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# THE Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

U. OGDEN, M.D.,  
EDITOR.

R. ZIMMERMAN, M.B., L.R.C.P., London  
107 Church Street, Toronto, Corresponding Editor

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## Selections: Medicine.

### CLINICAL LECTURE ON SPINAL HEMORRHAGE.

BY EDWARD LONG FOX, M.D.,  
Physician to the Bristol Royal Infirmary.

GENTLEMEN,—The patient you have just seen is a labourer, aged thirty-four, of temperate habits. He has always had good health until two months ago. He was then carrying a heavy weight on his back up a ladder, and felt suddenly a pain across the loins. His left hip immediately gave way under him; he was unable to lift the left foot from the ground. At the same time his urine began to dribble away from him, and on the next day the feces passed unconsciously.

On admission, there was found considerable wasting of most of the muscles of the left leg. He could bend the left knee but not the left hip. He was able to stand with a little help, but manifestly depended chiefly on the right leg. His urine was passed unconsciously, and he had no power over the accelerator urinae. There was entire paralysis of the sphincters of the anus. He had a bedsore as large as a crown-piece over the sacrum. His digestion was impaired. There was slight hyperæsthesia over the paralysed leg, and complete absence of galvanic excitability. No tenderness or pain down the spinal column. The temperature was a little raised, probably from the irritation of the bedsore. The temperature in the left groin one-fifth of a degree (Fahr.) higher than in the right. Urine ammoniacal and purulent.

He was given strychnia and quinine, the bedsore attended to, a nutritious diet ordered, and

in a very short time he improved to the extent of being able, in bed, to move the leg very freely, to control completely the sphincter ani, and to use the accelerator urinae, and, perhaps as an indirect result of doing so, the urine did not dribble away so incessantly. The bedsore got well, and the patient was able to digest a nutritious diet.

We have here—

1. Almost complete motor paralysis of the left leg, with slight hyperæsthesia, and with extinction of galvanic excitability.

2. Complete paralysis of the sphincter vesicae and the accelerator urinae and sphincter ani.

3. The occurrence of these paralytic symptoms *immediately* after the accident.

4. The gradual recovery from the motor paralysis of the left leg; complete restoration of the sphincters of the anus, and partial recovery after one month's treatment (three months after the injury) of the accelerator urinae and sphincter vesicae.

5. The sequence of cystitis, gradually alleviated by small astringent washings of the bladder.

The diagnosis is gathered from the mode of access on the one hand, and on the other from the consideration of the parts paralysed. The mode of access was absolutely sudden. A strain on carrying a heavy weight; a pain low in the back and along the few inches of the great sciatic nerve on its exit from the spinal canal; loss of power over the anus and bladder in the course of a few hours; the gradual occurrence of ammoniacal urine andropy purulent mucus from the bladder, as a result of the inability of fully emptying this organ.

The consideration of the parts paralysed enables us to fix pretty accurately upon the seat of lesion. Thus, neither the upper extremities nor any of the muscles engaged in respiration are involved; the lesion, therefore, must be below the last dorsal vertebra. The first lumbar gives off the ilio-hypogastric and ilio-inguinal nerves; the second, the genito-crural and external cutaneous; the third, the anterior crural, dividing into the middle cutaneous, the internal cutaneous, and the long saphenous; the fourth, the obturator, supplying the adductor muscles. Now, not only was there in this case no paralysis of the cutaneous nerves, but, even whilst unable to use the leg in any other way, the patient retained the power of bringing it towards the middle line, showing that the obturator was unaffected. Part, however, of the fourth lumbar, with the fifth lumbar and the first four sacral nerves, unite to form the great sciatic, the small sciatic and the pudic nerves, supplying not only most of the muscles of the leg and foot, but also the accelerator urinae; whilst a branch of the fourth sacral supplies the sphincter ani. This muscle is also supplied from the inferior hæmorrhoidal branch of the pudic nerve. The sphincter vesicae is supplied mainly from the sacral plexus, derived chiefly from the four upper sacral nerves. Both the sphincter ani, and the external and internal sphincter ani, the latter especially, derive some of their nervous supply from the hypogastric plexus of the sympathetic; and this plexus, again, is mingled with nerves from the fourth and fifth lumbar ganglia and the four upper sacral ganglia, with nerve connections with the fourth and fifth lumbar and the four upper sacral nerves. The seat of lesion is therefore tolerably plain. It is unilateral, confined to the left side, and situated not above the origin of the fourth lumbar nerve.

Such, then, being the mode of access, and such the position of the lesion, what is its nature? It cannot be spinal meningitis, for this lesion is not accompanied by paralysis; nor does the patient lie in any peculiar position, showing an instinctive dislike to being moved from fear of pain in the back and limbs that such movements would cause. It cannot be myelitis, though myelitis sometimes follows

hæmorrhage, because the access was so sudden, the paralysis so one-sided; and there is no priapism. It cannot be congestion of cord, for, again, the mode of access is too sudden, and congestion only leads to very partial paralysis, and that of a paraplegic form.

I would say in all fairness that Professor Leyden throws doubt on the existence of spinal congestion as a lesion causing symptoms, from the difficulty in verifying it by post-mortem observation. Though doubtless congestion is difficult of proof, it is equally impossible to disprove; and the transient nature of the paralysis supposed to follow it, and its recovery under remedies known to influence the calibre of the vessels, such as ergot, belladonna, strychnia, etc., are reasons for accepting the real existence of this lesion.

The absence of tonic spasm, and the presence of paralysis, prevent any thoughts of tetanus. There is no tenderness down the spine; and this symptom is never absent in the so-called spinal irritation. Here again the paralysis is a diagnostic mark. The paralysis would be at once too sudden and too persistent to depend on pure shock. Under such circumstances the symptoms would scarcely be unilateral; and did they occur with such intensity from shock, whether they may mean spinal congestion, spinal anaemia, or some peculiar cell-change of a temporary nature, they could not well persist for several weeks, unless the shock had determined myelitis, meningo-myelitis or hæmorrhage.

Locomotor ataxy differs from the lesion before us in that its progress is extremely gradual; it is accompanied with no true paralytic symptoms affecting either the limbs or the sphincters until a very long time has elapsed, if ever; and it is manifested by a want of co-ordination that is absent in our patient. The ocular phenomena, also, so frequently met with in locomotor ataxy, are wanting in the case before us.

The suddenness of the access of paralytic symptoms, with the marked improvement of the patient under treatment, entirely forbids the idea of tumour of the spinal cord. And lastly, the absence of reaction in the paralysed muscles to galvanic stimulus is sufficient proof that the lesion is spinal, and not cerebral.

We are therefore led to the almost certain diagnosis of slight hæmorrhage of the spinal pia mater on the left side of the cord, about the level of the origin of the fourth lumbar nerve, dripping *guttatim* downwards, and never of sufficient amount to pass round the cord to the right side.

Is the prognosis favourable or otherwise? To form a right opinion on this point, we have three main data—the position of the spinal cord affected; the nature of the lesion; and the effects of treatment so far as it has gone. We have, however, to keep in remembrance the effects of the lesion on particular organs, and on general nutrition, and also the secondary sequelæ on the spinal cord that are sometimes the consequences of hæmorrhage. The position of the lesion is so far satisfactory, that it is too far down to cause any interference with the respiration. As a general rule, the higher in the cord the lesion, the more disastrous it is. It is also a good point for prognosis, that the paralysis is unilateral as regards the limbs. This being so, makes it probable that some of the nerves supplying the bladder and the sphincters of the anus are also unaffected. The nature of the lesion—hæmorrhage, and that, too, to so limited an extent that it has evidently not affected the right side at all—is itself a satisfactory point. A small hæmorrhage ought, *primâ facie*, to be absorbed, and absorbed within a period that would render important sequelæ in the cord somewhat improbable. And then again, the effects even of very limited treatment enable one to speak, not with positive assurance, but with fair hope, of a good result. The state of the patient you have already heard and seen for yourselves; the sphincters of the anus have wholly recovered their power, and this was marked a few days ago, when accidentally the patient was purged ten times after drinking too much tamarind-tea; the leg can be moved in every direction, and although locomotion is not easy, yet marked progress has been made. Again, the patient has regained considerable use of the accelerator urinæ, and some at least of the sphincter vesicæ.

