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THE

MEDICAL CHRONICLE.

Vol. VI.]

DECEMBER, 1858.

[No. 7.

ORIGINAL COMMUNICATIONS.

ART. XIV.—*A Case of Sterno-omphalopage.* By JOHN REDDY, M. D.,
L.R.C.S.I., Physician to the Montreal General Hospital, &c.

The following singular case may not prove uninteresting to your readers:—

On the 29th August, 1858, I was sent for to see a woman whom I was told had been some hours in labor. On my arrival at 8½ P.M., I was informed that it was her tenth labor; that she had been delivered of eleven children in the previous confinements, having had twins the first and third times. The midwife gave me the following account:—At 4½ P.M., when she was sent for, the labor-pains had commenced, they continued very regularly, and the os uteri dilated to about the size of a half-crown. At 6 o'clock P.M. dilatation was completed, and the head began to descend. It passed the os externum about 7½ o'clock, and, although the pains were very frequent and strong, at the end of an hour there was no further advance; and, perceiving that every effort to aid the delivery was unavailing, she determined upon seeking assistance.

On examination I found the head fully protruded, face swollen, and of a dark livid color; life must have been extinct for some time, and the labor-pains were neither frequent nor strong. Having employed traction several times during the presence of pain, I found that it had no other effect than causing about an inch of the neck to advance. At first

I was under the impression that the difficulty might be owing to an abnormal width of the shoulders; but, on examining, I felt a hard on each side of the sternal end of the neck. Without any difficulty I brought the arms down, which caused the neck to advance as far as the sternum; and, while making a further effort to extract, a second pair of hands protruded. I immediately re-examined, and discovered that a second child was presenting, and apparently connected with that already delivered. I now procured the assistance of my friend Dr. Sutherland, who, on examination, coincided with me in the opinion I had formed. For some time considerable difficulty was encountered in our attempts to deliver. The blunt hook was used and proved inefficient. Eventually however, by digital efforts, we succeeded in bringing down the legs of the first child, which were immediately followed by the body; the face towards pubis at once revealing the point of union. It now remained to bring down the second fetus, which was also attended with difficulty. The legs were not within reach, but the fore fingers could be made to touch across the back, which was arched forwards. Delivery was accomplished with the aid of a silk handkerchief which was passed round the back, so as to form a loop round the body of the child, whereby I was enabled to exert the requisite traction until extraction was terminated. The body came away feet foremost, accompanied by the placenta. There was only one placenta, it was of immense size, kidney-shaped, and at least twice the natural thickness.

There was but one cord; it was not quite half an inch in length and was more than twice the usual thickness, hardly appearing to leave any interval between the umbilicus and placenta.

EXTERNAL EXAMINATION.—This double monster presents the following appearances:—Development seems to be comparatively perfect in one fetus, while in the other it is deficient in several particulars. For convenience of description I shall designate the more perfectly formed of the two as fetus A, the other as B.

A. The head, neck, shoulders and arms are natural; the spine, pelvis, and legs normal, with the exception of the right foot, which was clubbed (Talipes varus); external genital organs complete.

B. The head slightly smaller than A; shoulders and arms natural; the spine deficient from about the middle of the dorsal region down to anus, presenting a large tumor measuring transversely $4\frac{1}{2}$ inches, filled with fluid (Hydro-rachitis); the legs nearly natural in shape, except that both feet were clubbed (Talipes varus); generative organs merely rudimentary.

A is 15 inches in length; the circumference of head 13 inches. B is 14 inches in length, and measures not quite 12½ inches around the head.

The union between the two commenced at about the second bone of the sternum, and terminated at the umbilicus, measuring 6½ inches in circumference, and 2 inches in width. The annexed wood-cut will convey a very fair representation of this singular specimen of humanity.



INTERNAL EXAMINATION.—The following appearances were ascertained :—The thoracic cavities were perfect and distinct, with a diaphragm in each, no arterial communication existing. The stomachs were regular in shape, each terminating in a duodenum, which latter became fused at the entrance of the ductus communis choledochus; the canal thus formed was continued for a distance of about ten inches, when it became largely dilated, forming a sac of about two inches in diameter, which connected with the anus of foetus B by a short tube of an inch and a half in length. From this sac the small intestine of foetus A branched off, was continued a distance of 9 or 10 inches, and terminated in a perfect caput cœcum coli; the large intestines of A then pursued the usual course, and were filled with meconium. B had no large intestine, with the exception of the sac and tube mentioned above.

The livers of both were distinct, but joined by a membrane of areolar tissue at the mesian line. They and the stomachs, with a portion of the intestine, were located in the connecting band.

Dr. Craik is engaged in making a preparation of them for the Museum of the Medical Department of the University of McGill College, to which institution I have presented them. He kindly assisted me in the examination of the internal viscera.

For some time after delivery the patient appeared to be doing well; the uterine contracted firmly; there was no hemorrhage, neither internal nor external; and everything seemed to promise that a favorable recovery might be expected. Owing, however, to her having become accidentally aware of the nature of what had occurred, she appeared to receive a severe mental shock, which prostrated her; and, at the termination of two and a half hours, she was seized with symptoms of syncope, and died in about half an hour. Of this unhappy termination I was the next morning informed; for no intimation of the woman's danger had been given me.

Montreal, November, 1858.

ART. XV.—*Illustrations of the Efficacy of Dr. Kerr's new remedy for Dysentery.* By THOS. F. S. BROWN, M.D., Berlin, C. W.

Having in a very severe attack of dysentery experienced the great superiority of a remedy recently introduced by Dr. Kerr of Galt (Calcutta Medical Journal), I deem it my duty to the author and the public to make known the facts of the case.

In August last I was seized with dysentery (it being epidemic in this town). The usual remedies were promptly and skilfully administered; although the quantity of opium (or some of its preparations), combined with judicious doses of mercury, and occasionally acetate of lead, not forgetting ipecac., speedily rose to an equivalent of 21 or even 24 gra. daily,—no amendment took place. I vomited incessantly, and though tormented with thirst, could retain no fluid. In my case, the effect of large doses of opium was prostrating and overpowering, (whatever it may be in the case of others.) I did not sleep at all, but I could scarcely be said to be awake, except to the consciousness of severe pain and frequent calls to rise, agonizing tenesmus, and still frequent vomiting. I had been 10 days ill, and though assiduously and skilfully attended by my friend Dr. Bingham, and was once visited in consultation by a physician of acknowledged standing from Hamilton, nature was sinking, collapse was to be feared, when Dr. Kerr visited me. He immediately, with Dr. Bingham's sanction, gave me 3½ gra. of the following combination
Equal parts by weight of

| | |
|----------------------------------|------------------------------|
| One of the Scrophulariaceae..... | Digitalis Purpurea. |
| Two " Solanaceae..... | Solanum Dulcamara. |
| |Datura Stramonium. |
| Three " Umbelliferae..... | Sium Lineare. |
| |Cicuta Maculata. |
| |Conioselinum Canadense. |
| One " Papaveraceae..... | Opium. |

I confess my incredulity at the time of any superiority of this medicine over those I had taken previously.

I was very restless from a sensation of sinking and severe pain; the stomach, however, for 12 hours previously had been less irritable. In half an hour, after dozing a few minutes, I became suddenly aware of a great change, I could lie quiet, the distressing tenesmus was less, pain in body and limbs less severe, the sensation of sinking was relieved, a glow of warmth was supplanting the cold of threatened collapse, and an inclination to sleep, not experienced before during my illness, was stealing over me. The first thought was amazement at the change, then a faint recollection of a new medicine crossed my mind, and I resigned myself to its influence. I was immediately asleep, and for an hour and a-half had a comfortable and refreshing sleep, unaccompanied, comparatively speaking, with the sensorial disturbance so constant a result of opium and other preparations in my case. When I awoke every symptom was relieved. Seven grains were given once in six hours (being one grain of each) or one grain of opium instead of four or six in the same space of time. I spent the first 24 hours almost wholly in sleep. Calls to rise were still frequent, but the tenesmus less severe, and though I retched a few times, vomiting ceased. In a few days appetite began to return, but having for six or seven years laboured under dyspeptic attacks, nearly, but not strictly periodical, of a severe and intractable form, I thought possibly owing to this circumstance the stools continued more frequent than I could have wished. A few grs. Acct. Plumbi, in addition to Dr. Kerr's remedies, soon set all right in that respect. I may state that before trying the last addition I increased the frequency of Dr. K's medicine to four hours instead of six, when the digitalis (being now six grains daily) produced its powerful sedative, in addition to its diuretic effects, requiring the leaving out for some days that ingredient, to be returned to after some four days, but only half the quantity. I was able to sit up on the 35th day and to walk out on the 40th.

During 12 years practice I never in the treatment of dysentery met with a narcotic to be compared with Dr. K's combination in relieving general irritability, pain, and above all, nausea and vomiting. It produces a wonderful degree of comfort, unattended by sensorial disturbance. From 30 minutes after the first dose was taken, which contained but half a grain of each ingredient, my suffering was comparatively nothing. Little hopes were entertained of my recovery previous to the first dose, but they became sanguine before I had taken the third. I am now quite recovered, and I trust with very considerable improvement in my stomach complaint before mentioned, during the attacks of which

every article of food, of whatever kind, became intensely acid, and had to be vomited before relief could be obtained. No medicine did any permanent good; sometimes for ten days nothing could be taken, or if taken could not be retained. I certainly must say that I have felt less of stomachic disorder since my recovery than during any like period for the past six or seven years. Should this prove to be the effect of Dr. K's combination (and I have reason to think so) it will add greatly to its importance as a remedy.

My friend, Dr. Bingham, adds the following testimony:—

It is with much pleasure that I add my testimony to that of Dr. Brown in favour of the very remarkable powers of Dr. Kerr's narcotic powder.

After closely observing its effects in the case of Dr. Brown, I had an opportunity to test its merits in six cases, one of which was somewhat similar, although none of them were nearly so severe nor protracted as his. The first patient to whom I administered it was a child some three years of age who had been suffering very severely from tenesmus and the muco-bloody discharges peculiar to the disease, for four or five days, with but few or no flattering symptoms of amendment, although the usual remedies prescribed in such cases, viz., calomel, opium, ipecac, and acet. lead had been steadily persevered in from the time I first visited the patient. Immediately after giving the powder to the child the first time, the pain was very greatly relieved, and through the subsequent employment of the remedy, regularly continued, the little patient suffered a very trifling amount of pain until the termination of the disease, which however did not occur until after the lapse of some two or three weeks from the time of invasion.

The calomel administered upon my first visiting the patient produced a degree of pyalism I had neither anticipated nor desired, and to this circumstance, I very frankly admit, I attributed in a great measure the protracted character of the case.

The second case in which I employed Dr. Kerr's combination, was that of a lady recently confined with her fourth child, who had been suffering severely not only from the general symptoms of the disease, but also from nausea and delirium, which latter symptom, however, had only been present for a few hours before I saw her, the invasion having occurred some four or five days previously, from which time up to the hour I saw her she had been testing the efficacy of all kinds of domestic remedies, among which as I was informed was a strong infusion of peach leaves. In this case, the first dose was given at bed time, and the pa

tient slept soundly until morning. Before its administration the stools were attended with great pain, and occurred as frequently as every half hour. In three days from the time I first saw her she pronounced herself quite well.

In three out of the four remaining cases it was the only remedy prescribed (the patients being children of the respective ages of two, eight, and twelve years), and with the most speedy and flattering results. In the sixth and last case in which I had an opportunity to try Dr. Kerr's remedy, the patient was not confined to bed at all, although suffering pretty severely, but he could not be prevailed upon to remain quietly in the house, while he persisted in eating whatever he felt inclined to take as diet, and the case ran on for some two weeks, although to a favourable termination.

An officer who was for some fifteen years a resident in India, and who has seen a good deal of dysentery in both India and Canada among the troops, recently stated in a letter that he succeeded in curing four cases of the disease with Dr. Kerr's powder, one of them his sister, in whose case the discharges were distinctly hemorrhagic and alarming.

[We have been favored with the perusal of a letter from Mr. Lockhart, late of Lockhart & Louison, of this city. He relates that when crossing the Atlantic in the steamer "Edinburgh," last July, he was seized with dysentery, which altogether resisted the efforts of the surgeon to cure it. On the sixth day, he recollected a small packet of Dr. Kerr's medicine in his possession. Recovery commenced with, and was completed by its use.

We learn that Dr. Kerr looks upon the arithmetical series of the three natural orders containing the plants specified, as the curative agent of the ulcers of the mucous membrane in dysentery, the small quantity of opium being added to check the frequency of the discharges. He further believes that the efficacy of the medicine is not confined to dysentery; but will be found to extend to affections of the mucous membrane elsewhere, such as the sore throat of scarlatina—*Eds. Med. Chron.*]

REVIEWS.

ART. XIII.—*Diseases of the Urinary Organs. A Compendium of their Diagnosis, Prognosis and Treatment.* By WILLIAM WALLACE MORLAND, Member of the Massachusetts Medical Society; Member of the Boston Society for Medical Improvement; One of the Attending Surgeons at the Central Office of the Boston Dispensary, &c., with Illustrations. Philadelphia: Blanchard and Lea. Montreal: B. Dawson and Son. Quebec: Middleton and Dawson, 1858. pp. 579.

Few of the publications that issue from the medical press are entitled to the rank of specimens of elegant composition. Nay, even good writing is not much cultivated by the majority of professional authors. These are things to be deplored. Fortunately, in general the defects as well as imperfections in style and in expression are not of so conspicuous an order as to arrest the mind of ordinary readers; while commonly a species of uniformity is found to pervade the mass of productions most likely to be consulted, which prevents what would otherwise be singular from being noticed. Occasionally, however, it is otherwise, and then faults are so glaring and so gross, as to be evident even to superficial or humble observers, such as ourselves. An example of this is furnished in the work above named, and from it we have chosen a few instances by way of illustration. Speaking of cancer of the kidney, Dr. Morland remarks:—

‘Propagation by contiguity is not uncommon, as from the liver to the right side of the kidney; from stomachal or intestinal contact (those organs being diseased) with the left.