On admission, however, we found a small bed sore over the sacrum, and you know how

serious such a lesion frequently is, when the spinal cord is in any way affected. The bed-sore is now nearly well, and this is another proof of the gradual clearing up of the internal lesion.

One thing still remains, and is enough of itself to impress a very serious aspect on the case, and materially to influence the prognosis—I mean, of course, the cystitis. The man passes a highly ammoniacal urine; and, on standing, this urine deposits a thick bed of epithelium, pus, and triple phosphate crystals. It may be that this cystitis has existed from a very early period of the illness—within, perhaps, a few days of the accident; if so, it has been probably increasing in intensity during the two months before he submitted himself to treatment. Not only is it a grave condition by itself, but, as you know, it may indirectly induce that degeneration of the kidney (beginning first in the pelvis, and progressing backwards into the renal structure) which we know by the name of surgical kidney. As long as the urine is so alkaline, we are quite unable by the microscope to determine whether or not the kidney is yet affected; our ignorance on this point at the present time, and our fear of such a renal affection in the future, must necessarily make our prognosis, otherwise favourable, extremely guarded.

And, lastly, the pressure of a clot of blood will sometimes produce myelitis; and although the seat of the hæmorrhage in this case is below the cord, we might get an equally disastrous effect by the pressure on the nerves of the cauda equina. I show you a plate of a section of cord in which destructive myelitis was set up after an accident, in which the bodies of three vertebræ were more or less fractured, and a large hæmorrhage into the spinal cord had resulted. Opposite the seat of hæmorrhage, and pressed upon by a clot, the cord was inflamed in almost its whole depth. Such a condition would be improbable in the case before us, all the more so that the patient is improving: but its possibility ought somewhat to affect our prognosis.

Now as to treatment. There are two principles to be kept in view in the treatment of such a case—first, to place the patient in the best pos-

sible circumstances for the absorption of the hæmorrhage; and, secondly, to remedy the effects of the lesion. To obtain the first result, you have seen that we have simply endeavoured to keep the patient in tolerable health. Slight tonics and strychnia, good food, care against constipation, gentle exercise of the affected leg, turpentine dressing to the bed sore, and a water-cushion to lie on, have been the main details of our care of him. But in attempting to remedy the effects of the lesion on the bladder it has been necessary to do more; and here I have urged attention to the minute details insisted upon so wisely by Sir Henry Thompson. It is expedient to insure the passage outwards of the mucopurulent *débris* with which the membrane of the bladder is covered, and also to effect the complete emptying of this organ. For this purpose the bladder is every second day washed out under certain special conditions—(1) that not more than one ounce of fluid be used; (2) that the washing is done with the help of a non-metallic catheter—you have seen that the accidental substitution of a metallic instrument on one occasion caused vesical hæmorrhage and considerable irritation; (3) that when astringents are used (and we did use them here after three or four injections of tepid water) they should be of the mildest character. Our patient has had acetate of lead lotion in the proportion of a quarter of a grain to the ounce of water, gradually increased to a grain and a half. He is also taking now an infusion of the *Triticum repens*. Under this treatment he feels no pain from distension of the bladder, nor from the nature of the application used.

He is getting well—slowly, indeed, as to the cystitis, rapidly in all other ways; and it is probable that had he come under treatment as soon as he received the injury he would by this time have entirely recovered.

**LINIMENT TO REPRESS THE SECRETION OF MILK.**—This liniment is made of six parts each of the tinctures of black pepper and of bergamot, and two and a half parts of camphor with eighteen of castor oil. The breasts are rubbed with it three times a day.—*Union Médicale.*

## REMARKS ON APOPLEXY.

In a lecture on Cerebral Hemorrhage, in the *British Medical Journal*, Dr. Julius Althaus remarks:—

Among the various points which influence the issue of such attacks as just described, the age of the patient is a most important one. Clinical experience has shown that the young recover more easily from the complaint than the old; and the result of my researches on the mortality from this disease in England and Wales during the last forty years, enable us to give considerable precision to this point. A large number of infants die of apoplexy in the first year of age; but these are mostly cases of meningeal, and not of cerebral hemorrhage. Of the latter there are hardly any instances between the first and fifteenth year of life; after fifteen they are “few and far between;” but at thirty-five there is a perceptible increase, and the numbers then gradually swell, until they reach an immense maximum, between seventy and seventy-five years of age. Between seventy-five and eighty the mortality from this complaint is still very large, while after eighty a rapid fall sets in; but considering how few people are still alive at eighty and the subsequent periods of life, the fatality of cerebral hemorrhage does actually increase rather than diminish as age advances. I am therefore able to state in general terms that cerebral hemorrhage is of slight significance up to thirty years of age; that its fatality increases *pari passu* with years; and that *the greater the age, the less is the probability of recovery from cerebral hemorrhage.*

While, therefore, age must, in every individual case of this kind which may come under your observation, largely influence your opinion about the patient's prospects, you should know that *sex* has no such influence at all. It is true, that it has hitherto been generally assumed that males are more liable to die of apoplexy than females; but my investigations of this point have conclusively shown that such is not the case, that the sexes die in almost equal proportions of the disease; and that the slight excess which is found to exist is for women and not for men, the proportion in two hundred thou-

sand consecutive cases being 1000 for males, to 1009 for females. From this you will perceive that for the purpose of prognosis sex is devoid of practical importance.

The *constitutional condition* of the patient has, on the contrary, a most important bearing on prognosis. Where cerebral hemorrhage occurs from leukaemia or contracted granular kidney, the prognosis is unfavourable. Gout and syphilis are likewise undesirable complications, while the absence of constitutional faults will, *ceteris paribus*, render the patient's prospects more hopeful.

Finally, *treatment* may incline the balance towards recovery or death. The treatment by venesection, which was formerly much in favour, was thoroughly irrational, and generally followed by disastrous results; indeed, many patients have died of the remedy rather than of the disease. Venesection has lately fallen into disuse; but the condition of the brain during cerebral hemorrhage is not one of congestion, as was formerly believed, but of anæmia; the organ not only loses blood largely, but is also, from compression of its arterioles through the clot, unable to receive a fresh supply of the reviving fluid; death in this disease takes place chiefly from anæmia; and by resorting to phlebotomy, you simply increase cerebral anæmia still further, and thereby hasten the fatal result. *Eschew the lancet, therefore, as a deadly instrument in these cases.*

A simply expectant plan of treatment is recommended by the most recent writers on the disease; and there can be no doubt that abstaining from all active interference is far better than to bleed your patient. Molière, on his death-bed, cried out to his doctors: "Laissez-moi mourir, mais ne me tuez pas!" and the expectant plan of treatment certainly does not kill the patient, it only allows him to die. In spite, however, of recent authorities for doing nothing, a more active mode of treating cerebral hemorrhage seems to me to be called for.

Your object must be to arrest the further effusion of blood from the ruptured coats of the miliary aneurisms, by causing the vessels to contract. Now, many styptics must be inapplicable for these cases, because the patient cannot swallow, and even if medicines were intro-

duced into his stomach, it seems most doubtful whether they would be absorbed. Nor can the rectum be used for the purpose of affecting the circulation, as there is frequently paralysis of the sphincter-ani, and inability of the bowel to retain its contents. The hypodermic mode of administering medicine seems, therefore, to recommend itself, particularly in these cases; and the remedy I think most appropriate for them is ergotine.

There are two kinds of ergotine known to chemists, viz., Wiggers' and Bonjean's. The former is insoluble in water, ether, and dilute acids, but soluble in alcohol, strong acetic acid, and caustic potash; and, on account of these peculiarities, it is not suitable for subcutaneous injection. Bonjean's ergotine, on the other hand, is easily soluble in water, and it is this therefore which you should use. I am in the habit of injecting a grain of it every hour, or where the symptoms are very urgent, even every half hour, into the subcutaneous cellular tissue; and, although the experience of a single observer, in a disease like the one now under consideration, cannot count for much, yet I feel justified in recommending you to follow this practice, as being likely to save many lives.—*Med. and Surg. Reporter.*

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METHODS OF INCREASING OR DIMINISHING INTRA-THORACIC PRESSURE AT WILL WITHOUT ANY PRESSURE.—Dr. J. S. Cohen, (*Med. and Surg. Reporter*, July 26, 1876) gives the following method of obtaining the advantages of rarefied or condensed air:

1. Valsalva's method, a forcible movement of expiration with mouth and nostrils closed, increases the intra-thoracic pressure and has the same physical effect as the inspiration of compressed air, and the effect can be increased by external compression of the chest and abdomen.
2. Deep and prolonged inspirations with mouth and nose closed will expand the chest and rarefy the air in the lungs, and the effect is the same as that of the inspiration of rarefied air.
3. Expiration aided by external compression of the chest and abdomen has an effect similar to that of expiration into rarefied air.

## TREATMENT OF SCIATICA BY AQUA-PUNCTURE.

BY GOPAUL CHUNDER ROY, M.D.

The treatment of the following case was undertaken in accordance with the suggestion made in *The Lancet* of the 4th March, 1876, by Mr. R. Clement Lucas. Just at the time I had this patient under my treatment, and seeing the miserable life he was leading from a chronic and obstinate attack of sciatica, I resolved to give him the benefit of this novel method. He was suffering from pain for a year and a-half, extending from the sacrum down to the left foot. The tenderness was felt along the course of the sciatic nerve on the posterior aspect of the thigh, and diffused itself on the calf. There was no starting of the limbs nor pain in the hip-joint; but on account of the rigid tension felt in stretching the limb he was obliged to walk in a stooping posture, so that the pelvis was distorted and rotated on itself, the spinous process of the diseased side being on a lower level than the other. His appearance indicated constant suffering, and the disturbance of nightly rest made his life a burden. There was no history of syphilis, and his general health was fair.

As no internal medicine or external embrocation produced any palliation of the symptoms, commenced hypodermic injection of water on June 15th. I must premise that the treatment was not an unmixed one, inasmuch as it partly consisted of acupuncture along the course of the nerve on the posterior region of the thigh. On the first day three injections were used—one in the gluteal region, one in the thigh, and the third in the calf of the leg. In the first two the needle was carried deep into the tissues, and a syringe of water was injected; and in the third, as the pain was superficially situated, the injection was simply hypodermic. That the needle had passed close to the nerve in the thigh, was evident from the contraction of the muscles of the limb as the injection was being pumped in. I sent the patient away with instructions to appear on the third day, when he reported the pain in the leg had completely disappeared, and the limb was more at ease. The same treatment was repeated three or four times at

intervals, after which he had so far recovered as to be able almost to walk upright. He had better rest at night than he had enjoyed for a year, and felt himself grateful for the palliation of his symptoms. Before injecting the water, I used to exhaust the cavity of the syringe with a view to ascertain if any fluid could be sucked in, but I never found anything except a few drops of blood. The relief could not have been due, therefore, to any letting out of fluid from the sheath of the nerve, to which the advocates of acupuncture in sciatica ascribe the benefit. The patient is still under treatment, and confesses that the injection has relieved more than half of his painful symptoms.—*The Lancet*.

## RENAL NEURALGIA IN LOCOMOTOR ATAXY.

To the catalogue of visceral neuralgias in association with locomotor ataxy, with which readers of M. Charcot's admirable lectures are well acquainted, must be added yet one more—namely, a renal neuralgia. The case in which this was the predominant symptom was related by M. Reynaud at the last meeting of the Académie Médecine. A man, thirty-nine years of age, was admitted into the hospital suffering apparently from a severe attack of renal colic. There was extreme lumbar pain, marked retraction of the testicle, vesical tenesmus, suppression of urine, vomiting, and a condition of semi-coma. The diagnosis of renal colic, at first entertained, was subsequently abandoned, chiefly on the ground of the long duration of the attacks—namely, several days at a time,—followed by a temporary cessation and recurrence, finally becoming continuous. Moreover, the pain was radiated towards the shoulder as well as towards the thigh, and the urine was free from albumen. At the post-mortem examination, the kidneys were found to be healthy, and the cause of the renal trouble was found to lie in sclerosis of the posterior columns of the cord. The patient had never had any inco-ordination of movements. M. Reynaud thinks there can be no doubt that this was a case quiet analagous to those in which the stomach and intestines are usually the seat of neuralgia; and as he believes this to be the first instance in which nephralgia was marked, he contented himself with simply recording the facts of the case.

## Surgery.

### CLINICAL LECTURE ON THE TREATMENT OF COMPOUND DEPRESSED FRACTURES OF THE SKULL.

BY SAMPSON GAMGEE, F.R.S.

*Surgeon to Queen's Hospital, Birmingham.*

GENTLEMEN: Is the trephine to be employed or not in compound fractures of the skull, with depression? No question more than this has engaged the attention of practical surgeons: it is still unsettled, and I shall endeavour to lead you to a correct understanding of its merits in commenting on three cases which I have to bring before you. In each case the scalp was divided, and the bones of the skull were broken and driven in, without however, producing evidences of injury to the nervous centres. In none of the cases was the trephine employed: in all the result has been perfectly successful.

The man before you, Thomas Moran, a bricklayer's labourer, aged 55, was admitted to Ward 3 on September 15th. While he was at work, just previously, a brick fell from a considerable height upon his head, making a Y-shaped scalp-wound about two inches and a-half in length, and situated rather above the middle of the left parietal bone. The flap of the wound being turned back, a Y-shaped fracture became visible, with its centre depressed cre- behind of an inch: the sides of the fracture sloping evenly towards the central and most depressed point. The man seemed little affected by the accident, and had no idea of its serious nature. The edges of the wound, admitting of easy approximation, were brought together and dressed with dry lint: and for the first fortnight the patient was kept perfectly quiet in bed, on milk-diet, with an ice-bag on the head. No signs of constitutional disturbance appeared, and the man was discharged at the end of seven weeks, to use his own terms, "in as good health as ever he was in his life." The wound was then quite healed, and the area of the depressed bone measured one inch and a-half longitudinally, seven-eighths of an inch transversely; its depth was three-eighths of an inch in the centre.

The next patient, Henry Hadden, a machinist, aged 25, was admitted into the Queen's Hospital at 11.20 P.M., on September 25th. A few minutes previously, in a street row, a brick had been thrown at his head, producing a wound an inch in length, over the left temporal ridge, in a line above and in front of the ear. The hæmorrhage was considerable. The probe passed into a

very abruptly punctured fracture of the skull; the amount of depression being half an inch, and the edges on one side, at least, being quite perpendicular. Mr. C. W. Keetley, our house-surgeon, to whom I am indebted for the notes of these cases, made a memorandum at the time, to the effect that, in Hadden's fracture, a small piece of bone appeared to have been driven right in. The man was quite sensible, though faint from loss of blood. He was put to bed, with an ice-bag on the head. At 8.30 next morning, a little headache was complained of; the pupils were even; temperature 101 deg. A magistrate took the depositions at the bedside in the afternoon.

*September 27th*, morning. Pulse 80; temperature 98 deg. There was a thin drab fur on the dorsum of the tongue. The bowels were not open. He had slept well; was very hungry. The wound was healthy. His eyes were slightly swollen.