It is the latter part of the sentence, the part posterior, as an anatomist would say, to the semicolon, we are struck by. A reference is there made, in parenthesis, to certain organs which we do not find any where specified more precisely than by the vague intention which the words preceding contain. Their reference “stomachal or intestinal” not signifying, properly speaking, any organ, but on the contrary something pertaining to or relating to the stomach or intestine, and which is here explained as contact. We hold that neither a reference nor a relation is an organ.

Again, in the same page it is said—

“Hæmaturia occurs in variable degree in renal cancer. If abundant, it may plug the ureters.”

Here there is a confusion made of an act and its product. The act (Hæmaturia) cannot plug the ureters; but its product (extravasated blood) may. The continuance of the act implies that the escaping material is in a fluid condition, and in this state forms no mechanical obstacle; for, admitting it to be poured forth in quantity so abundant and so quickly as to fill up the urinary reservoir with its aqueducts, the distention would provoke contraction, and the whole would be speedily afterwards expelled. Where, however, the bleeding is in less quantity, it is not improbable a portion of the liquid may be so circumstanced as to undergo coagulation, and the clot becoming entangled with the mucous lining may constitute a veritable obstruction and so plug the ureters. But this is altogether different from what is to be made out of the superjacent extract. There, instead of the physical occurrence being ascribed to its real cause, the product effused; it is expressly spoken of as due to the act of hæmorrhage itself since this (hæmaturia) forms the nominative throughout.

Leaving this, our next inspection opens up a nest of curiosities, some dull, some meaning'less, some perversa, some stunted.

“*Differential diagnosis.* Cancerous tumor of the kidney may be supposed, when the enlargement is of the *liver*. The renal swelling however, if there be no anatomical displacement, is in the lumbar region. * * * An enlarged kidney is not moveable; were the tumor of splenic origin it would extend higher up into the chest and its anterior, notched edge is frequently distinguishable.”

Now we ask, what is meant by the first declaration? “*Cancerous tumor of the kidney may be supposed, when the enlargement is of the liver.*” Are we right or are we wrong in understanding thereby that in a given case when the liver has been found enlarged, cancer may be suspected to exist in the kidney, in other words, that cancer of the kidney is denoted by an enlargement of the liver. If we are wrong in this deduction, how are we to know it—how are we to ascertain this is not what the writer implies? He evidently considers his statement self-expressive, for the context does not seem to render it more lucid and certainly not more impenetrable. But if we are right, can we believe the author to be serious and truthful, or shall we not rather hold him guilty of perpetrating a preposterous absurdity in the face of simple honesty. Enlargement of the liver a diagnostic sign of a Cancerous Kidney! Incredible!! Prodigious!!!

The second sentence is also mystical. Taking the aid afforded by the commas, and eclipsing what they include within their em

brasure, we read this trite truth. "The renal swelling is in the lumbar region." That is true, but, as we have said, it is a trite truth. We believe the kidneys always lie in that locality, and we know of no instance where they were ever found in any other as the epigastric,—thus, by our selection, imitating the author in his loose style. With this conviction of the prevalent situation of these important glands; we are confirmed in the further idea that the expression within the commas can have no reference to them, and is one representing really, what it appears to be, a general provision. Accordingly we may go on to think that the above relation is only in the normal condition of the system, and that when this unhappily becomes disordered as by "an anatomical displacement" then the rule ceases to be of force. And as the "displacement" is cut off from immediate connection with the "renal swelling" it does not necessarily concern any deviation in the position of this tumor, but on the contrary, being general, it has a universal or "anatomical" reference to any one of the numerous parts of the body. Under which interesting admission, the legitimate inference is, by application, that a displacement of the shoulder joint, which is strictly anatomical, or any such accident, must entail a corresponding difference in the situation of the renal tumor! Believing the author to be above desiring to impart such decidedly *unsound* teaching, we must considerably give him credit for wishing to convey some other intelligence than that now drawn from his words. Still we think he will concur with us in considering it to be a matter of deep regret that he should have penned them so uncertainly as to allow of the possibility of such a signification being put upon them; of course to the educated, the sentence may not have serious difficulties, aware of what should be averred, a more right view may be taken for granted. Yet, it is far otherwise with the uninformed: let one not versant in medical attainments read the passage thus commented on, and who shall say his ideas will not accord with our exposition.

In the last paragraph there is also another example of the mischief of bad writing. It is observed that, "were the tumor of splenic origin it would extend higher up into the chest." We cannot certainly suppose a person who undertakes to publish a monograph on the urinary organs is so ignorant as not to know that the spleen is not situated in the chest. Yet, if we are to judge of him by his language, what other import is to be put upon it. In what occurs there is nothing to warrant any other conclusion than that the spleen being naturally in the chest, its relative position becomes somewhat elevated by the enlargement, and so occupies a higher place

within this cavity, or, as above quoted, it "extends higher up." Observe it is not said the organ is nearer to the chest, or encroaches upon it; but that it is actually "into the chest," or, in equally significant words, that it is *within* the chest. We cannot believe the author to be as ignorant of anatomy as he labours to describe himself, and therefore we would throw the odium entirely upon the clumsy, inelegant manner of his diction. We refrain here from marking grammatical errors, our business is rather to show the false impressions which his mal-compositions convey.

Still another:—

"The *form* of the blood often reveals its source."

The blood as a perfect whole, such as implied when the word is unqualified by any other, has no form, nor can it have any. It is absolutely amorphous, and therefore to speak of its form is folly. We admit that various *parts* of the blood have a definite shape, but these do not justify the statement, for of these parts, which are we to suppose is referred to; is it the red corpuscles? or if not these, is it the white globules? or if not these, is it the crassamentum into which, by rest, blood separates? or if not this, is it fibrin, disentangled from other components, which has solidified and been moulded to the reservoir wherein it lies? or if not this, is it an albumino-plastic exudation derived from the circulating mass? And if, by happy adventure, the right portion has been hit upon, if one of these be the thing meant and not another, upon what propriety can the general term *blood* be devoted to it? These are questions which it will require some ingenuity to answer, so as to establish the right of the author to put forth his loose appellation; for it will have to be shewn that a part may denote the whole, and that, though that part be likely to be confounded with other parts, it is comprehensible simply from a nonentity, an unsignified intention.

Occasionally Dr. M. varies his style with a word borrowed from one of the dead languages; the introduction however strikes us as not being always of the most felicitous character. In enumerating the symptoms of the lesion under notice, after a full pause, he opens out into a classical air by saying—

"The *facies* of the patient is peculiarly anxious."—

Leaving it to be settled whether a shorter word in the vernacular would not have been more euphonious and less pedantic.

Against some of his combinations of words we must enter our protest, even though we have to depart from the field to which we had formerly restricted ourselves—*as*, for instance, "*was supposed causative*," and

"comparatively quite rare," and such sort, that belong to the same category, with incorrect phrases like "many years previous to," "covered with a scant growth," &c.

To unreflecting minds it may seem a subject of indifference whether one style or another be adopted in writing medical works, but a little consideration would undeceive them. As we have shown, the composition may be so perverse or misty as to imply to the reader one sense, while the author designed an entirely different one to be understood. Medicine is a learned profession, and those who write for the instruction or improvement of its votaries ought surely not to appear unlearned;—otherwise, where is their competency or adequacy to discharge the task they have undertaken? No man having the ability will be indifferent to his language, for experience teaches that the same substance or subject may be rendered *nauseous* or *agreeable* according to the style and form in which it is dressed or treated. Raw food is obnoxious to the cultivated palate, nor can it be assimilated without danger; but the same article when nicely cooked has its digestibility increased, and may be esteemed a delicacy. It is precisely so with literary efforts: rough stuff will be bolted, while the polished will be received kindly. In common hand-books a formal, stiff, descriptive style may be tolerable, because conventionally accepted; but in books of a higher order, such as the practitioner requires to consult, wherein he may read the clinical history of disease and learn the experience of predecessors, the diction should be of a far higher cast: and the more strictly correct it is, as well as the more adorned, so in proportion will the matter be recommended to the mind of the reader, both by a more ready acquisition and by a more enduring recollection.

ART. XIV.—*A Manual of Medical Diagnosis.* Being an analysis of the signs and symptoms of disease. By A. W. BARCLAY, M. D., Cantab. et Edin., Fellow of the Royal College of Physicians, Assistant Physician to St. George's Hospital, &c. &c. Philadelphia: Blanchard & Lea. Montreal: B. Dawson & Son. Quebec: Middleton & Dawson. 1858. pp. 423.

The object of the present manual, so far as we have been able to ascertain, is not, as might be inferred from its title, to set forth the symptoms of distinction between analogous affections nor to enter upon the differential features that subsist between them; but rather, on the contrary, to impart instruction upon the best procedures to be instituted in individual cases of disease, with a view of discovering their true nature

and real seat. Accordingly it affords expositions of the various examinations that require to be pursued in determining the value of the indications that meet the inquirer in his investigations into matters of clinical study. Attention is directed to the principal points that require to be considered, and the chief sources from which knowledge is to be derived are expatiated upon. The comparative value of different signs and modes of examination is, where required, brought prominently before the eye, and the entire description so arranged as to lead to the most complete establishment of the diagnosis of which the present state of science permits. This work is therefore one which will be found especially useful to the Hospital Student, Chef de Clinique, and indeed to all who are not experts by method or by practice in the art of which it treats. It is, as the preface states, a "guide to the systematic investigation of cases in the wards of the hospital." The plan upon which it is modelled is similar to one that Dr. Barclay followed in "more than 12,000 patients" with whose particulars he was called upon to be familiar while serving in the capacity of Medical Registrar of St. George's Hospital, London. It contains 35 chapters; of these the initiatory ones are upon the method of diagnosis, duration and sequence of phenomena, and general condition of the patient; they are preceded by an introduction in which several general topics are briefly discussed, as, the province of diagnosis, error of pathognomonic signs, compound causes, etc. The greater number of the remaining chapters are engrossed with special diseases, either general or local, in classes or alone; while separate chapters are, in addition, devoted to several co-related matters, as, the general examination of regions and organs, semeiology of diseases of the brain, examination of the chest, modifications of normal breath and voice sound and of percussion resonance, superadded sounds in their relation to altered breath and voice sounds, examination of the heart, and examination of the urino. We have been so favourably impressed with the scope of this volume and with the ability of its execution that we should like to see it in the hands of every student, be he young or old, and, still better, every one mastering its teachings. We regard it as an important addition to medical literature, meeting a necessity which, we believe, existed in our language, and presenting novel features to the ordinary English books that have been published on the subject of disease. It is essentially practical in its tendencies, and well calculated to assist the medical inquirer in the various researches he is expected to prosecute.

ART XV.—*Concentrated Organic Medicines.* Being a practical exposition of the Therapeutic properties and Clinic employment of the combined proximate Medicinal constituents of Indigenous and Foreign Plants. To which is added a brief history of crude inorganic remedies, constituents of plants, concentrated medicines, officinal preparations, etc., etc. By GROVER COE, M.D. Published by B. Keith & Co., New York, 1858. pp. 432.

The reader might imagine from a perusal of the title, which is quoted above *in extenso*, the work to which it referred was one of a most valuable character. Let him not be deceived. "The combined proximate medicinal constituents of indigenous and foreign plants" upon which it professes to treat are, in plain speaking, preparations of certain remedies in use among Thomsonian, or cayenne-fire and lobelia-puke doctors, the gentlemen who rejoice in a self-inaugurated Eclecticism. These compounds have all very fine names, as a few examples will serve to shew, to wit: asclepin, ampelopsin, alnuin, apocynin, baptisin, cypripedin, chimaphilin, caulophyllin, etc. No information, so far as we can find, is laid down upon the method of manufacturing them; that part of the subject appears to have been purposely kept enshrouded in impenetrable forgetfulness or oblivion. Great pains are however taken to sound forth the praises of the articles as they are made by Messrs. Keith & Co., and in this consists the "practical exposition of the therapeutic properties and clinic employment" of these irregular and defective chemicals. It is very evident to us, and we presume would be equally so to any one else who condescended to look into this "exposition", that the articles therein be-lauded are to be procured from these proprietors, than whom, for aught that appears to the contrary, there are no other vendors. Most rightly is it styled "practical," for its tendency is to invite the purchase of the proffered articles, and to serve as a new kind of advertisement, adding one more to the dodges of trade for which certain classes in American society have acquired an unenviable fame. We had almost forgotten to remark that the work is rendered yet more attractive by illustrations. Both editor and publisher have handed down to posterity their veritable likenesses. Dr. Coe figures in the frontispiece—Dr. B. Keith just in front of the page (109) which enlarges upon his "enterprise, energy and industry." We have no hesitation in saying the portraits of these two worthies are most striking! and represent very remarkable characters!! men of whom it might, in every sense, be said, they were *no ornaments* to the profession whose title they appropriate!!!

ART. XVI—*Lectures on the Principles and Practice of Physic, delivered at King's College, London.* By THOMAS WATSON, M. D., Fellow of the Royal College of Physicians; late Physician to the Middlesex Hospital, and formerly Fellow of St. John's College, Cambridge. A new American, from the last revised and enlarged English edition. With additions by D. FRANCIS CONDIE, M. D., Fellow of the College of Physicians of Philadelphia, Member of the American Philosophical Society, etc., etc. With one hundred and eighty-five illustrations on wood. Pp. 1224. 1856. Philadelphia: Blanchard & Lea. Montreal: B. Dawson & Son. Quebec: Middleton & Dawson.