The bowels acted the next day. The wound gradually healed; and on October 9th, the ice-bag was left off, a flannel cap allowed to be worn, and the man to get up. At the end of another fortnight the man was discharged in perfect health; the cicatrix was quite sound; and the depression at the seat of fracture admitted the end of the little finger, which did not seem to touch bone at the bottom.

The third case which I have to bring before you is that of T. Smith, a joiner's labourer, aged 25. He was stooping down at his work, when a brick fell on his head from a height of thirty feet. When admitted to Ward 1 (4.15 P. M., October 15th, 1875), half an hour after the accident, he was quite sensible. A wound on the left side of the head was bleeding freely; corresponding to it was a depressed fracture of the skull, the depressed piece of bone being horse-shoe shaped, and situated near the middle of the lambdoidal suture. The depressed surface was about one-eighth of an inch below the surrounding bony level. No head-symptoms. Pulse 80: temperature 99 deg.; respirations 24. The edges of the wound were approximated and dressed with dry lint. An ice-bag was ordered to be kept on the head constantly.

*October 16th*. Temperature 99 deg.; pulse 72 respirations 20. He was perfectly sensible. He had taken plenty of milk. He was ordered to have an ounce of castor oil.

*17th*. He slept four or five hours in the night. The bowels had acted. Temperature 101 deg.; pulse 104; respirations 22.

*18th*. Temperature 101.6 deg.; pulse 76; respirations 24.

*November 19th*, morning. Temperature 99.2 deg.; pulse 84; respirations 22. There were still



no symptoms of serious lesion or constitutional disturbance.—7 P.M. Temperature 104.4 deg.; pulse 104; respirations 32. He had a rigor half an hour ago. A full dose of castor oil was administered, and the bowels freely relieved. No other untoward symptom occurred, and the rigor and rapid rise of temperature remained an inexplicable incident.

*December 8th.* He had continued perfectly well, and for the last month had acted as assistant porter in the hospital. He was now discharged, and I made the following note: "The length of the cicatrix is one inch and three-quarters. The depressed portion of bone measures one inch and one-eighth, by seven-eighths of an inch. The depression is deepest in the centre, where no bone can be felt. The man looks perfectly well, and says that he is so."

You have here three cases of compound depressed fracture of the skull admitted within a period of one month, treated successfully, without the trephine or elevator. You may form some idea of the interest attaching to these cases, by a statement of Erichsen, that, with a single exception, he does "not recollect ever having seen a case recover, in which a compound depressed fracture of the skull occurring in the adult had been left without operation."

Prescott Hewett's counsel is given in no doubtful terms. "What," he asks, "is to be done, supposing there be a wound leading down to the bone in a depressed fracture of the vault without symptoms? The rule is that we are to operate and at once." With the utmost regard for this dictum of one of the most thoughtful surgeons of our time, who has made injuries of the head the special object of his clinical studies, and conceding that, in his advocacy of operative interference in compound depressed fractures of the skull, Prescott Hewett is at one with many eminent surgeons, especially British, I am clearly of opinion that the practice followed in the cases before you should be the rule of practice.

When addressing you on the treatment of compound fractures of the limbs, I have sought to impress upon you the wisdom of the precept, "to aim at reducing a compound to the condition of a simple fracture, and to treat both alike." This precept is equally applicable to compound depressed fractures of the skull, when the brain is not injured.

Although unanimity has not yet been attained, the progress of surgery has powerfully contributed to the establishment of this proposition. A century ago, operative interference was the rule in all fractures of the skull. It was Quesnay, himself

an advocate of the practice of interference, who gave force to the opinions of dissentients, by the very title of one of those masterpieces of clinical study embodied in the memoirs of the old Academy of Surgery. It fell to the lot of another of the academicians to substitute for traditional empiricism rules of practice as prudent and safe in their application, as their conception was enlightened and their demonstration closely and carefully reasoned. With few reservations, Desault was opposed to the use of the trephine in fractures of the skull. It was otherwise with his great rival on this side of the Channel, Percival Pott. The elevator and trephine were his favourite instruments, and so great was his ascendancy in the surgical world, so much more fascinating for the multitude, then as now, were boldness and complication than prudence and simplicity, that his heroic action had many imitators; foremost amongst whom was his most illustrious pupil, John Hunter, who went so far as to advocate the trepan in some doubtful cases, "as the operation can do no harm." The impending French Revolution, and its attendant slaughter on the battle-fields of Europe was soon to furnish those lessons which, in surgical as in other experience, make men judicious.

When after the battle of Talavera de la Reyna, the order was given for all the wounded who could leave the town to march, Surgeon Rose found himself in charge of a large number of the disabled Guardsmen. Twelve or fourteen of them had compound fractures of the skull, some with depression. In none of these was the trephine employed. The retreat in the burning sun lasted sixteen days, and yet every one of those who were wounded in the head recovered.

Hennen relates the case of Corporal Corkeyne, wounded by a musket-ball in the head at Waterloo. The fractured portion of bone was driven into the brain (being exactly an inch and one-fourth from the surface of the scalp). No operation was performed, and yet the man was discharged cured in a few weeks. After quoting a similar case, Hennen sums up: "We have here sufficient proof that there is no absolute necessity for trepanning, merely for depressed bones from gun-shot"—an opinion strengthened by the cumulative experience of military surgeons, many of whom now entirely discard the trephine, while almost all are agreed that its use should be restricted to very exceptional cases.

Desault's conservatism told directly on the civil practice, not merely of his own countrymen but of British surgeons. John Bell, with his true surgical instinct, with his impetuous energy, and with the furnished eloquence of his ripe culture, threw in

his lot against the trepan. "After the expiration of my apprenticeship at these hospitals," Astley Cooper has placed on record, "I went over to Paris, to see the practice of Desault at the Hotel Dieu; and there I found that scarcely ever under any circumstances did he trephine; and he was more successful than the English surgeons." Abernethy and Lawrence, too, were in this matter disciples of Desault, and on the same side must be mentioned one of the most enterprising surgeons of the century—a master who combined in a very rare degree fearlessness and judgment, power of brain, and skill of hands—I allude to Robert Liston. In his *Practical Surgery* he thus writes: "When fracture of the skull is complicated with wound of the scalp, the surgeon will not in general mend matters much by trephining, as has been advised, merely because there is a wound; if the depression is pretty extensive, and unless he has a better reason to give for the proceeding than the mere circumstance of the fracture being compound, as it is called, he will often thus add as much to the injury and to the risk which the patient is subjected to by it, as he would by dividing the scalp in simple fractures."

This warning is of special significance, emanating as it does from one who had had abundant opportunities of witnessing the effects of the trephine and elevator, and who possessed operative skill and courage in so high a degree that he never felt the temptation to inaction as a refuge from responsibility.

Samuel Cooper was equally conservative; but it is due to you to state that three of his contemporaries—Guthrie, Brodie, and Velpeau—in the very first rank of surgical authorities, rather inclined to the heroic practice of Pott than to the physiological watchfulness and the gentle medical measures of Desault. Italian surgery has gradually come round to non-interference as the rule of practice in fractures of the skull, while the German school has traditionally been opposed to the trephine. Neudorfer, writing after the Franco-German war, sums up directly against it. MacCormac reflects the experience of the French and German surgeons on the battle-field of Sedan, in the statement that, "as a general rule, the largest proportion of good results (in gunshot fractures of the skull) obtain amongst those cases where the amount of operative surgery has been at a minimum."

Jules Rochard has contributed an interesting summary of the international position of the question. Speaking of trephining, he says: "The spirit of reserve distinguishes French surgery. It holds a position between the practice of

the Germans, who scarcely ever trephine, and that of the English and of the Americans, who, though resting on the same rules as ourselves, have much more frequently recourse to this operation. Leon le Fort has analyzed the trephine operations on the two sides of the Channel from 1855 to 1866. He has found one hundred and fifty-seven of them in England, and only four in France, in that period."