The numerous and important additions which of late years have been made to the science of Medicine, rendered a new edition of this favorite work a thing much to be desired. In the words of the preface, "in the fourth London edition, of which the present volume is a re-print, the lectures of Dr. Watson have undergone a thorough revision, and whatever of value recent research has added to our stock of knowledge in the various departments of medical science has been carefully incorporated in them. The lectures, on fever especially, have been greatly enlarged and improved; the positive distinctions that have been insisted upon by eminent pathologists between typhus and typhoid fevers are recognized as being founded on truth. The extent of these additions is shewn by the fact, that, notwithstanding a very considerable enlargement in the size of the page, the work has been increased by about two hundred pages. The very full and accurate exposition of the present state of pathology and therapeutics, in reference to the diseases embraced in these lectures, has rendered it necessary to augment materially the size of the work by frequent or extensive additions. In regard to a few of the forms of disease more particularly interesting to the American physician, the account given by the author will be found somewhat defective, while he has omitted to notice one or two affections endemic to the United States. It is to remedy these deficiencies that the Editor, in preparing the present edition, has mainly directed his attention." Each of our readers will find it to his advantage to provide himself with the new edition of Watson.

ART. XVII—*A Practical Treatise on the Causes, Symptoms and Treatment of Spermatorrhœa.* By M. LALLEMAND, formerly Professor of Clinical Surgery at the University of Montpellier, etc. Translated and edited by HENRY J. McDOUGALL, member of the Royal College

of Surgeons of England, etc., etc. Third American edition. To which is added: On Diseases of the Vesiculæ Seminales, and their associated organs; with special reference to the morbid secretions of the Prostatic and Urethral Mucous Membrane. By MORRIS WILSON, M.D. Pp. 380. 1858. Philadelphia: Blanchard & Lea. Montreal: B. Dawson & Son. Quebec: Middleton & Dawson.

Much distress of mind, misery and sickness, might be prevented were physicians to study more particularly everything relating to the abuse of the generative organs. Many appear to have such an antipathy to the subject, that it leads them to ignore entirely facts which are patent to their eyes, and which meet them at every turn. Masturbation and other forms of abuse prevail most extensively amongst the youth in our educational institutions, and even those who have been kept sedulously within the precincts of home are not exempt from the vicious habit. To every practitioner who has not made himself acquainted with what is known regarding self-abuse, spermatorrhœa, &c., we cordially recommend this work of M. Lallemand's; which is, undoubtedly, the best and most complete work on the subject that has ever been published.

ART. XVIII.—*A System of Human Anatomy, General and Special* By ERASMUS WILSON, F.R.S, author of "The Dissector's Manual," "A Treatise on Diseases of the Skin," &c. A new and improved American, from an enlarged London edition. Edited by WILLIAM H. GOBRECHT, M.D., Professor of Anatomy in the Philadelphia College of Medicine, Fellow of the College of Physicians of Philadelphia, etc. With three hundred and ninety-seven illustrations on wood. Pp. 616. 1858. Philadelphia: Blanchard & Lea. Montreal: B. Dawson & Son. Quebec: Middleton & Dawson.

"The present edition has been carefully revised and corrected; many parts, especially those relating to Histological Anatomy, have been rewritten, and a considerable addition has been made to the number of the wood-cuts. The author, therefore, feels some confidence and satisfaction in presenting this edition to his readers; and trusts that the Anatomist's Vade Mecum may continue to deserve the favour which it has hitherto received at the hands of the student of medicine." Notwithstanding the number of competitors that have entered the lists to win the favour of the student, Wilson's Vade Mecum still remains in his estimation *the* text-book on Anatomy.

CLINICAL LECTURE.

(Medical Circular.)

On Severe Compound Fractures of the Thigh and the Diagnosis of Ruptured Blood Vessels in such cases. By EDWARD STANLEY Esq. F.R.C.S., F.R.S., &c., Surgeon to St. Bartholomew's Hospital.

GENTLEMEN,—I am nearly sure you will all agree with me, now that we have fairly commenced our clinical cases and reports for the new Session, that there are two most essential modes of gaining surgical knowledge—observation of surgical cases and reading; and by reading I would wish to include the taking of notes and comparing of your notes in manuscript with your class-books; you must, I say, not only observe cases and keep on a level with existing improvements, but you must retain in your memory for practice hereafter what is thus taught. Opposite advice is occasionally given in journals, but when you recollect that hospital cases are continually following one another in your memory and fading away out of your memory you will agree with me that the truly industrious student is he who takes notes of cases in large numbers! But some one asks—“Is he to take notes of all the cases?” Oh! dear no! he is to select such cases only as illustrate great or primary surgical principles; let it be either as regards hernia, amputations, injuries of arteries, &c. Such note-books will be of great value to you in after-life. I began note-taking myself when I was a year in this hospital, and I find these notes most valuable to me every year still. Your own manuscript notes bring back the details of cases to your memory in a much more vivid manner than to have to hunt up cases in printed volumes. I would advise each of you to get a “common-place book,” like the one I now show you; it is on the plan recommended by the celebrated Mr. Locke, whose works are in the Library.—[Mr. Stanley caused immense amusement by gravely turning this curious old manuscript relic out of a paper cover, when it partly fell to pieces in a peculiarly common-place way, though full of invaluable notes of good Mr. Abernethy's times—its prescriptions rich in suggestions, or as *Hudibras* has it,—

“Deep-stored with delectory medicines
That whoso'er took is dead since.”]

Well, I propose to-day to speak again of a case admitted a year ago into the hospital—I mean that boy now in “Bentley's” ward; he has been up and about. I think I see some one gentleman or two amongst

the 150 now listening to me who took notes of this case; they will remember its chief characteristics* The case is headed in my note-book.

COMPOUND FRACTURE OF RIGHT THIGH AND SEVERE INJURY OF
OPPOSITE LIMB.

Followed by another essential particular—temporary cessation of pulsation in the arteries of the punctured limb. The boy is ten years of age, and it seems his legs got under the wheel of a waggon, or amongst the spokes of the wheels. Yes, just so, compound fracture of the right femur, and a condition when the boy was brought almost immediately to the hospital that the house-surgeon looked upon it as almost a hopeless case, in which gangrene might immediately be expected to set in; the pulse at the wrist was scarcely perceptible: both limbs appeared severely contused, and much blood had oozed out and become infiltrated in the right thigh, near and around the wound. Several persons who saw the boy on his admission were unable to find pulsation in the arteries of this limb. The boy was very much exhausted; and, in short, I was sent for at night to amputate as it was then believed to be compound fracture with the femoral artery torn through from the injury. When I arrived I found the lad lying in a state of most sad and complete collapse, nearly pulseless, and in a condition, as regarded the fractured thigh, that left one little room for hope of any kind; still I had some little hope, for I thought, after a little, I could detect the shadow of a shade of pulsation in the limb. When a half hour had elapsed this little twinkle of a pulse was still more marked, and to make a short story of a long one, as the collapse passed away the pulsation gradually returned, and we had now at length a hope not only that we could, perhaps, save the boy's life but his limb.

Now, you will say how is this cessation of pulse accounted for and its gradual restoration. Well, I believe there are two different modes in which pulsation may be impeded, and again set going. One is, that in the "smash" made of the thigh by a great waggon wheel, one of the fragments of the bone becomes impacted in some manner, and mecha-

* Mr. Stanley here referred, we believe, to the former part of the history of this case, given in the 'Medical Circular'—(Nov. 4, 1857)—Mr. Stanley, of necessity, being obliged to read over the notes of the case as then printed in this Journal and in this alone, we believe, of all our London Journals. The remarkable character of the case may be conceived from the fact that this is the second "Clinical" delivered by Mr. Stanley on this one case alone, and many leading London surgeons have come to see the patient.—*Medical Journal Note.*

nically presses on the femoral artery ; that then, by ordinary manipulation of the limb, aye or by merely lifting the boy on to the operating-table, this piece of bone gets displaced again, thus setting the artery free. Thus, simple temporary compression of the vessel may mislead the surgeon, and I would advise you in private practice to take care of this. The other explanation is that simple "contusion" of the arterial coats without laceration may have stopped the current in the femoral. I have seen this in other arteries, but the practical rule I wish now to impress on you is this, that except signs of gangrene be established in such cases the surgeon is not justified in the diagnosis of ruptured or lacerated artery. These may appear points of rather trivial importance to you, but you see the life of a fellow-creature depends on a good diagnosis.

Now, as to the other limb or knee : you know the knee became inflamed and suppurated, and I was obliged to make an opening which gave exit to several ounces of matter from the joint ; this part subsequently became ankylosed, and not at a very serviceable angle, yet I do not like to expose this boy again to accidents of chloroform or ether inhalation in order to bend it. The lad is a perfect curiosity of what a let alone system of surgery may do ; there is some dead bone to come away, and even that, as it does not seem loose, I am unwilling to meddle with ; that dead bone has taken a year to become detached, but it is still fixed, and I think it good surgery still to do nothing but wait.

Now, I think I cannot do better than contrast that case with another we have had in the hospital, the counterpart of various cases in this, my note-book or "common-place" book, I referred to at the commencement of the lecture. The case is marked "Traumatic Gangrene" of leg from injury of the popliteal vessels, too clearly marked, as the gangrene came on a few hours after the accident. This case is that of another lad, aged nine years, playing in the street, and as he was suddenly turning his body to run away, as in "cricket," a heavy body fell on the back of his knee, injuring the delicate vessels in that situation. He was carried to hospital an hour after the occurrence ; the poor lad was then utterly prostrate, but mark the notes of the case : "The skin of the limb is mottled and cold," says the note-book ; "no pulsation is to be felt in either of the tibial arteries ; the posterior part of the knee or popliteal region is swelled, and one or two punctures with a lancet gave exit to a mere drop of blood quite black. As the swelling seemed to spread up the limb we decided on amputation ;" some cold brandy and water was given to the lad, and we feared to use chloroform, but as this form of stimulus seemed to revive him, we gave him a little more and then a few cautious "whiffs" of chloroform, and I succeeded finally in taking off the limb, but the chief

point in the case to which I wish to draw your attention is the state of the vessels; both the vein and artery were ruptured, and the mouths of these vessels retracted. Here, unfortunately, there could be no second opinion according to our present canons of good surgery as to taking off the limb. This is a class of cases you will probably meet, any of you who go into the army, and the entire gravity of a gun-shot wound may depend upon the fact whether along with a bone the adjacent vessels may be involved in the wound; if gangrene unfortunately should supervene in any such cases, your course of procedure must be such as I have indicated, but still such cases, as you see, require the utmost caution and attention.

TRAUMATIC INJURIES OF THE URETHRA.

There is a man at present in "Kenton" ward, whose case offers several particulars of interest. This man has suffered from an injury of his urethra and perineum. You probably know that a blow on the perineum, as in a man falling straddle-wise on a gate or paling, is likely to be followed by symptoms of rupture of the urethra usually in the spongy portion of that canal, or at the junction of the spongy and membranous portion as the urethra traverses or crosses the triangular ligament. Now this is a class of case you will be meeting very often in practice. What do you find? The man has very severe pain in the perineum (for the urethra is a highly-organised part); there was a trickling of drops of blood from the urethra itself, especially where the corpus spongiosum is injured. What next? The bladder, unfortunately, will empty itself, or have a tendency to empty itself into the part injured, and *retention of urine* is almost sure to follow as a symptom. Effusion, however, I must tell you, is not an ordinary result of such cases: a catheter is passed for the "retention," and probably all goes well. Well, suppose retention to go on to a great extent, what is the result. Now, a great practical fact is this, that rupture of the bladder seldom or never occurs in such instances; rupture of this viscus seldom or never occurs either in females or children; it is quite rare that by direct violence such mischief, as almost any surgical mishap may occur. A man may have a drunken "bout," and get intensely drunk and stupified, and going out of a dark night tumble down the steps of a hall-door, or fall over a plank, or into a sand-pit his bladder being very full at the time, or he may fall off an omnibus when very drunk in the evening. In such instances the direct violence may destroy this viscus, but otherwise the accident is rare, and you will very seldom see it, even in this large hospital. The patient tells us he is forty-six years of

age; it seems he was engaged in a squabble with a policeman, when the perineum was forcibly struck or injured, and next morning as he could not pass water, he was brought to Mr. Paget at the hospital, who at once with his characteristic skill and prudence, passed a catheter and recommended the man to come into the hospital. Some surgeons say that in such a case you should cut down at once and open the urethra, but this is not necessary. Mr. Paget removed the catheter with some fear and trembling in a fortnight after and the man had done very well. The great practical fact is, that you must keep a catheter in the part until the tissues are completely healed and quiet; and if you do this, I think you need not have recourse to any more formidable operation, such as cutting open the urethra.

THERAPEUTICAL RECORD.

Treatment of boils.—The following mixture as an aperient tonic is the one usually prescribed for patients suffering with boils: ℞ Sulphate of magnesia ℥ iij, sulphate of iron ℥ ij, dilute sulphuric acid ℥ ss, diluted with infusion of quassia to a pint in quantity. Of this the dose is from two to four drachms three times daily taken in water. Locally each boil is touched with a glass brush dipped in the nitrate of mercury solution, and is subsequently dressed with an ointment containing a small proportion of the ammonio-chloride, or some similar salt of mercury.

Treatment of eczema of the scalp and face in children.—A fair-haired, blue-eyed child, aged two years, was admitted with that so common and so troublesome form of eczema in which the whole face and scalp are involved, but the rest of the surface free. It had suffered since the age of six months, but excepting the irritation of the eruption its general health was not interfered with. Mr. Startin ordered as follows: *Misturæ potassæ iodinæ*. ℥ j, aq. ℥ v; capt. ʒ j, ter in die. The surface to be washed with the yolk of egg and water, and smeared with the nitric oxide of mercury ointment. Rapid improvement ensued in this individual case; and it may be taken as a fair illustration of the treatment usually adopted. In obstinate cases the compound iodide mixture, which contains arsenic, is often employed.

The formulæ for the above mentioned preparations are—of the mixture—a drachm of iodine, an ounce of liquor potassæ, and a pint of distilled water, each drachm containing half a grain of iodine. (See page 26.) Of the liniment—olive oil, two ounces; lard, two ounces; powdered nitric oxide of mercury, a drachm; oil of bitter almonds, half a scruple; and glycerine, ʒ j

Prescription for impetigo figurata.—A cachectic boy, aged three, was brought to the hospital with scattered patches of impetigo figurata over the whole body,

more particularly at the dexures of the joints. He was ordered to bathe all the inflamed parts with the dilute nitric acid lotion, to apply the compound mercurial ointment to all excoriations and ulcers, and to take three times daily a teaspoonful of the following mixture; ℞ Mist. hydr. co. ʒj, tinct. opii, ʒj, aqua ad. ʒvj. Ft. mistura. (The mist. hydr. co. contains a tenth of a grain of the bi-chloride of mercury, and a fortieth of a grain of arsenious acid in every drachm.

The formula for the dilute nitric acid lotion is half an ounce of dilute nitric acid, and two drachms of tincture of myrrh, to a pint of water. Mr. Startin considers it quite as efficacious as the hydrocyanic acid lotion in relieving itching, while it is of course far less expensive. The "compound mercurial ointment" is made by mixing six grains of the ammonio-chloride, and six of nitric oxide with an ounce of lard.

Treatment of the different forms of acne.—In acne rosacea, and acne simplex, the acid solution of iron in half ounce doses is usually ordered, while for the tubercular form Mr. Startin places more confidence in the iodide of iron. The latter is generally given in from one to two grain doses. Malt liquors are strictly prohibited in all cases. In almost all the local use of the red lotion is directed, and any larger pustules or tubercles, which may be observed from time to time, are touched on their apices with the acid nitrate of mercury solution. In addition to these remedies the direction is mostly given to be particular in squeezing out the contents of the distended follicles as soon as they become perceptible.

The "acid solution of iron" is made by dissolving three ounces of Epsom salts, and two drachms of sulphate of iron, in half an ounce of dilute sulphuric acid, and a pint of infusion of quassia. The "red lotion" consists of two scruples of the bi-chloride of mercury, one of the bi-sulphuret, and ten minims of creosote, in a pint of water; each ounce containing two grains of the bi-chloride.

Alkaline treatment in glucosuria.—We notice, in the *Union Médicale*, reports of five cases of diabetes cured, or much benefited, by the use of mineral waters of Pougès, in France (which contained the carbonates of soda, lime and magnesia), under the care of Dr. De Crozant. He considers the affection to result most frequently from disease of the liver, which opposes the passage of the glucose derived from the starch in food, causing it to be taken up by the supplementary abdominal circulation, which conveys it to the kidneys.

PERISCOPE.

The Antagonism of Opium and Quinia. By M. GUBLER.

M. Gubler read a paper before the Société Médicale des Hôpitaux de Paris, on the antagonism between opium and sulphate of quinia, of which the following is a synopsis condensed from the summary published in "L'Union Médicale" of May 20, 1858. Being unwell himself, M. Gubler took sulph. quinia in 0.50 centigrammes doses only, and was struck with the fact that they produced humming in the left ear only, although his hearing is equally good on both sides. This peculiar effect occurred three days in succession. As at that time he suffered from a headache, which was most violent on the right side—on which side it is always greatest in M. G.—he was led to suppose that the evident congestion on the right side neutralized the effect of the quinia, which effect M. G. considered due to the privation of the brain of blood (*anémiar l'encephale décongestionner le cerveau*), the removal of congestion of the brain. M. G. having recovered his health, resumed his attendance in the wards of the hospital. He there saw a case of acute articular rheumatism, in which large doses of sulph. quinia and opium had been administered for several days without success. M. G. continued the dose of sulph. quinia—i. e. 1 gramme 50 centigrammes, with 0.25 centigrammes of extract of opium. Finding that the peculiar therapeutical effects of both remedies were entirely wanting, he increased the dose of sulph. quinia and diminished that of the opiate, without, however, any better success.

Lastly, he left out the opium altogether, and gave 1 gramme 50 centigrammes of sulph. quinia alone, which produced, in the most marked manner, the peculiar remedial effects of that drug. And from that time the rheumatism diminished rapidly and markedly. This and other subsequent cases of the same nature confirmed him in his belief that opium was antagonistical to sulph. quinia, or, so to speak, its antidote.

M. Gubler enunciates his particular views of the *modus operandi* of opium and sulph. quinia. According to him, opium produces congestion and hyperæmia, while its antagonist, sulph. quinia, produces anæmia and dissipated congestion—(*anémié et décongestionne*).

The following are the conclusions of M. Gubler:

1. Inversely to opium, which exalts organic action, producing sanguineous congestion and calorificity, sulph. of quinine acts on the nervous system, by condensing the forces there, in such a way as to arrest organic

action, the source of waste, and to diminish as much as possible the afflux of blood in the inflamed parts. (Sic.)

2. This *modus operandi* once admitted, we can readily understand the innocuousness of sulphate of quinia in the cerebral symptoms of rheumatism, which symptoms recent experiments have already tended to show were not due to its use.

3. Moreover, the use of sulph. of quinia is indicated in all the inflammatory forms of cerebral rheumatism; opium being serviceable in the nervous forms only, and in these only when not complicated by fever.

4. Sulph. of quinine and opium being antagonistic, should not be given together.

5. These two remedies may be used as antidotes to one another.

M. Guérard thought that sulph. quinia did "*décongestionner le cerveau*," and stated in support of his opinion, that its use produced imminent syncope. Some years previously, while suffering from intermittent fever, he had taken large quantities of sulph. of quinia, sometimes for a month at a time, in a single dose daily. As long as he remained in the recumbent position, he experienced no unpleasant sensation, but when sitting, syncope was imminent. He had seen a second similar case.

With respect to the antagonism of opium to sulph. of quinia, he was the more ready to believe it, inasmuch as in his *thèse de concours* for the chair of therapeutics, he had shown that the effects of medicines when isolated might be neutralized by combination; and had mentioned that M. Caventou had given strychnia combined with morphia, each in large doses, and that the effects of the combination had been greatly diminished. Substances which are poisonous by themselves, cease to be so when united.—*N. O. Med. and Surg. Journal*.

Caloric applied to Surgical Uses. By M. M. Guyot and Baudor.

M. J. Guyot, in 1842, published an essay "on the employment of caloric in the treatment of ulcers, the wounds resulting from amputations and other considerable surgical operations, hysteria, skin diseases, rheumatism, etc." M. Guyot was led to try the therapeutic effects of caloric upon animals, from the following theory, which he has given in the shape of three propositions:

1. The proximate and exciting cause of life in all organized beings is caloric.

2. The chief object of the organization is the production of a certain quantity of caloric, and its maintenance.

3. All the functions and vital phenomena are under the dependence of the temperature proper to the individual,

These experiments, followed with interest by Magendie himself, seemed to confirm the theoretical views of the author, and the results of his experiments were :

1. That wounds healed in every case (without dressing) more rapidly in a temperature of 30° centigrade or 86° F., than in an inferior temperature with or without dressing.

2. The greater number of wounds have been healed in the higher temperature without inflammation or suppuration, a circumstance not to be observed under ordinary conditions. "I cannot consider as inflammation," says M. Guyot, "the normal process of cicatrization, which never operates well except in the absence of pain, swelling, redness, and abnormal heat."

3. Wounds have been healed by a temperature above 86° F., which had previously resisted the healing process while at the ordinary surrounding temperature.

4. Wounds in full and free suppuration have ceased to suppurate upon being surrounded by a temperature equal to that of man under normal conditions; and these wounds have taken upon themselves the characters of recent wounds, and have healed after the manner of such.

From the above data, from the observations of Larrey upon the influence of climate in surgical practice, and encouraged by Magendie, M. Guyot extended his experiments, and with success, to the human subject. This plan of treatment now received the name of "incubation," and was defined as a medication, consisting in submitting certain parts of the body to the action of a constant temperature, almost equal to the proper temperature of the individual; that is, about 36° c. or 96° 8 F. It was further divided into—1. Incubation, local or circumscribed, in which a limited portion of the body is submitted to this therapeutic agent. 2. Incubation, diffused as in the treatment of chlorosis, amenorrhœa, œdema, ascites, neuralgia, etc.; whilst 3rd, and lastly, we have other general application of this process, as in the treatment of scrofula and rickets. The required temperature is obtained by means of a spirit-lamp applied to variously contrived containing cavities.

According to M. Guyot, the incubation exerts both a local and a general influence upon the economy. Locally, it,

1. Relieves all pain within a very short time of its application.
2. Causes the disappearance of the redness (whether this be inflammatory or congestive), without ever producing it.
3. Constantly diminishes, and most frequently removes the tumefaction, active or passive. Should pus be already formed, the incubation

will bring the abscess to maturity, by causing the resolution of the surrounding infiltrations.

4. A prompt amelioration of wounds of a sluggish, inert and unhealthy aspect—the paleness and flaccidity being immediately converted into a rosy aspect, with all the appearances of vigor and activity, whatever may have been their previous condition.

5. Whenever a wound in full suppuration is submitted to the influence of the normal heat, although the pus may be the most unhealthy, and out of all proportion with the size of the wound, the wound is promptly reduced to a good and healthy condition.

6. Cicatrization is more rapid, but it is impossible to determine exactly the amount of this advantage, as will be easily understood.

7. Amputation wounds are more easily and quickly healed, although by exactly the same processes, viz. : by degorgement, suppuration and cicatrization after a shorter or longer period. From observation of these cases, we can only state that they heal incontrovertibly better by incubation than by any other method at present employed.

From the above, it will be seen that *this plan* of treatment is merely and modestly looked upon as simply favoring the happy termination.

As to the general action of incubation :

1. When applied to wounds resulting from amputations, it suppresses or considerably diminishes the traumatic fever, and consequently calms the patient, and places him in a condition where, his appetite returning, he may be better able to withstand the enemy.

2. If, as the consequence of a long and undermining local disease, the patient is exhausted by sanious suppuration, colliquative diarrhœa, and consumed by adynamic fever, the incubation will raise up his forces, calm his pulse, arrest the diarrhœa, and moderate the suppuration.

3. If the female organism be subject to those nervous movements, alike so venacious and so painful, which characterise hysteria, this plan of treatment will calm the patient and re-establish health.

In support of his views, the author reports the results of thirty-two cases of amputation, fifteen cases of ulcer, and ten serious recent wounds.

At the period of publication of the above, this plan of treatment created considerable noise in the medical world, and seemed destined to occupy a considerable space, and exercise no ordinary influence in medical and surgical therapeutics. However, the state of health of M. J. Guyot obliging him to quit the arena of medicine, his propositions and practice were alike by degrees forgotten, either from indifference or default of conviction on the part of the surgeons ; so completely has incu-

bation, as a therapeutic, been lost sight of, that many of our existing members would be able to give no other definition of incubation than that to be found in Maunder, viz.: "the act of sitting upon eggs to hatch."

Is this lapse from the medical memory merited? This is a question which a thesis published and sustained before the French Faculty of Medicine this year, by a M. Edmond Baudot, seems to settle.—*Medical Times and Gazette*.

Nouvelles Recherches sur la Digestion. Première partie sur le Principe Acide du Suc Gastrique Par M. BLONDLOT, Docteur en médecine et Docteur ès-sciences, à Nancy.

Le Docteur F. G. Smith, professeur de physiologie à Philadelphie, ayant publié dans ce journal (1) des expériences sur la digestion, qu'il a eu l'occasion de pratiquer sur le Canadien à fistule stomacale, rendu célèbre par les travaux de W. Beaumont, et les résultats auxquels il est arrivé ne s'accordant pas avec quelques-uns des principes que j'ai émis dans les différents ouvrages que j'ai produits sur le même sujet, je me suis d'abord proposé de soumettre ce travail à un examen critique; puis m'étant aperçu que, pour établir les bases de mon argumentation, je devais commencer par exposer le résumé de mes propres travaux, j'ai été ainsi conduit à donner à cet article des développements plus considérables.

Dans le mémoire dont il s'agit, le docteur Smith se livre à l'examen de plusieurs questions relatives à l'action physiologique de l'estomac, qu'il considère comme n'étant pas encore définitivement résolues. Parmi ces problèmes sont ceux qui concernent la nature de l'acide qui domine dans le suc gastrique et l'influence de ce suc sur les divers groupes de substances alimentaires. Aujourd'hui, je n'aborderai que le premier point, réservant le second pour une prochaine communication.

Les trois principes auxquels on a tour à tour attribué l'acidité du suc gastrique sont, dans l'ordre chronologique, l'acide chlorhydrique, l'acide lactique et le biphosphate de chaux. En circonscrivant le débat entre ces trois principes, je me suis demandé s'il n'existerait pas quelque réactif capable de les différencier tout d'abord. L'eau de chaux m'a semblé surtout propre à attendre ce but.

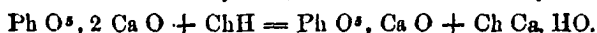
En effet, la chaux forme, comme l'on sait, avec les deux premiers acides, des sels très solubles, tandis qu'elle produit, avec le biphosphate calcaire (Ph O^2 , Ca O), du phosphate neutre (Ph O^2 , 2Ca O), insoluble.

(1) No. 1. Janvier 1858, p. 144-158.

Or, si dans de l'eau de chaux parfaitement limpide, on vient à verser quelques gouttes de suc gastrique péalablement filtré, à l'instant même il se fait un précipité dont la proportion augmente à mesure que l'on ajoute une plus grande quantité de suc gastrique. Ce précipité est du phosphate neutre de chaux, soluble, sans la moindre effervescence, dans l'acide acétique, fournissant de l'hydrogène phosphoré, quand après l'avoir desséché, puis chauffé dans un tube avec un globule de potassium, on vient à l'humecter, etc.

Cette expérience, toute simple qu'elle est, me semble décisive. D'où proviendrait, en effet, le phosphate calcique précipité, s'il ne résultait pas de la neutralisation du biphosphate existant normalement dans le liquide? On ne pourrait faire à cet égard que deux suppositions également insoutenables. La première serait de prétendre que le phosphate calcique précipité s'est formé de toutes pièces, par la combinaison de la chaux ajoutée avec de l'acide phosphorique libre qui serait contenue dans le suc gastrique; or, je démontrerai plus loin que, s'il existe de l'acide phosphorique dans ce liquide, il n'y est point à l'état de liberté absolue. La seconde supposition serait que le phosphate neutre précipité préexistait dans le liquide, qui le tenait en dissolution à la faveur des acides chlorhydrique ou lactique, lesquels, une fois neutralisés, laisseraient déposer le sel neutre. Admettre une telle supposition serait se payer de mots vides de sens.