The authorities I have quoted will be sufficient to convince you that the masters of our science have treated this question as a very important and difficult one. From their differences you will learn caution and toleration in judging others, and the need of most careful inquiry, before you determine to use the trephine. The three patients whom I have brought before you with compound depressed fractures of the skull, successfully treated without the trephine or elevator, have not recovered by accident or in virtue of a curious coincidence. As many authorities are against me, I have deemed it my duty to compare my opinion with that of others, for your instruction. In examining the question from an historical point of view, I do not pretend to have exhausted it; but I do hope to have proved that the progress of opinion has on the whole, been in favour of non-interference, when the scalp is wounded and the skull broken and driven in; without, however, producing symptoms of brain-lesion. The lesson very impressively taught by a careful study of the subject is this: that whereas the trephine was almost indiscriminately employed before surgery attained to the position of a science, its use has steadily decreased as enlightened experience has accumulated. Many surgeons, from being advocates of the trephine, have gradually abandoned it; but, so far as my researches have extended, I cannot find an instance of conversion to the practice of trephining by a surgeon whose reason indisposed him to adopt it, or whose experience had once led him to relinquish it. That there may be cases of compound depressed fracture of the skull justifying operative interference I do not deny, and I myself had occasion to operate successfully on such cases in this theatre. Another opportunity may present itself for discussing these cases. For the present, I shall limit myself to again impressing upon you my conviction that, in compound depressed fractures of the skull without brain-symptoms, the proper course of practice is NOT TO TREPHINE.—*British Medical Journal.*

It has been granted in the Duchy of Saxe-Coburg Gotha for the cremation and subsequent disposal of the dead, and an apparatus is about to be erected by the German Society at a cost of 15,000 marks.

## CLINICAL LECTURE ON STRICTURE OF THE URETHRA.

*Delivered at the Liverpool Royal Infirmary.*

BY REGINALD HARRISON, F.R.C.S.,  
*Surgeon to the Infirmary.*

\* \* \* \* \*

In undertaking to say anything about the treatment of stricture, I am conscious that the subject is a well-worn one. Still, with all our plans of treatment, we have not arrived at anything like uniformity of practice, and as this is only to be obtained by taking the sum of our respective experiences, I feel less hesitation in bringing under your notice some conclusions which my own experience, chiefly gathered in the wards of this hospital, has enabled me to arrive at. These considerations I hope to place before you during my course of clinical lectures this session. In using the term "stricture," I reserve it, as Sir Henry Thompson suggests in his eminently practical work on Disease of the Urinary Organs, for one kind of stricture—viz., organic strictures. "Spasm" and "inflammation" are conditions more or less transient, but do not constitute stricture in the acceptation of the term which is now generally adopted. The causes of stricture are varicous. Let me give a few illustrations. A patient has a venereal sore on his glans penis involving the meatus. When this heals a cicatrix is left. Cicatrices are more or less disposed to contract, and in this instance result in the narrowing of the urethral orifice. This condition was well illustrated by a case in No. 7 ward, where the same state of things was produced by an improperly performed operation for circumcision; a portion of the glans penis having been removed along with the prepuce. When the sore healed, the cicatrix contracted, and the patient presented himself here with a tight stricture of the meatus requiring division. Another cause of stricture amongst our sailor patients arises from injuries where the urethra becomes bruised or lacerated. A man falls from aloft across a spar or a rope, and ruptures his urethra. If the patient recovers from the immediate effects of the injury, it is with his urethra scarred. Here we have the worst variety of stricture—traumatic—a form of the disorder more obstinate to deal with than any

other. In our enquiries as to the cause of stricture, we find that by far the larger proportion of our patients attribute their misfortune, directly or indirectly, to previous attacks of gonorrhœa. Those who do so *directly* are disposed to look upon the stricture as the natural consequence of their previous mishap. Those who do so *indirectly* usually have something to say about the treatment employed and its bearing upon the subsequent formation of a stricture. It is worth our while for a moment to analyse the statements made by this latter class with the view of ascertaining how far their allegations hold good. "I was almost cured of my gonorrhœa, only a very slight discharge remaining, which I thought would go away of itself," is the statement of the patient who is convicted of his own indiscretion in having allowed things to go on from bad to worse. Others, again, seek refuge in referring their misfortune to the improper advice they have received. "I was told that it was only a gleet, due to weakness, which would go away by iron, tonics, and cold baths." Here we have illustrations of gleet terminating in stricture.

Now it is well for you, once for all to understand that a gleet is not a disorder which is disposed to go away of itself; on the contrary, it requires careful and well considered treatment, and if it does not receive this—that is to say, if it is clumsily dealt with or not dealt with at all—it most probably ends in the formation of a stricture.

A gleet is to be regarded as indicative of the early formation of stricture. Nay, further, you will not do wrongly in regarding a gleet as a stage in the stricture-forming process when by your treatment you can promise your patient to restore his urethra to its normal condition; when a stricture is once allowed to become cicatricial in its character, you may palliate or adapt, but you can no more *restore* his urethra than you can by dissection or any other process remove a scar from his skin. You may moderate the inconveniences of a scar, but you cannot obliterate it. Let not, then, the curable stage of stricture pass by; at all events, let the onus of doing so rest with your patient and not with yourself.

Again, it is very common to hear patients attribute their strictures to the use of injections in the treatment of their gonorrhœas. A considerable amount of prejudice exists in the public mind in reference to the use of these applications. Patients not unfrequently say, when consulting you about a gonorrhœa. "Do not order me an injection, as I understand they often occasion stricture." Is there any truth in such an allegation? Assuredly not, presuming, of course, injections are judiciously prescribed and properly used.

Let me remind you that the cure of gonorrhœa by specifics is essentially one on the principle of injection. For how do the drugs that act specifically on the urethra effect their purpose? How do we explain the action of copaiba, oil of sandal-wood, creasote and certain terebinthines, in the cure of gonorrhœa? Do not all these drugs exercise their therapeutic properties, by certain of their constituents, for the most part demonstrable, being conveyed by the urine to the situation of the disorder? What is this but a cure by injection or, to be etymologically correct, ejection? It is the urine of the patient that conveys the specific to the disease, just as the rose water in your injection does the sulphate of zinc, or other astringents.

It is the abuse of injecting that is open to animadversion. Injections in the treatment of gonorrhœa only do harm, when, by reason of their composition or strength, they act as *irritants* to the mucous membrane.

In the ordering of urethral injections there are two rules which should be regarded:—1. Do not strain the urethra by the *quantity* of injection used. 2. Do not pain the urethra by the *quality* of the injection. A teaspoonful of fluid *put* into the urethra frequently is better than a tablespoonful *forced* in three times a day. This is a point upon which I have long insisted. In prescribing injections you should feel your way, adding to the strength according to circumstances. Some persons, it is well known, are far more sensitive to the action of remedies than others; and this applies equally to the urethra—"The temper of the urethra varies as much as the temper of the mind."\* An injection appropriate in

strength to a first gonorrhœa is like the proverbial drop of rain on the duck's back in the case of the *habitué*. I remember ordering one of the latter an injection well known as "the four sulphates." It cured him effectually, and without pain. A friend, hearing of the success, borrowed the prescription, and, without proper advice, used it. The consequences were, an acute attack of cystitis and a subsequent stricture. Surely it is only to the foolhardiness of the sufferer that such an unfortunate result is to be attributed.

And I would here remark that I have seen a great deal of damage done and suffering occasioned by the use of some of the nostrum injections advertised throughout the country as "infallible cures" and "preventives." Many of them contain the ordinary astringents applicable to the urethra, but in a very potent form. I caution you therefore against sanctioning their use.

These observations have been made with the view of showing that it is only by their improper use that injections are open to the charge of occasioning stricture. If they are prescribed in accordance with the rules I have given, you will never have cause to regret their use.

[Mr. Harrison then proceeded to speak of the pathology of stricture, illustrating his remarks by cases which have recently been under treatment in the infirmary.]