En effet, pour qu'un acide quelconque dissolve le phosphate de chaux, il faut qu'on en emploie une proportion suffisante pour neutraliser un équivalent de base: ce qui indique clairement que la dissolution qui s'opère n'est que la conséquence d'une décomposition dans laquelle le sel neutre ayant perdu l'un de ces deux équivalents de base, est passé à l'état de biphosphate. Lors donc que du phosphate neutre de chaux est dissous par de l'acide chlorhydrique, il se forme simultanément du biphosphate de chaux et du chlorhydrate de la même base, ou, autrement dit, du chlorure de calcium hydraté, conformément à la formule suivante:



Pareille réaction aurait lieu évidemment avec l'acide lactique, à cela près qu'au lieu de chlorure de calcium, il se produirait du lactate de calcium; mais, dans tous les cas, le principe acide qui dominerait dans le liquide serait toujours le biphosphate de chaux (1.)

(1) Il est vraiment étrange de voir figurer l'un à côté de l'autre, dans certaines analyses du suc gastrique, du phosphate neutre de chaux et une proportion équivalente d'acide chlorhydrique ou d'acide lactique, comme si l'acide phosphorique pouvait conserver les deux équivalents de base en présence d'acide, dont l'énergie ne le cède en rien à la sienne, dans les conditions ordinaires de température et de pression.

Il est encore une autre objection qui a été faite, à propos de l'expérience précédente, à l'existence du biphosphate calcaire, comme étant le seul principe acidificateur du suc gastrique, la voici : Si, après avoir précipité de l'eau de chaux avec du suc gastrique, on verse quelques gouttes du liquide trouble qui en résulte dans un grand excès du même suc. Le précipité se redissout, ce qui, dit-on, ne saurait avoir lieu avec un biphosphate. C'est une erreur ; car si l'on reproduit l'expérience avec une solution étendue de biphosphate de chaux obtenue en faisant réagir à froid de l'acide chlorhydrique sur du phosphate neutre de chaux en excès, c'est-à-dire dans les conditions où le biphosphate du suc gastrique paraît se produire dans l'économie, comme nous le verrons plus loin, les mêmes effets se reproduisent identiquement. Quand à la raison chimique du phénomène, on comprend que ce n'est point ici le lieu de s'en occuper, le fait brut, si je puis m'exprimer ainsi, suffisant pour répondre à l'objection.

Mais ce n'est pas seulement à l'état de biphosphate que la chaux se se trouve dans le suc gastrique ; elle y est aussi, en proportions équivalentes, à l'état de chlorure, ainsi que je l'ai démontré ailleurs (2). Du reste, l'existence de ce sel dans le suc gastrique est aujourd'hui admise par tous les chimistes, parmi lesquels je citerai particulièrement Braconnot, qui l'avait signalée dans du suc gastrique de chien, que je lui avais remis moi-même, et Berzélius, qui, dans une lettre qu'il m'a fait l'honneur de m'adresser, déclare en avoir trouvé dans du suc gastrique que le docteur Beaumont lui avait envoyé, et qui provenait de ce même Canadien dont il est de nouveau question.

Ces deux principes admis, il nous serait maintenant facile de nous rendre compte des expériences rapportées par le docteur Smith, et de démontrer que, loin de contredire mon opinion, elles viennent au contraire la confirmer.

Dans une première expérience, l'auteur distille du suc gastrique, et constate que les premiers produits recueillis dans le récipient sont neutres aux papiers réactifs et sans action sur l'azotate d'argent ; tandis que, vers la fin de l'opération le liquide qui passe est acide et donne avec l'azotate d'argent un chlorure bien caractérisé ; preuve évidente qu'il s'était dégagé un peu d'acide chlorhydrique à l'état de liberté. Ce fait n'est pas nouveau, il confirme ce qui avait déjà été annoncé par plusieurs chimistes, notamment par Prout, Braconnot, MM. Bernard et Barreswil, et par moi-même, dans la mémoire précitée. Du reste, avec la plupart

(2) Voir le mémoire que j'ai publié en 1811, dans les *Mémoires de la Société des sciences de Nancy*, sous le titre de : *Nouvelles recherches sur la nature et l'origine du principe acide qui domine dans le suc gastrique.*

des chimistes actuels, il reconnaît que l'acide chlorhydrique dégagé ne préexistait pas dans le liquide à l'état de liberté, mais provient de la réaction de l'acide qui domine dans le suc gastrique sur les chlorures qu'il renferme. A l'appui de cette opinion, qui aujourd'hui ne trouve, pour ainsi dire, plus de contradicteur, il cite la judicieuse remarque faite par M. Barreswill, à savoir, que le suc gastrique donne un précipité abondant avec l'acide oxalique, ce qui ne saurait avoir lieu dans un liquide qui contiendrait la moindre trace d'acide chlorhydrique.

La présence de l'acide chlorhydrique libre dans le suc gastrique normal se trouvant ainsi écartée, le débat se trouve, en quelque sorte, restreint entre l'acide lactique et l'acide phosphorique plus ou moins libre. Pour décider la question, le docteur Smith fit l'expérience suivante :

Exp. V (*Mémoire cite*, p. 150).—Une portion de suc gastrique fut bouillie légèrement dans une cornue. Le liquide distillé contenait des traces d'acide chlorhydrique libre. Le résidu, examiné au papier, était plus acide qu'avant la distillation. On le fit alors évaporer avec soin et on l'examina de temps en temps, ce qui fit constater que son acidité s'augmenta tant qu'il resta liquide. On chauffa beaucoup plus, de façon à dessécher, mais sans carboniser la matière; en la mouillant avec de l'eau, on la trouva encore beaucoup plus acide. On chauffa de nouveau, de manière à arriver à un commencement de carbonisation, et alors on humecta et on trouva que l'acidité avait diminué. La même expérience répétée et poussée jusqu'à une carbonisation avancée, montra, lorsqu'on mouilla le résidu, une acidité encore moindre: et, en chauffant encore jusqu'à ce qu'il n'y eût plus d'odeur empyreumatique, on trouva que toute acidité avait disparu.

De ces faits, l'auteur se croit en droit de conclure: 1^o que l'acide qui a décomposé les chlorures était fixe relativement à l'acide chlorhydrique, ce qui est parfaitement exact; 2^o qu'ayant disparu par l'action du feu, il devait être de nature organique: ce qui est une erreur. En effet, nous avons vu que le suc gastrique renferme simultanément du biphosphate de chaux et du chlorure de calcium, en rapport d'équivalent. $= \text{Ca O}_2, \text{Ca O} + \text{Cl Ca} + \text{HO}$. Cela étant, d'après les principes les plus élémentaires de la chimie, on doit se représenter le biphosphate calcique comme tendant incessamment à reprendre l'équivalent de base que l'acide chlorhydrique tient, pour ainsi dire, en échec, et qui lui serait nécessaire pour passer à l'état neutre, beaucoup plus stable. Il y a donc entre le sel acide et l'acide chlorhydrique une sorte de lutte, qui se termine à l'avantage du premier, qui est fixe, lorsque, l'application de la chaleur, la concentration du liquide, et même par la simple soustraction de la pression

atmosphérique, on augmente la tendance de l'acide chlorhydrique à se volatiliser ; de sorte qu'il ne reste plus, en définitive, que du phosphate de chaux parfaitement neutre (1).

Toutefois, pour que cette explication soit légitime, il faut qu'au moment où, par l'application de la chaleur, l'acidité du résidu disparaît, les vapeurs qui s'échappent renferment de l'acide chlorhydrique libre. Or, d'après l'auteur, il n'en serait point ainsi. Dans l'expérience III (p. 149), il rapporte qu'ayant chauffé du suc gastrique dans une capsule de porcelaine, jusqu'à l'incinération, il vit le résidu devenir de plus en plus acide. à mesure que la concentration augmentait mais que la vapeur qui s'échappa ne donna aucune manifestation d'acidité.

Il y a ici une erreur matérielle qui provient de la manière dont on a opéré. Comment, en effet, eût-on pu constater la trace d'acide qu'emportaient avec elles les vapeurs diverses qui s'échappaient de toute la surface d'une capsule de porcelaine ?—Voici comment l'expérience doit être faite. Après avoir concentré un peu de suc gastrique dans une capsule, introduisez le résidu dans un tube de verre fermé par un bout. Achevez alors la dessiccation à l'aide d'une chaleur ménagée. Lorsqu'elle sera terminée, essuyez exactement avec du coton la partie supérieure du tube qui a été atteinte par les projections du liquide ; puis introduisez-y une lanière de papier bleu de tournesol. Chauffez alors de nouveau jusqu'à déorganisation complète, et vous verrez le papier rougir de la manière la plus manifeste, quoique les vapeurs ammoniacales qui se dégagent en abondance aient dû en neutraliser une partie.

On le voit, non-seulement ces faits détruisent par le bas l'argumentation du Dr. Smith, mais ils viennent même protester contre son opinion. Si, en effet, l'acide qui prédomine dans le suc gastrique était de nature organique, dès le moment où il a été réduit à l'état de charbon, il devrait cesser d'agir sur les chlorures, et les vapeurs qui se dégagent loin d'être acides, devraient manifester une réaction alcaline, à raison du carbonate d'ammoniaque engendré par la destruction des matières azotées, qui font partie de ce fluide.

En résumé, les expériences que nous venons de rapporter aboutissent donc à démontré que l'acide lactique, pas plus qu'aucun autre acide organique, ne constitue le principe acide du fluide spécial sécrété par l'estomac. Il est, d'ailleurs, digne de remarque que, bien que l'acide lactique soit aujourd'hui généralement considéré comme la cause plus

(1) Il est peut-être bon de faire remarquer que l'acide chlorhydrique mis en liberté par la concentration de la liqueur est en grande partie retenu par la matière organique, ainsi que je l'ai fait voir dans le mémoire précité, en répondant à une objection qui m'avait été faite par MM. Bernard et Barreswil.

ou moins exclusive de l'acidité du suc gastrique, d'une part, aucun auteur, que je sache, n'est réellement parvenu à en extraire de ce fluide une quantité appréciable, malgré sa tendance à former avec certaines bases des sels cristallisables, faciles à caractériser, et que, d'autre part, un grand nombre de chimistes éminents, entre autres Braconnot, qui s'était spécialement occupé de l'acide lactique, n'ont jamais pu en découvrir la moindre trace dans le fluide en question.

L'acide lactique se trouvant donc aussi hors de cause, si je puis m'exprimer ainsi, il ne nous reste plus à examiner que l'acide phosphorique plus ou moins combiné à la chaux. Or, indépendamment des faits qui précèdent et qui tous concordent pour manifester le biphosphate calcaire comme étant le seul principe acidificateur du suc gastrique, j'en rapporterai quelques autres qui, bien qu'accessoires, n'en apportent pas moins leur contingent de preuve en faveur de cette opinion.

On sait que l'acide phosphorique ordinaire, c'est-à-dire à trois équivalents d'eau, et les phosphates acides dans lesquels un de ces trois équivalents d'eau est remplacé par un équivalent de base, ne partagent qu'avec l'acide acétique, dont il ne saurait être ici question, la propriété de ne pas coaguler l'albumine; tandis que l'acide chlorhydrique, mais surtout l'acide lactique, opèrent très bien, comme l'on sait, cette coagulation. Or, il est certain que le suc gastrique ne coagule point l'albumine, même à la température de 38 à 40 degrés. Du reste, pour m'assurer que ce défaut de coagulation ne tient point, comme on l'a prétendu, au degré de dilution dans lequel se trouve le principe acide dans le suc gastrique, j'ai fait l'expérience de la manière suivante :

Ayant déterminé, au moyen d'une solution de soude normale au dixième, titrée d'après la méthode de M. Moore, le degré d'acidité du suc gastrique, j'ai acidulé de l'eau, avec les acides chlorhydrique ou lactique, au même degré, c'est-à-dire de façon qu'un volume déterminé de liquide exigeât pour sa complète neutralisation la même quantité de soude qu'un volume semblable de suc gastrique : or, tandis que ce dernier était sans action sur les liquides albumineux, les deux autres solutions y produisaient une coagulation manifeste.

Il est encore une autre particularité qui vient à l'appui de mon opinion, et sur laquelle je crois devoir m'arrêter, d'autant plus que, d'une part, j'aurai quelques rectifications à faire sur la manière un peu trop absolue dant je l'avais jusqu'ici présentée, et que, d'autre part, on peut en déduire quelques conséquences pratiques relativement à l'action du suc gastrique sur certains médicaments de nature minérale : je veux parler de la propriété commune au principe acide du suc gastrique et au biphosphate de chaux de ne pouvoir être neutralisé par le carbonate de chaux. Ce fait

que j'ai fait connaître le premier, me semble tout d'abord d'une grande valeur pour démontrer leur identité. Aujourd'hui, plus que jamais, je persiste dans cette manière de voir ; seulement, je ferai connaître quelques rectifications qui répondent péremptoirement à certaines objections qui m'ont été faites relativement à la portée de cette expérience, remarquable entre toutes par sa simplicité.