THE TREATMENT OF CANCER.—An English journal states that in the University College Hospital, London, in cancer cases, the application of stramonium ointment was found to give great relief to pain. Mr. Henry Morris had good results in a severe case of epithelioma, involving nearly half the scalp, with "Fell's Paste" (chloride of zinc, flour, and liquor opii sedativus, sufficient to form a paste). The first application produced an eschar, which was cut through so that the remedy could be applied deeper, and applications having been made daily, or on alternate days, for about a month, the whole mass came away, leaving the bone exposed; finally, a thin sheet of this exfoliated, the wound healed, and the patient has remained well for several months since.

\* Brodie on Diseases of the Urinary Organs, p. 50.

## THE RADICAL CURE OF INGUINAL HERNIA.

BY CHARLES C. F. GAY, M.D.,

*Attending Surgeon to the Buffalo General Hospital, Buffalo, N. Y.*

John Bliss, aet. 38 years; entered Hospital some weeks since, for anal fistula, for which I operated, and now having nearly recovered, is willing to have operation for radical cure of hernia. He has had hernia, right side, since 1862, nearly fourteen years, and has worn a truss. The abdominal ring is large, and the intestine descends into the scrotum.

At my clinic to-day, May 13, 1876, I operated in the presence of the class, in the following manner:—

Chloroform was given; lifting a portion of scrotal integument upon my left fore-finger, it was carried up to the inferior pillar of the abdominal ring, through which the needle was passed and brought out through the integuments nearly or quite an inch above the superior pillar. The needle, which has an eye at its point, was now threaded with silver wire, and withdrawn through the pillar which it had transfixed, but not through the scrotal integument. The point of the needle, guided by the index finger, and still threaded with silver wire, was directed upward, beneath the border of the superior pillar, through the pillar and out through the integuments at the same point where the needle was threaded.

The needle used in introducing the wire is four inches in length, slightly curved at its point, with an eye at its point, and is fixed to a strong handle.

Having introduced the wire, it is twisted, when, by passing the finger up to the ring it was found sufficiently closed to prevent any further extrusion of intestine. The same needle was used in passing a four-stranded silken thread or ligature. This ligature was passed in the manner following: The fundus of the scrotum was carried before the index finger up to the ring; the needle was now passed through the scrotum, directed by the finger, beneath the border of the superior pillar through the canal, and out through the integument an inch and a half above the ring; the needle was now threaded with the silk ligature and withdrawn down through the canal and tunica vaginalis testis, and was of sufficient length to allow the ends to be tied together. The operation was then finished, having required not more than ten minutes in its performance.

Subsequent treatment consisted of opium and the local application of warm water fomentations.

May 20th.—The silk ligature was removed; it had excited considerable local inflammation, but

did not cause pain enough to require the administration of more than a quarter of a grain of morphine every four to six hours. The scrotum was suspended.

May 27th.—The silver wire was untwisted, in order to see if the pillars of the ring would separate. For this purpose the finger was passed up to the ring, when it was ascertained to be closed, without assistance of the wire ligature. The wire, however, was again twisted, cut short, and allowed to disappear beneath the integuments, to remain there as an innocuous substance, or until it ulcerated its way out. This patient was under observation until the middle of July, when he left the Hospital to go to work. At this time there was no indication of hernial protrusion; as a precautionary measure, however, I advised him to wear a bandage or light truss for a time, although there did not seem to be the least necessity for any mechanical support.

REMARKS.—I understand full well the measure of skepticism evinced by surgeons of the efficacy of any operative means yet devised or to be devised for the radical cure of hernia. I must confess to having shared in this skepticism myself; still, I have an abiding and firm conviction that this very common physical disability will yet fall within the range of the resources of surgery, and that an operation will yet be devised that shall be recognized as radical, and included in the standard and classical operations of surgery.

At the recent meeting of the American Medical Association, held at Philadelphia, I listened to the reading of an interesting paper upon this subject by Dr. Dowell, of Galveston, Texas.

I was surprised to learn from him of so large a percentage of cures by his operation, which consisted, briefly stated, in passing, with a curved needle, pointed at both ends, sutures through the pillars of the ring in sufficient number to excite inflammation, and thereby close up the opening. He had operated successfully upon over seventy cases, and claims that his method answers for any form of hernia. I shall be very glad to learn that, after a still more extensive experience, the Doctor shall find that his operation possesses all the merit he now claims for it. I fail to see, however, in his method, any essential advantage over that of my own, unless it may consist in the larger number of sutures which he employs in coaptating the borders or overlapping the pillars of the ring.

My own operation for radical cure of hernia has been limited to direct and oblique inguinal herniæ. I should be quite well satisfied with success in operating for these forms of hernia, inasmuch as they are, more than other varieties of

hernia, amenable to surgical means, leaving femoral hernia in the hands of those who are more sanguine than myself of good results.

In the operation which I have described, I might, with propriety, have used a second or third silver ligature, but my object in using the ligature has been to hold together the borders of the ring only during such time and no longer, as would be required for effusion and deposit of plastic material from inflammatory action excited by the silk ligature.

I introduce the silver wire subcutaneously, and have allowed it to remain for an indefinite period of time. I think it just as well to remove it after it has fulfilled its mission: that is, after subsidence of inflammatory action, since the ring will then remain closed without any further aid from the ligature, still, no harm or inconvenience can come from its remaining *in situ*. In the case of a child on whom I operated a few years ago, the wire ulcerated its way out after several months.

I feel unwilling, with my present experience, to say how much or how little the operation is fraught with danger. The point of the needle must be, in great measure, guided by the end of the index finger, and the first steps of the operation must necessarily be conducted by the sense of touch rather than of sight. With care and deliberation in transfixing the pillars of the ring with the needle, there will be no injury inflicted either upon nerve, blood-vessel, spermatic cord, or intestine, therefore, the only supposable danger must arise from the local inflammatory action.

In reference to the propriety of the operation, it is unfortunate that, at present, authority seems to be against the efficacy of operative measures. I have too much respect for the opinions of those who are cited as authority on questions of surgery, to distrust the soundness of any decisions which they may make, still, I hope that evidence may yet be adduced of sufficient force to enable those who have expressed doubt as to any permanent result from operative interference, to reverse their judgment.

Should it transpire, in the course of time, that the plastic material which has been relied upon for closing the herinal outlet is absorbed, then the operation is of no avail; but if it be not absorbed, as I have abundant evidence to show that it will not be, then certainly the operation ought to be classed with the standard operations of surgery.

Maximilian Joseph Chelius, the celebrated German Surgeon, died at Heidelberg lately, aged 83.

## THE TREATMENT OF SCROFULOUS OPTHALMIA.

Mr. H. C. Lawrence gives, in the *Medical Press and Circular*, his own experience on this debated subject, as follows:—

The marked digestive derangement has benefited from a mercurial purge, followed by a course of non-mercurial aperients until the evacuations become normal. Next a plain, nourishing and unstimulating diet, to which milk contributes largely, is beneficial. Meat should not be given too freely. Most of the patients are ill-nourished when scrofulous ophthalmia manifests itself; partly from poverty, partly from digestive imperfections; to feed these too generously virtually promotes starvation; the fuel becomes excessive for the combustion power of the invalid.

Cod-liver oil requires regulation in use. Instead of regarding it as a specific, my own experience has led me to consider it hurtful in some cases; the cases for its use and non-use may be differentiated thus, as Sir William Lawrence and Niemeyer have noted: First, the "torpid" constitutions who are clumsy and thick-set in build, and exhibit a tumid upper lip and enlarged nose, and have abundance of adipose tissue; by these cod oil is not required, and it may prove injurious to them; while, secondly, the "erethitic," with slender frame, lack of fat, and accelerated pulse and over-active nervous system, largely benefit from the use of cod-liver oil. These cases have procured for it the name of an anti-scrofulous remedy (Niemeyer).

The photophobia has been relieved at first by the use of bromide of potassium, and the relief maintained by the administration of quinine. Quinine employed after potassium bromide has appeared more efficacious than when used alone. Relapses of intolerance of light have yielded to similar treatment.

Fresh air, and plenty of it, is imperative. Cold shower-baths in summer, sponging with tepid sea-salt water in winter, have proved valuable auxiliaries.

For local treatment a green shade, made like the peak of a rifle cap, is preferable to one fitting close to the eyes, the latter being inju-

rious. Padding of the eye with cotton wool to prevent friction of the lids appears to me neither necessary nor advantageous, equally good if not better results having followed frequent poppy fomentation instead, allowing free exposure to air, with shade from light.

When the acute symptoms have subsided the utmost possible benefit has ensued upon the use of poppy fomentation used as a douche to the eye, at first warm, then tepid, ultimately cold. The spasm of the orbicularis oculi seems to be much lessened thereby.

Counter-irritation in the form of linimentum iodi painted behind the ear is preferable to blistering. Scrofulous constitutions resent blisters, secondary cutaneous eruptions and swelling of the neighbouring glands being apt to follow. Frequency of counter-irritation, however, short of producing breach of skin and glandular enlargement, seems not only indicated, but is found practicably to be very useful.

Nitrate of silver has proved itself injurious when applied to the conjunctiva in scrofulous ophthalmia, and solution of atropine less useful in allaying irritation temporarily than frequent anodyne fomentation. Atropine should be reserved to insure dilatation of the pupil when necessary.

Iron is preferable to quinine in marked anæmia, but I have not sufficient evidence to prove its regular efficacy over quinine in promoting repair and nutrition in ulceration of the cornea, as some authors assert, while quinine exerts a marked effect in lessening the photophobia scrofulosa.

REMOVAL OF AN ENLARGED SPLEEN.—Mr. Spencer Wells recently removed at the Samaritan Hospital a large spleen, which had been diagnosed as an ovarian tumour. On tapping it its nature became apparent, and nothing was left but to give the patient a chance for her life by its removal. It weighed eleven pounds. The vessels were all carefully secured, but the patient sank in a few hours. This is a very rare form of diagnostic error, and there must have been a very close resemblance to an ovarian tumour, for Marion Sims was present at the time, and these two masters of the subject are not likely to have been readily deceived.—[*London Letter in Phila. Med. Times.*]

## STRANUGLATED HERNIA.

BY E. H. WASHINGTON, M.D., AUGUSTA, GEORGIA.

In looking over the medical journals, I noticed an article by Prof. Augustus F. Erich, of the Baltimore College of Physicians and Surgeons, proposing a new mode of taxis in strangulated hernia. His plan is, to take the body of the patient at an angle of 45°, so that the intestines will gravitate toward the chest, an ice bladder to the ring, and gentle taxis; and this after the ordinary plan had been tried unsuccessfully for some hours. The Professor added that he intended to try a bag of sand on the hernia in the next case he might meet with.

Prof. Erich says that five treatises on surgery which he consulted, including those of Gross and Erichsen, did not recommend placing the patient in the posture mentioned.

Some years since I recommended a plan far better: it is to apply a dry cup to the abdominal wall, say over the umbilicus; then let an assistant stand between the legs of the patient and lift the hips as high as he can; then the operator, drawing on the dry-cup, produces a vacuum and atmospheric pressure (far better than sand) being superadded to the weight of the intestines gravitating toward the chest, a reduction is easily effected in less than a minute.

The operation is almost painless, and really seems so to the patient, for the relief from the preceding pain is so great that he never says a word about any suffering from the operation.

The above plan has not attracted as much attention as its merits deserve, but if any one will try this painless, easy and quick plan, he will never try the tedious, painful, and sometimes dangerous taxis, recommended in the ordinary works on surgery. I abandoned the ordinary taxis more than twenty years ago, because the above plan was so much superior.

The Russian peasantry reduce hernia by dry-cupping on a grand scale; they take a small cooking-pot, and make the bottom as hot as they can without making the rim too hot, and then applying over the abdomen, cool the bottom with cold wet cloths, and thus suck up so a large portion of the intestines that they are

able to make traction enough on the intestine to draw it back again into the abdominal cavity, though the patient has not the hips elevated.

I respectfully beg leave to call attention again to the above plan, as one promising all that is needed, with but little trouble to the operator, and no suffering to the patient.—*N. Y. Med. Journal.*

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#### TREATMENT OF BOILS AND CARBUNCLES.

Dr. Peter Eade, in an article in the *Brit. Med. Journ.*, maintains the following doctrines in regard to these affections:—

1. That boils and carbuncles are not mere inflammations and sloughings of cellular tissue, but specific diseases.

2. That they are parasitic, and, as such, endowed with a definite life and history.

3. That, in their early stages, they may be infallibly destroyed and aborted by destruction of their central stem or root; and that even after this stage has passed, they may generally be destroyed, and in all cases, at the very least, greatly modified, by the free application of carbolic acid.

4. That, to produce this result, the acid must be freely introduced into the central portion of the disease, and also into any other part where an opening exists or is formed artificially.

The essentials for the proper action of the carbolic acid, Dr. E conceives to be:—

1. The acid must be applied in *strong* solution (four or five parts of acid to one of glycerine is the strength I employ).

2. It must be brought into contact with the diseased tissue, for it appears to exert no influence on or through the unbroken skin. To this end, if sufficient opening do not exist when the case is first seen, a proper one must be fearlessly made in the very centre of the disease by some appropriate caustic, and, perhaps, the acid nitrate of mercury effects this better and with less discomfort than any other.

3. The acid solution must be occasionally re-applied to, and into, the hole thus formed, or those already existing, and I have found it a good plan to keep a piece of lint wet with a weaker solution constantly over the sore.

#### NEW OPERATION FOR THE OBLITERATION OF DEPRESSED CICATRICES AFTER GLANDULAR ABSCESSSES, OR EXFOLIATION OF BONE.

Mr. William Adams, surgeon to the Great Northern Hospital, etc., recommends (*British Med. Journ.*, April 29) for the removal or obliteration of deeply depressed cicatrices, such as result from glandular abscesses of the neck or from disease of bone in any region, a new operation, which consists: 1. In subcutaneously dividing all the deep adhesions of the cicatrix by a tenotomy knife, introduced a little beyond the margin of the cicatrix, and carried down to its base; 2. In carefully and thoroughly everting the depressed cicatrix—turning it, as it were, inside out, so that the cicatricial tissue remains prominently raised; 3. In passing two hare-lip pins, or finer needles, through the base, at right angles to each other, so as to maintain the cicatrix in its everted form for three days; 4. In removing the needles on the third day, and allowing the cicatricial tissue—now something swollen, succulent, and infiltrated—gradually to fall down to the proper level of the surrounding skin.

He relates three cases in which he resorted to this operation, and gives illustrations of the cases before and after the operation, which show considerable improvement in the appearance of the patient.

“After the operation,” he says, “the cicatricial tissue always loses its shiny, membranous, and vascular characters; it becomes thickened, and of an opaque white colour. The thickening of the cicatricial tissue results from its succulent condition during the three days it remains elevated by the pins, and the inflammatory infiltration at its base.

“The permanency of the operation is placed beyond all doubt by the last two cases described—one nine and the other nearly three years since the operation; and the completeness of the obliteration of the depression and the improvement of the cicatricial tissue, have surpassed my most sanguine expectations.”

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Dr. Simon, Professor of Systematic and Clinical Surgery in the University of Heidelberg, is dead.



## CARBOLIZED BRAN IN COMPOUND FRACTURES.

BY LEWIS D. MASON, M.D., BROOKLYN, N. Y.

The advantages possessed by bran, properly mixed with carbolic acid, as a dressing in compound fractures, are these:—

1. The discharge is disinfected as it flows from the wound into the bran.
- 2 We have a dressing that is "germ proof," and one that notably limits suppuration.
3. We secure the anæsthetic properties of the acid.