Dans les précédents travaux que j'ai publiés sur ce sujet, j'avais dit qu'on peut faire bouillir indéfiniment le suc gastrique, comme aussi une solution plus ou moins étendue de biphosphate de chaux avec du carbonate de la même base, en excès, sans que celui-ci soit attaqué. Cette assertion était trop absolue ; car, s'il est vrai qu'après plusieurs heures d'ébullition, le liquide conserve encore une acidité des plus évidentes, il ne l'est pas moins, comme je l'ai reconnu depuis, que cette acidité va en diminuant de plus en plus, à mesure que l'action de la chaleur augmente et se prolonge : ce qui prouve incontestablement que le carbonate de chaux a été attaqué. Du reste, je me suis assuré du fait de la manière suivante : M'étant procuré une certaine quantité de suc gastrique sur un chien à fistule, j'en déterminai le degré d'acidité au moyen d'une solution de soude, puis après y avoir ajouté du carbonate de chaux pur (spath d'Islande pulvérisé), je maintiens le liquide à l'ébullition pendant une demi-heure environ ; puis, l'ayant laissé refroidir, je déterminai de nouveau son degré d'acidité, et trouvai qu'il avait notablement diminué. Après une nouvelle demi-heure d'ébullition, il avait perdu près moitié de son acidité primitive et il était devenu trouble par la formation d'une certaine quantité de phosphate neutre de chaux. Il est à peine nécessaire de faire observer que, dans ces expériences, avant de prendre le degré d'acidité resté au suc gastrique réduit par l'ébullition, j'avais soin de le ramener à son volume primitif par l'addition d'une quantité suffisante d'eau distillée.

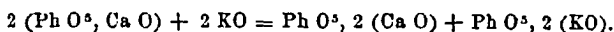
Du reste, il est facile de se rendre compte de ce qui se passe en pareille circonstance. Quand on met le suc gastrique, qui renferme, disons-nous, du biphosphate de chaux, en contact avec du carbonate calcaire, il se manifeste la même tendance à la décomposition dont j'ai parlé en exposant la réaction qui s'opère, sous l'influence de la chaleur, entre ce biphosphate et les chlorures naturellement contenus dans le suc gastrique. Seulement, comme l'acide carbonique tient moins à sa base calcaire que l'acide chlorhydrique, c'est le carbonate qui est décomposé ; au lieu du chlorure de calcium, pour fournir au phosphate l'équivalent de base qui lui est nécessaire pour passer à l'état neutre, tandis que l'acide carbonique se volatilise. Au surplus, la même expérience répétée avec une solution artificielle de biphosphate de chaux dans l'eau distillée, donne

avec le carbonate calcaire des résultats sensiblement identiques, qu'il y ait ou non un chlorure en présence dans la liqueur.

J'ai de même constaté que le suc gastrique, comme aussi une solution étendue de biphosphate calcaire attaque lentement, même à la température ordinaire, mais mieux à 40° C., la magnésie carbonatée et le fer métallique, surtout quand il est dans un grand état de division, ainsi qu'il arrive au fer réduit par l'hydrogène. Il y a alors un faible dégagement d'hydrogène, qui provient de la décomposition de l'eau. Dans tous les cas, l'acidité du liquide s'affaiblit, et il se forme un précipité plus ou moins abondant de phosphate neutre de chaux mélangé à du phosphate de magnésie ou de fer, dont un faible partie seulement reste en dissolution.

On le voit, ces différentes particularités peuvent être d'un certain intérêt pour la thérapeutique; mais, tout en apportant quelques restrictions au principe que j'avais d'abord posé d'une manière trop absolue, loin d'infirmer les conséquences que j'en ai déduites relativement à la nature de l'élément acidificateur du suc gastrique, elles fournissent une nouvelle preuve en faveur de mon opinion, puisqu'elles sont communes à ce fluide et au biphosphate de chaux.

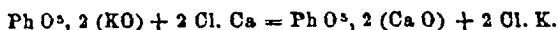
Il est encore un dernier fait sur lequel je veux fixer l'attention. Dans le mémoire dont j'ai déjà parlé, j'avais cru pouvoir arriver à la démonstration direct de l'acide phosphorique plus ou moins libre dans le suc gastrique de la manière suivante: Après avoir précipité le phosphate calcaire du suc gastrique avec de la potasse en léger excès, j'ai recherché, par les procédés connus, dans le liquide filtré, la présence du phosphate de potasse, qui semblait devoir en résulter, conformément à la formule suivante:



En effet, j'étais parvenu à constater des traces de ce phosphate alcalin qui me semblait, à bon droit, si démonstratif. Toutefois, depuis la publication de ce travail, la même expérience a été essayée par d'autres auteurs, notamment par M. le docteur Schiff; or, dans certains cas, on a trouvé un peu de phosphate alcalin dans la liqueur filtrée après sa neutralisation par la potasse, et d'autres fois, on n'a pu en découvrir la moindre trace. Moi-même, ayant repris ces essais, j'ai obtenu des résultats non moins variables. D'où provient cette différence? L'auteur que je viens de citer ayant remarqué qu'il obtenait plus particulièrement du phosphate alcalin avec du suc gastrique dont la sécrétion avait été provoquée par l'ingestion des os, a cru pouvoir en conclure que lorsque ce fluide donne un phosphate alcalin par l'addition de la potasse, cela provient de ce que les os, attaqués par l'acide qui y prédomine, auraient

produit du biphosphate de chaux, qui n'existait pas dans le suc gastrique à l'état normal. Nous ne tarderons pas à voir que cette assertion est chimiquement inadmissible.

Voici, de mon côté, l'explication que je crois pouvoir donner de ces faits. Il existe, avons-nous dit, du chlorure de calcium dans le suc gastrique, en même temps que du biphosphate de chaux. Or, en admettant que, par l'addition de l'alcali, il se soit formé du phosphate neutre de potasse, ce sel, rencontrant du chlorure de calcium, se convertit à son tour en phosphate neutre de chaux et en chlorure de sodium, conformément à la formule suivante :



De sorte que, en réalité, la potasse ajoutée au suc gastrique précipite immédiatement, à l'état de phosphate de chaux neutre, tout l'acide phosphorique qu'il renferme, absolument comme l'eau de chaux. Toutefois, pour qu'il en soit ainsi, il faut que les deux sels calcaires se trouvent dans ce fluide en proportions équivalentes; autrement, si le biphosphate prédominait, on devrait retrouver dans le liquide filtré une proportion plus ou moins considérable de phosphate alcalin. Toute la question se réduit donc à savoir si les deux sels dont il s'agit seraient susceptibles d'éprouver quelques variations dans leurs proportions respectives. Mais d'abord voyons si l'un des acides dont on a admis l'existence dans le suc gastrique pourrait faire prédominer le biphosphate en attaquant les os ingérés dans l'estomac.

Supposons un instant que la partie terreuse des os soit uniquement formée par du phosphate calcaire à deux équivalents de base, si elle est attaquée par de l'acide chlorhydrique ou par de l'acide lactique, pour un équivalent de biphosphate de chaux produit, il se formera un équivalent de chlorure de calcium ou de lactate de chaux. Or, il est évident, d'après ce que nous venons de voir, que, lorsque la liqueur qui contient ces deux sels viendra à être neutralisée par la potasse, il ne restera plus en dissolution un atome de phosphate alcalin. Il y a plus; c'est que comme, d'une part, le phosphate des os est plus basique que nous ne l'avons supposé, et que, d'autre part, une certaine proportion de carbonate de chaux s'y trouve mélangée, ces deux causes réunies concourent à faire prédominer le chlorure ou le lactate sur le biphosphate, et à produire ainsi un effet opposé à celui qu'on annonçait.

Là n'est donc point l'explication cherchée. Pour moi, je crois la trouver dans la théorie suivante que j'ai émise sur l'origine probable des deux sels calcaires qui se rencontrent simultanément dans le suc gastrique.

Après avoir fait l'analyse quantitative de ce fluide (1), une des considérations qui me frappèrent le plus, fut que ces sels y étaient en proportion telle qu'il y avait autant de base dans l'un que dans l'autre ; ce qui semblait indiquer qu'ils avaient pris naissance par la réaction de l'acide chlorhydrique sur du phosphate neutre de chaux. Or, pas plus que le biphosphate de chaux, l'acide chlorhydrique ne saurait exister à l'état de liberté dans le sang, qui est alcalin ; mais il s'y rencontre abondamment combiné à la soude. Le chlorhydrate de soude (chlorure de sodium hydraté) est, en effet, de tous les sels, celui qui se trouve le plus abondamment répandu dans l'économie animale. Il est donc très probable que ce sel est décomposé, dans les parois de l'estomac, en acide chlorhydrique, qui, se trouvant, à l'état naissant, en présence d'un excès de phosphate neutre de chaux (dont l'existence dans le sang, probablement à l'état de suspension, est incontestable), détermine la formation des deux sels calcaires du suc gastrique ; tandis que la soude restée dans le sang va sans doute contribuer à l'alcalinité de certaines sécrétions, telles que la salive, la bile, etc.

Cette théorie étant admise, je serais très disposé à penser que, si les deux sels en question ont pris simultanément naissance en proportions équivalentes, il pourrait ne pas en être absolument de même pour leur élimination ; de sorte que, dans certaines circonstances, le biphosphate, dont l'intervention dans le suc gastrique paraît bien plus importante que celle du chlorure, serait alors éliminé en proportion un peu plus considérable que ce dernier : ce qui expliquerait la prédominance de l'acide phosphorique que la potasse a parfois démontré dans le suc gastrique.

Ce n'est là, il est vrai, qu'une hypothèse, qui ne saurait encore prendre rang parmi les vérités rigoureusement démontrés ; toutefois, si des expériences ultérieures venaient la confirmer, ce serait une nouvelle preuve à ajouter aux précédentes, pour démontrer que le principe acide du suc gastrique est bien exclusivement le biphosphate de chaux.—*Journal de la Physiologie de l'homme et des anim. ux.*

(1) J'ai trouvé le suc gastrique composé ainsi qu'il suit :

| | | |
|--------------------------------|-------|----------------|
| Eau..... | 96,71 | |
| Biphosphate de chaux..... | 0,60 | = Calcium 0,12 |
| Chlorure de calcium..... | 0,32 | = Calcium 0,11 |
| — de sodium..... | 0,16 | |
| Chlorhydrate d'ammoniaque..... | 0,36 | |
| Perte..... | 0,05 | |

100,00

Diet in Phthisis. By M. CHAMPOUILLON.—The ideas formerly entertained regarding the nature of Phthisis, have now given way to others of a more sound and better established character. Tubercularisation of the lung, so long considered as a mere local disease, is now recognized as a general or constitutional affection—a diathesis having its elements, so to speak, throughout the whole system, and only localizing itself in the lungs when circumstances favorable to such an occurrence arise. Such a mode of origin being admitted, if not demonstrated as being that of tubercle, we are consequently called upon to inquire what means are most likely to modify or counteract it; and to the particular kind of aliment adopted by the individual has been attached the greatest amount of importance in this respect, as being the most energetic of all those influences modifying that condition of the organism associated with this disease.

M. A. Latour, who has to a great extent appropriated this question of dietetics, has recently laid down rules for the regulation of aliment in tubercular disease, both as a prophylactic and curative means of treatment; and impressed with the analogies subsisting between syphilis and scrofula in general, has come to the conclusion, that a regimen of a tonic nature is equally suitable for both of those affections. In this way, rich soups, animal food roasted or grilled, old claret, goat's milk salted, etc., mainly constitute and limit the regimen he prescribes in pulmonary cases of this kind. M. Ruz is somewhat bolder in his advice to such patients: "Enjoy life, go out or come in, on horseback or on foot, as you please," says he, "but go." Such confident treatment could only be justified by success; and success in this way does not appear to have been wanting to M. Ruz, who, in support of his doctrine, adduces two remarkable examples. Dr. Norverre, a confirmed subject of tubercle, on seeking a warmer climate in the West India islands, was there necessitated to be on horseback night and day—exposed alternately to a burning sun and heavy rains—in a word, to the very extremes of atmospheric vicissitudes. During his whole residence there, however, he ate and drank well, cured his phthisis, and died of dysentery twenty-five years after his arrival at Martinico.

M. Bidault, another medical man doomed as laboring under phthisis, also sought to reestablish his health by a residence in the same place; he followed the mode of life of his countryman Norverre, entering into all the excitements and good living to be had. How this intrepid *viveur* ended his days, M. Ruz does not mention.

A diet of mutton chops and generous wines, says M. Bicheteau, again may no doubt be beneficial in certain cases of tuberculosis, but the digestive

system in such persons must not have lost its energy. "We cannot, sufficiently disapprove," says he, "of that advice which does not hesitate to recommend substantial food, tonics and excitants, to those unfortunate patients who already can scarcely digest milk or soups, and who are reduced by colliquative diarrhœa. Among patients treated in this manner, we can adduce one instance where the alimentary canal was so injured by perseverance in a regimen of this kind, that death became accelerated, and was due to rapid tuberculation of the intestines, rather than softening of the tubercular deposits at first formed in the lungs."

M. Andral, in his additions to the "Treatise of M. Laennec," when speaking of individuals affected with tubercle, and in whom a tendency to inflammatory conditions exists, says: "In these cases a milk diet is of service;" while, on the other hand, in reference to the more asthenic examples he says: "Among such cases the milk diet is contra-indicated, and if it is attempted, it soon has to be laid aside, as the health suffers; and the time shortly comes when such diet ceases to nourish." Thus, according to the judicious observations of M. Andral, two different morbid states proper to phthisis must regulate the aliment in this disease; far from being a uniform and invariable character, the *therapeutique* of tuberculosis differs so much as to be the cause of great difficulty in its treatment, and in this way, however much authority M. Latour's name may possess, we cannot believe that generous or stimulating diet and salted milk should be the best method of treatment in all cases of phthisis.

The tonic method of treatment in this disease is by no means new; it was recommended by Morton, Portal, Raullin, etc., but by them only in particular cases. This method, no doubt, may be of service in cases where the patients are scrofulous or cachectic, or born of tuberculous parents, and where it is desirable to alter the constitution. But we know that the lining membrane of the stomach, partaking of the morbid condition existing elsewhere, may become atrophied or hypertrophied, ulcerated or softened, and in that way give rise to dyspepsia of a most intractable character, and rejecting all kinds of regimen—not excepting that of an exciting quality. Analogous disorders attack the intestinal canal, and all aliment in such circumstances becomes a cause of diarrhœa and debility. Phthisis may be apyretic, but is more frequently accompanied by fever, and sometimes by hæmoptysis, because the tubercles in the lung are only one result of a cause which induces an inflammatory condition beyond them, and extending to other organs, which become irritated, congested, and inflamed. The usual custom is to combat this state by an unexciting regimen; but, according to M. Latour, this is a

mistake. Now, can the proper mode of treatment consist in stuffing such patients with soups, animal food and wine? The fact is that this procedure may answer well enough in such cases of scrofula as require support and stimulation and in whom the leucophlegmatic condition amounts to cachexia; but in pulmonary cases what is required in general, is a regimen of a mild and refrigerent description.—*Gaz des Hôp.*, and *Edin. Med. Jour.*

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On the Treatment of Neuralgia by Electricity. By J. ALTHAUS, M. D.

From the time when Sarlandière and Magendie first made known their observations on the therapeutical use of electro-puncture, galvanism has been frequently and in various ways administered to relieve such neuralgic pains as defy other therapeutical proceedings. The practice of electro-puncture being connected with more or less annoying inconveniences, viz., in many instances very violent pain during the operation, and afterwards inflammation and suppuration in those tissues into which the needles have been thrust, other modes of applying galvanism have been naturally resorted to. Duchenne recommended to produce a strong revulsion by practicing faradisation of the skin, by means of metallic brushes conveying a very powerful electro-magnetic current to the painful points; but the pain produced by this proceeding is, according to Duchenne himself, atrocious, and in a certain number of cases the operation has not been accompanied with any success. Another, and in my opinion, the better way, is to send an induced current, of middling intensity, for a certain time through the affected nerve, by means of moistened conductors; one pole being placed at a point where the trunk of the nerve may be reached nearest to the nervous centres, the other one on any of the terminal branches of the nerve. This mode of electro-magnetic treatment, which is derived from the physiological fact that by such a proceeding any nerve in its normal state may be made more or less insensible, I have found the least inconvenient and the most efficacious for some forms of neuralgia. In fact, the pain produced by it is very insignificant, and hardly worth mentioning, when compared to the often excruciating neuralgic pain against which the proceeding is instituted. On the other hand, I have seen the method alluded to answering in cases where both electro-puncture and faradisation of the skin had been resorted to with little or no success. From a number of patients I have treated for neuralgia, two cases are subjoined to illustrate the therapeutical proceeding.—*Med. Times and Gazette.*

The Medical Chronicle.

LICET OMNIBUS, LICET NOBIS, DIGNITATEM ARTIS MEDICÆ TUERI.

QUALIFICATIONS FOR ARMY MEDICAL APPOINTMENTS.—We publish the following information concerning the rank of army medical officers as we believe it will be interesting to our readers generally, and particularly beneficial to such young gentlemen as may be intending to become candidates now or hereafter for assistant Surgeoncies—The present Director General is T. Alexander Esq. C. B. who was recently in this city as head of the branch of the Department in this Command.

The name of no gentleman can be placed on the list of candidates who does not possess a diploma in surgery, with the following testimonials:—Eighteen months' hospital; twelve months' anatomy; twelve months' practical anatomy; six months' physiology; twelve months, eight months' clinical surgery, twelve months' practice of physic or six months' practice of physic, and six of general pathology; eight months' clinical lectures on ditto, the same as required in surgery; twelve months' chemistry: six months' practical chemistry; three months' botany; three months' materia medica; three months' practical pharmacy, or apprenticeship; three months' natural history; three months' midwifery; three months' practical midwifery; one course natural philosophy; one course logic. Candidates must be unmarried, not beyond twenty-five years of age, nor under twenty-one years. The certificate of the teacher of practical anatomy must state the number of subjects or parts dissected by the pupil. All candidates for medical appointments are required to be conversant with Cullen's Nosology.

The following warrant was issued on the 14th October:—

VICTORIA R.

Whereas we have taken into our consideration the recommendations of the commissioners appointed by our authority to enquire into the regulations affecting the sanitary condition of our military forces, and the medical treatment of the sick and wounded of our army, our will and pleasure is that from and after the date of this warrant the following rules shall be established for the future admission, promotion, and retirement, and the pay, half-pay, relative rank and allowances of the medical officers of our army, and that by these rules our Commander-in-Chief shall govern himself in recommending officers for admission, promotion, and retirement.

1. The grades of medical officers in our army shall be four in number—viz:—

- (1) Inspector-general of hospitals.
- (2) Deputy inspector-general of hospitals.
- (3) Staff or regimental surgeon, who after 20 years' full-pay service in any rank shall be styled surgeon-major.
- (4) Staff or regimental assistant-surgeon.

2. No candidate shall be admitted to the competitive examination for a commission in the Medical Department of our army who does not possess such a certificate or certificates as would qualify a civilian to practise emedicine and surgery; and no such candidate shall receive a commission as assistant-surgeon until he shall have satisfactorily passed an examination in military medicine, surgery, and hygiene, after attending the authorized course in a general military hospital.

3. No assistant-surgeon shall be eligible for promotion to the rank of surgeon until he shall have passed such examination as our principal Secretary of State for War may require, and shall have served on full-pay with the commission of assistant-surgeon for five years, of which two shall have been passed in or with a regiment.

4. A surgeon whether on the Staff or attached to regiments, must have served ten years in the army, with a commission of full-pay, of which two must have been passed with the rank of surgeon in or with a regiment, before he will be eligible for promotion to the rank of deputy inspector-general of hospitals.

5. A deputy inspector general of hospitals must have served five years at home, or three abroad, in that rank before he shall be eligible for promotion to the rank of inspector-general.

In cases, however, of emergency, or when the good of the service renders such alteration desirable, it shall be competent for our Secretary of State for War to shorten the several periods of service above-mentioned, in such manner as he shall deem fit and expedient.

6. Assistant-surgeons shall, as a general rule, be promoted to the rank of surgeon in the order of their seniority in the service, unless unfit for the discharge of their duties from physical or professional incompetence or misconduct. In cases of distinguished service, however, an assistant-surgeon may be promoted without reference to seniority; and in such cases, with a view to insure the responsibility attaching to an appointment made out of the regular course of promotion, the recommendation, in which the services of the officer shall be detailed, shall be published in the General Orders of the Army and in the *Gazette* in which his promotion appears.

7. All promotion from the rank of surgeon to that of deputy-inspector and from the rank of deputy inspector to that of inspector, shall be given by selection for ability and merit; and the grounds of such selection shall be stated to us in writing, and recorded in the office of our Commander-in-Chief, the selection being made from the whole rank of surgeons, whether styled surgeons or surgeon-majors.

8. The rates of pay of the medical officers of our army shall be in accordance with the following schedule:—

| | After 30 Years' Service on Full Pay. | | After 25 Years' Service on Full Pay. | | After 20 Years' Service on Full Pay. | | After 15 Years' Service on Full Pay. | | After 10 Years' Service on Full Pay. | | After 5 Years' Service on Full Pay. | | Under 5 Years' Service on Full Pay. | |
|--------------------------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|-------------------------------------|-------|-------------------------------------|-------|
| | £ | s. d. | £ | s. d. | £ | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Inspector-General..... | 2 | 5 0 | 2 | 5 0 | 2 | 0 0 | * | — | — | — | — | — | — | — |
| Deputy-Inspector-General | 1 | 14 0 | 1 | 10 0 | 1 | 8 0 | * | — | — | — | — | — | — | — |
| Surgeon-Major..... | — | — | 1 | 5 0 | 1 | 2 0 | — | — | — | — | — | — | — | — |
| Surgeon..... | — | — | — | — | — | — | 18 0 | — | 15 0 | * | — | — | — | — |
| Assistant-Surgeon..... | — | — | — | — | — | — | — | — | 13 0 | — | 11 6 | — | 10 0 | — |

9. In addition to the pay of their ranks, officers at the head of the medical department on foreign stations shall receive allowances at the undermentioned rates, when serving under the following circumstances.

If with an army in the field of 10,000 men or upwards, 20s per day.

If with an army in the field of 5,000 men or upwards 15s. per day.

If with an army in the field of any less number, 10s per day.

10. After the date of this warrant every medical officer placed on half-pay by reduction of establishment, or on the report of a Medical Board, in consequence of being incapacitated by reason of ill-health, caused by wounds, or brought on by the discharge of his duties, shall be allowed the half-pay to which his period of full pay service may entitle him, according to the following schedule :—

| | After 30 Years' Service on Full Pay. | | After 25 Years' Service on Full Pay. | | After 20 Years' Service on Full Pay. | | After 15 Years' Service on Full Pay. | | After 10 Years' Service on Full Pay. | | After 5 Years' Service on Full Pay. | | Under 5 Years' Service on Full Pay. | |
|---------------------------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|-------------------------------------|-------|-------------------------------------|-------|
| | £ | s. d. | £ | s. d. | £ | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Inspector-General..... | 1 | 17 6 | 1 | 13 6 | 1 | 10 0 | — | — | — | — | — | — | — | — |
| Deputy-Inspector-General. | 1 | 5 6 | 1 | 2 6 | 1 | 1 0 | — | — | — | — | — | — | — | — |
| Surgeon-Major..... | — | — | 0 | 18 6 | 0 | 16 6 | — | — | — | — | — | — | — | — |
| Surgeon..... | — | — | — | — | — | — | 13 6 | — | 11 0 | — | — | — | — | — |
| Assistant-Surgeon..... | — | — | — | — | — | — | — | — | 10 0 | — | 8 0 | — | 6 0 | — |

11. With a view to maintain the efficiency of the service all medical officers of the rank of surgeon-major, surgeon, or assistant-surgeon shall be placed on the retired list when they shall have attained the age of 55 years, and all inspectors-general and deputy inspectors-general when they shall have attained the age of 65 years.

Officers thus superannuated shall be entitled to the rates of half-pay stated in the preceding schedule.

12. Every medical officer who shall have served upon full pay for 25 years and upwards shall have the right to retire upon half-pay, at the rate of seven-tenths of the daily pay he was in receipt of when thus retiring, provided he shall have served three years in the rank from which he retires, or shall have served in any rank for 10 years in the

* Or on promotion, should these periods of Service not be already completed.

colonies, or five years with an army in the field. But if he shall not have complied with any one of these conditions he shall be entitled only to half pay at the rate of seven-tenths of the daily pay he was in receipt of before his last promotion.

13. Every medical officer thus claiming to retire must give six months' notice to the head of his department of his intention to claim this right prior to his being allowed to retire; and no medical officer shall have a right to give such notice after he shall be under orders to proceed to any foreign station, until he shall have served at such station for one month.

14. If a medical officer is placed on half-pay from any other cause than those hereinafter named he shall only be allowed a temporary rate of half-pay (not exceeding the rates stated in clause 10) for such period and at such rate as shall be assigned to him by our Secretary of State for War, on a consideration of the length and character of the services rendered to the public by such medical officer.

15. On reduction of establishment the surgeon and assistant-surgeon who are junior in the ranks shall be the first reduced, and on restoration to full pay the reduced officers, who are senior in their rank, shall be the first restored.

16. The relative rank of the medical officers of our army shall be as follows:—

Staff or regimental assistant-surgeon as a lieutenant, according to the date of his commission; and after six years' full-pay service as captain, according to the date of the completion of such service.

Staff or regimental surgeon as major, according to the date of his commission; and surgeon-major as lieutenant-colonel, but junior of that rank.

Deputy inspector-general of hospitals as lieutenant-colonel, according to the date of his commission; and after five years' full-pay service as deputy inspector-general, as colonel, according to the date of the completion of such service.

Inspector-general of hospitals as brigadier-general, according to the date of his commission, if with an army in the field, or after three years, full pay service as inspector-general, as a major-general, from the date of his joining such army in the field, or according to the date of the completion of such service.

17. Such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds (except as regards the presidency of Courts-martial, where our will and pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel, and light, or allowances in their stead, detention, and prize money. But when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters.

18. Medical officers shall be entitled to all the allowances granted by our warrant of the 13th July, 1857, on account of wounds and injuries received in action, as combatant officers holding the same relative ranks.

19. Their families shall in like manner be entitled to all the allowan-

ces granted by our warrant of the 15th of June, 1855, to the families of combatant officers holding the same relative ranks.

20. Medical officers shall be entitled to field allowances, at home and abroad, at the following rates, subject to all the conditions and restrictions, laid down in our warrant of 1st July, 1848 :—

| | Ordinary. | Extraordinary. |
|--|-----------|----------------|
| | s. d. | s. d. |
| REGIMENTAL. | | |
| Assistant-Surgeon, under six years' service | 1 0 | 2 0 |
| Assistant-Surgeon, above six years' service | 1 6 | 2 6 |
| Surgeon | 2 6 | 4 6 |
| Surgeon-Major | 2 6 | 4 6 |
| STAFF. | | |
| Assistant-Surgeon, under six years' service | 1 6 | 2 6 |
| Assistant-Surgeon, above six years' service | 2 0 | 3 6 |
| Surgeons | 3 0 | 5 0 |
| Surgeon-Major | 3 0 | 5 0 |
| Deputy-Inspector-General, under three years' service.. | 4 6 | 7 6 |
| Deputy-Inspector-General, above three years' service.. | 6 0 | 10 0 |
| Inspector-General of Hospitals | 9 0 | 15 0 |

21. Surgeons or surgeons-major of infantry regiments, shall not in future be subject to any diminution of the allowance of forage, according to the regulations in force, nor to any stoppage out of their daily pay for any ration of hay, straw, or oats supplied for the horse or horses kept by them for the public service.

22. All staff surgeons of the first-class and senior surgeons of artillery now serving, or who, being now on half-pay, shall hereafter be called upon to serve, shall rank as surgeons-major from the date of their commissions as staff-surgeons of the first-class or senior surgeons of artillery, and shall receive the pay of surgeon-major according to the foregoing schedule of full-pay from the date of this warrant, or from the date of being called from half-pay to full-pay; and all surgeons who have already completed 20 years' full-pay service, or upwards, in any rank, shall have the rank and pay of surgeons-major from the date of this warrant.

23. Medical officers shall be held entitled to the same honours as other officers of our army of equal relative rank.*

24. A medical officer, retiring after a full-pay service of 25 years and upwards, may, if recommended for the same by the head of his department, receive a step of honorary rank, but without any consequent increase of half-pay.

25. Good service pensions shall be awarded to the most meritorious medical officers of our army under such regulations as shall be from time to time determined by us, with the advice of our Secretary of State for War.

26. Six of the most meritorious medical officers of the army shall be named my honorary physicians, and six my honorary surgeons.

Given at our Court of St. James's this 1st day of October, 1858, in the 22nd year of our reign.

By Her Majesty's command,

J. PEEL

GIN-SENG IN CANADA.—An exceedingly interesting pamphlet has of late been published by M. Verreau, Principal of the Jacques Cartier Normal School, consisting of a re-print of a very rare work, and entitled “Mémoire présenté à Son Altesse Royale, Mgr. le duc d’Orléans, Régent de France, concernant la précieuse plante du Gin-Seng de Tartarie, découverte en Amérique par le Père Joseph-François Lafitau, de la Compagnie de Jésus, missionnaire des Iroquois du Sault St. Louis,” preceded by a very learned biographical notice of the discoverer of Gin-Seng. “Après Charlevoix,” says M. Verreau, “le Père Lafitau est un des Jésuites qui se sont le plus distingués comme historiens et comme naturalistes. Le *Journal de l’Instruction Publique*, dont les rédacteurs s’efforcent de réunir dans leur collection tout ce qui peut intéresser les amis sincères de la gloire de notre pays, commence aujourd’hui la production du mémoire que ce savant missionnaire présenta au duc d’Orléans, régent de France, “sur la précieuse plante du Gin-Seng” qu’il venait de découvrir dans les forêts du Canada, mémoire fort rare maintenant et qui accompagné comme il l’est d’un *fac simile* de la planche qui se trouve dans le volume publié à Paris, et d’un portrait avec autographe de l’auteur, sera pour les amateurs de souvenirs historiques du pays une véritable bonne fortune. Nous eussions aimé à joindre à ce mémoire une notice biographique quelque peu étendue ; mais, malheureusement pour nous, le Père Lafitau était du nombre de ces apôtres zélés, dont la vie se résume dans leurs travaux et dans leurs écrits, ou l’homme a toujours le soin de s’effacer derrière les grandes choses qu’il accomplit.” At one time the trade in Gin-Seng from this country to China promised to become one of some consideration. According to Mr. Garneau as much as 500,000 francs worth was exported in one year. The properties of Gin-Seng as a medicinal agent ; its physiological effects and therapeutical uses, have not, as yet, been thoroughly investigated. The Chinese attribute almost marvellous powers to the root “It nourishes and strengthens the body, checks vomiting, removes hypochondriasis and all other nervous affections, and, in short, is capable of giving a vigorous tone to the system, even in old age, and is a panacea for all ills. It is administered in a variety of forms and the only ill result arising from overdoses they state to be a tendency to hemorrhage.” The Canadian root was supposed by many not to possess the virtues of the Asiatic. This, however, as M. Verreau observes, may have arisen from faults committed as to the season in which it was collected, method of drying, &c. Here, then, is an excellent opportunity for some active mind to distinguish itself, by thoroughly investigating everything connected with Gin-Seng. We hope ere long to hear something more regarding this indigenous plant, and in the mean time we are much indebted to M. Verreau for enabling us to call the attention of the profession to it.

CANADA DIRECTORY.—The Prospectus of a new edition of this truly national work lies before us, and we are equally surprised and pained to learn that the enterprising Publisher has sustained a very serious loss by the publication of the first edition. We hear a great deal of palaver nowadays concerning Canadian nationality. Seldom do a few hundred men meet together in public, no matter for what object, but they are told, by those who address them, that all distinctions of race, etc., must be set aside and forgotten, and that the people should unite in developing the vast resources of our immense territory, in supporting and encouraging local enterprise; and know of no other nationality but that associated with our common country. These patriotic sentiments are, of course, applauded to the very echo. They are excellent, and meet with our hearty assent, for we are Canadian, and have a deep affection for the country of our birth. We would be better pleased, however, to witness love of country manifested rather in deeds than in words. Here, for instance, is a work that reflects the highest credit on Canada; it is entirely the result of Canadian enterprise; even to the paper on which it is printed, it is Canadian. There is not, we believe, a work of a similar character, at all to be compared to it, either in Europe or America. It has astonished foreigners, and done more than all the speaking of all the after-dinner and political stump-orators to make Canada thoroughly known and appreciated abroad. And yet, the Canada Directory has met with so little encouragement, that Mr. Lovell is out of pocket by it, and he has been compelled to issue a Prospectus "as a precautionary measure, to ascertain what degree of support a new edition of the Directory would receive, before embarking more capital and involving himself in more anxiety in an undertaking that has already proved extremely arduous."

The new edition, if a sufficient number of subscribers be obtained, will appear in September, 1859. The price to be \$8. We shall be happy to receive the names of those of our readers who may be desirous to have their names placed on the subscription-list.

QUARTERLY REPORT OF THE MONTREAL GENERAL HOSPITAL,
ENDING 28TH OCTOBER, 1858.

| | | | |
|---|-----|------------------------------|------|
| Patients remaining from last quarter..... | 74 | Died during the quarter..... | 9 |
| Patients admitted present quarter..... | 251 | Now in hospital..... | 64 |
| | | Discharged..... | 252 |
| | 325 | | 325 |
| <i>In-door patients.</i> | | <i>Out-door patients.</i> | |
| Males..... | 171 | Males..... | 665 |
| Females..... | 80 | Females..... | 679 |
| | 251 | | 1344 |

DISEASES AND ACCIDENTS.

| Disease, &c. | Admit. | Died. | Disease, &c. | Admit. | Died. |
|---------------------------|--------|-------|-------------------------|--------|-------|
| Abscessus..... | 4 | ..... | Gonorrhœa..... | 1 | ..... |
| Adenitis..... | 1 | ..... | Hæmoptysis..... | 1 | ..... |
| Ambustio..... | 1 | ..... | Hemiplegia..... | 2 | ..... |
| Amputatio..... | 3 | ..... | Hysteria..... | 2 | ..... |
| Aneurism per anast.,..... | 1 | ..... | Icterus..... | 2 | ..... |
| Angio-leucitis..... | 1 | 1 | Impetigo..... | 1 | ..... |
| Anthrax..... | 1 | ..... | Inebrietas..... | 1 | ..... |
| Asthma..... | 1 | ..... | Intertrigo..... | 2 | ..... |
| Bronchitis..... | 9 | ..... | Inversio unguis..... | 1 | ..... |
| Bursitis..... | 1 | ..... | Iritis traumat.,..... | 1 | ..... |
| Cancer epith.,..... | 1 | ..... | Lepra guttata..... | 1 | ..... |
| “ mamma,..... | 1 | ..... | Luxatio..... | 1 | ..... |
| “ uteri..... | 0 | 1* | Mania..... | 1 | ..... |
| Caries..... | 1 | ..... | Neuralgia..... | 1 | ..... |
| Cataractus..... | 1 | ..... | Obstipatio..... | 1 | ..... |
| Catarrhus..... | 2 | ..... | Oedema..... | 1 | ..... |
| Cephalalgia..... | 2 | ..... | Ophthalmia scrof.,..... | 3 | ..... |
| Cholera Canad.,..... | 1 | ..... | Orchitis..... | 6 | ..... |
| Chorea..... | 1 | ..... | Paralysis..... | 1 | ..... |
| Circumcisio..... | 1 | ..... | Paraplegia..... | 1 | ..... |
| Conjunctivitis..... | 10 | ..... | Paronychia..... | 1 | ..... |
| Contusio..... | 8 | ..... | Peritonitis..... | 1 | ..... |
| Corneitis..... | 2 | ..... | Phrenitis..... | 1 | ..... |
| Cynaache tonsil..... | 3 | ..... | Phthisis..... | 7 | 2 |
| Debilitas..... | 2 | ..... | Pleuritis..... | 1 | ..... |
| Del. tremens..... | 6 | 1 | Pleurodynia..... | 2 | ..... |
| Diabetes..... | 1 | ..... | Pneumonia..... | 2 | 1 |
| Diarrhœa..... | 6 | ..... | Polypus nasi..... | 1 | ..... |
| Dysenteria..... | 9 | 2 | Psoriasis..... | 1 | ..... |
| Dyspepsia..... | 8 | ..... | Rheumatismus..... | 23 | ..... |
| Epilepsia..... | 2 | ..... | Scrofulosis..... | 2 | ..... |
| Erysipelas..... | 3 | ..... | Sinus..... | 2 | 1 |
| Febricula..... | 2 | ..... | Strictura ureth.,..... | 1 | ..... |
| Febr. com. cont.,..... | 15 | ..... | Synovitis chron.,..... | 1 | ..... |
| “ intermit.,..... | 1 | ..... | Syphilis..... | 21 | ..... |
| “ remit.,..... | 1 | ..... | Tinea capitis..... | 2 | ..... |
| “ typhoid..... | 1 | ..... | Tumor..... | 1 | ..... |
| Fistula in ano..... | 1 | ..... | Ulcus..... | 13 | ..... |
| “ perineo..... | 1 | ..... | Urticaria..... | 1 | ..... |
| Fractura..... | 6 | ..... | Vulnus..... | 9 | ..... |
| Furunculus..... | 2 | ..... |  |  |  |
| Gastrodynia..... | 2 | ..... |  |  |  |
| | | | | 251 | 9 |

OPERATIONS, &c., DURING THE QUARTER.

Major Operations.—Amputation of fingers, 2.

By Dr. WRIGHT.—Amputations: of legs, 3; of toes, 2. Excisions: of tumors, 2; of penis, 1; of inverted nails, 2. Circumcision, 1. Aneurism injected, 1. Operation for fistula in ano, 1. Hydrocele tapped, 1. Division of Cataract, 1.

Fractures treated.—In-door, 6; out-door, 1. Total, 7.

Dislocations reduced, 1.

Minor operations.—Venesections, 2; cuppings, 11; leeches applied, 17; catheterisms, 14; teeth extracted, 77; wounds dressed, 14; ulcers strapped, 22; abscesses opened and other incisions, 20; total, 177.

By Dr. CAMPBELL.—Amputation of breast.

By Dr. REDDY.—Excision of epithelial cancer. (Omitted in last report:—Popliteal aneurism cured by compression. Scirrhus of the tongue removed by the ecraseur.)

By Dr. FRASER (omitted in last report).—Extirpation of eye-ball.

Attending Physicians.—Drs. Scott and Wright.

ROBERT CRAIK, M. D., House Physician and Surgeon.

* Admitted during previous quarter.

MEDICAL NEWS.

Dr. David Uhl, of New York, whose conduct in the Cunningham-Purdell affair we felt it our duty to animadvert upon, died at Bolivar, Venezuela, on Friday, September 17. The odium which he brought on himself by his unfortunate conduct in that affair determined his removal from New York. *Requiescat in pace.*—The number of deaths from yellow fever in Charleston, S. C., in the month of September as reported in the Charleston "Medical Journal" was 399 whites and 18 blacks. In New Orleans, during the same period, as stated in the Medical and Surgical Journal of that city, the total number of deaths by the disease was 1825.—In the United States the consumption of coffee is eight times as great as in Great Britain, and probably the consumption of beer in Great Britain is eight times as great as in the United States.—No less than twelve crosses of the Legion of Honor were lately given to medical men, both in civil and military practice. Amongst the higher grades of the order we notice Messrs. Audral and Trousseau. These eminent physicians have attained the rank of "commander," which is the highest but one in the Legion of Honour.—Professor Chomel has left to the Medical Benevolent Society of the Department of the Seine three per cent. stock, bearing an interest of £8 a year. What Jenner said on reading, in Elysium, that complaints had been made of his having a statue in Trafalgar Square:—

"England, ingratitude still blots
The 'scutcheon of the brave and free—
I saved you many a million spots,
And now you grudge one spot to me."—*Punch.*

—A new medical warrant for the army has been issued, giving the medical officers the same right, privilege and position, according to their rank, as other officers.—The Board of Trinity College have elected Benjamin George McDowell, M.D., T.C.D., to the post of Professor of Anatomy and Physiology to the University, rendered vacant by the death of the late Dr. Harrison. Dr. McDowell has long been known in Dublin as Lecturer on Anatomy and Physiology to the Richmond Medical School, and as Physician to the Whitworth and Hardwicke Hospitals.—A Negro, superbly dressed, magnificent and audacious, has succeeded in bewildering the Parisian *dames* with his panegyrics of his nostrums, which were vouched to cure all the maladies which flesh is heir to. After a brief triumph, and creating a grand sensation in the *salons*, he has suddenly and mysteriously dilted, leaving a large number of imbeciles and gulls to bewail his loss.—It is said there has been a fearful outbreak of cholera in the valley of Cashmere, and that *one hundred thousand* persons have fallen victims. It is reported also to be spreading.—The Medical Faculty of Marseilles have recently decided that desecration of a young woman is quite possible under mesmerism. Such a case having been tried before the tribunal, the medical electrician was sentenced to penal servitude for life, as guilty of rape!—The Emperor of Russia seems resolved to put down quackery in his dominions. The circumstance, perhaps, of his father dying under the treatment of a homœopath in a manner that excited extreme dissatisfaction, has set his mind against charlatanism in every shape. Homœopathy and Morrison's pills have been alike exiled from the dominions of the great Czar. An order has just been issued to prohibit the importation of certain quack compositions, such as collodium, cantharida'c, hydrargrum-zooticum, Morrison's pills, oleum Hartadane, hydrargyrum sulphuratum stibiatum, Leroy's medicines, etc., etc.—By the report of the Commissioners, it appears that the number of patients in the various Lunatic Asylums of Ireland amounted upon the 1st of January 1857, to upwards of 3,286. Despite emigration, etc: the lunacy returns show an annual increase.—Dr. Boyd, health-officer of the City of Brooklyn, reports 22 cases of yellow fever as having occurred in that city during the past summer.