The method of carbolizing the bran is very easy—simply by adding the crude carbolic acid slowly to the quantity of bran to be carbolized, stirring it at the same time. A little experience will decide how much of the acid a given quantity of the bran will require. An excess should be avoided. The bran will retain the properties of the acid for some time. I have now used it in two cases of compound fracture of tibia, and one of compound fracture of femur.

CANCER OF THE LIPS IN AUVERGNE.—At the recent Congress at Clermont-Ferrand, Dr. Fleury, of that place, read a paper on the great prevalence of cancer of the lips in Auvergne, the facts being derived from a statistical account running over more than thirty years. The lesion is especially met with among the mountaineers, much less frequently occurs among the inhabitants of the plain, and is very rare among workmen in the towns. Abuse of tobacco-smoking cannot be adduced as the cause, as the mountaineers do not smoke; while the workmen in the towns, who are almost exempt from the affection, are all smokers. On this account Dr. Fleury, in 1856, entered his protest against the conclusions of Prof. Bouisson's work, which attributed cancer of the lips to smoking, designating it *cancer des fumeurs*. He believes that it approaches in its etiology chimney-sweepers' cancer, the want of cleanliness of sweeps and the mountaineers' being the common cause of epithelial cancer in both. He agrees with Prof. Bouisson as to the less frequency of this cancer in women, and its localisation in them in the lower lip. He believes that, with improved hygiene and a greater attention to personal cleanliness, this disease, which annually sacrifices so many victims, will greatly diminish in frequency if not disappear.—*Gaz. Heb.*

Dr. W. S. Bowen, ophthalmic and aural surgeon to the Hartford Hospital (U. S.), records this month the occurrence in his practice of six cases of disease of the middle ear induced by the use of the nasal douche in treating naso-pharyngeal catarrh. Many will remember that Prof. Roosa published some time since in the *Archives of Ophthalmology and Otology* a report detailing sixteen cases of the sort. Dr. H. L. Shaw has also given his experience of eighteen cases, in three of which the mischief was caused, not by the ordinary douche, but by the posterior nares syringe, and in one by the practice of snuffing salt-and-water from the hand through the nostrils. Dr. Bowen says there can be no doubt that in his own cases the disease was entirely due to the forcible entrance of fluid thrown by the douche to cleanse the nasal passages and pharynx. In five of the cases the pain and disturbance about the ear were observed immediately after the fluid was passed into the nostril, and in the remaining case the connexion was so close as to justify a positive opinion as to the cause of the serious suppurative inflammation that followed. The writer observes that the nasal douche is really a dangerous instrument, the use of which should be discarded, save in exceptional circumstances.

SPONTANEOUS GENERATION.—The *Institute* (August 2nd) announces that the Académie des Sciences received at its meeting on July 31st (the French academicians take no holidays) two letters in absolute contradiction of each other, and both written on the same day (July 29th), one dated from London by Professor Bastian, the other from the Valais by Professor Tyndall. The former reiterates the affirmations made in a previous communication, that urine exposed to a temperature of 50° C. (122° Fahr.) undergoes spontaneous fermentation without the intervention of any ferment. In his letter Prof. Tyndall declares that Prof. Bastian's experiments are absolutely incorrect, he having in vain repeated them. He has never obtained any but negative results, and denies that Professor Bastian has any right to draw conclusions from them favourable to spontaneous generation.

## Midwifery.

### REPORT OF A CASE OF ABDOMINAL PREGNANCY TREATED BY GASTROTOMY.

Dr. T. G. Thomas read the history of an interesting case of extra-uterine pregnancy which had been treated by abdominal section. The diagnosis had been strongly inferred from the development of the case, which was characterized by nausea and vomiting, and later by deposition of pigment. The most important and reliable signs, however, were a solid body the shape of a fetus floating in fluid in the abdomen, and at the same time an empty uterus. After aspirating a large amount of sero-pus, the solid body rested at the symphysis pubis. It was decided to perform gastrotomy, and, after etherizing the patient, an incision was made in the linea alba to the extent of five inches, and a child removed. Dr. Thomas said that he would have jeopardized the life of the patient, after cutting through the abdominal walls and reaching the peritoneum, if he had not been confident of the diagnosis. The peritoneum was thickened, and presented many of the characteristics of an ovarian cyst. If the mistake had been made of stripping it off the abdominal wall, the patient in all probability would have died. After extracting the child, no placenta was seen, but merely the attachment of the cord to the peritoneum. From the experience gained in a former case, no attempt was made to discover and remove the placenta. The wound was closed, and a drainage-tube inserted in the bottom of the incision. The child weighed seven pounds, and had died apparently from compression of the cord. The experience of the former case referred to by Dr. Thomas was a persistent and nearly fatal hemorrhage following the attempt to remove the placenta by force. After the operation, the patient did well till the fourteenth day, when signs of septicæmia developed themselves. On examining the drainage-tube it was found to be closed up, and, on clearing it and removing the discharge, the patient improved. Shortly after, a decomposing mass presented at the wound, and on examination this was found

to be the placenta. After the removal of the placenta, the patient made a good recovery.

Dr. Thomas said that two important points to be considered in the operation of gastrotomy for abdominal pregnancy were, first, not to remove the placenta, and second, to keep the abdominal wound open. He had had under his charge seven cases in all, and in six of these a positive diagnosis had been made previous to operation. Four of them recovered and three died. In regard to the subject of operating, no definite rule could be laid down. In some cases an operation would be a blunder.

Dr. Barnes agreed with Dr. Thomas that no definite law could be laid down in regard to operation. He coincided also with the opinion expressed as to not removing the placenta. This had struck him forcibly in a case which he saw with Dr. Rambotham, of London. He questioned, however, if it were wise always to leave an unclosed portion of the abdominal wall for the avoidance of the placenta. He believed that in many cases the placenta would either be absorbed or undergo such change as to give no further annoyance after the operation. He had not been so happy as Dr. Thomas in making correct diagnoses in this class of cases. He called to mind distinctly two cases that he supposed were undoubtedly extrauterine pregnancies. They proved, however, to be ovarian tumours. In speaking on the subject, he wished to draw attention to another point, and that was, the inability to make a diagnosis of ovarian tumours from a microscopical examination of the ovarian fluid. He obtained some fluid from a suspected ovarian tumour, and had it examined by one of the most skilful experts on the subject in London. On his assurance, ovariectomy was performed, when the case proved to be ascites.

Dr. Drysdale, of Philadelphia, said that in an experience of twenty-three years he had examined fifteen hundred cases, and had not made a mistake. He felt he could speak with certainty. The peculiarities of the cell were, that it was of a granular character and unaffected by acetic acid. When the same test was applied to the pus and other cells, they swelled up and became decidedly changed.

Dr. Byford had an experience of twenty-five

cases, and in all of these the cell referred to by Dr. Drysdale was present.

Dr. Thomas said that Dr. Barnes touched upon an important subject in speaking of the treatment of the placenta. The matter resolved itself into the question whether the safer procedure was to keep the abdomen open for drainage or not. He was strongly convinced that the former was the better plan, for the reason that it was unsafe to wait for septicaemia to develop and if the abdomen were closed, it would involve the necessity of opening up the cavity, and an exceedingly important point was the danger of not finding the nidus of septicaemia. In future cases he felt that he would be warranted in prosecuting the same method as practised in the past. Of the cases in which he had made a correct diagnosis he did not take any special credit to himself, as he thought that they were by no means obscure or puzzling. In regard to the ovarian cell, he was of the opinion that, although Dr. Drysdale was able to make a correct diagnosis, other observers were not so skilful. He had asked the opinion of microscopists in New York, and they frankly told him that they were unable to diagnose ovarian tumours by examining the aspirated fluid. It was only fair to Dr. Drysdale to mention that, of all the specimens sent to him for examination, a correct opinion had been rendered in each case. —*N. Y. Medical Journal.*

**HYDROCHLORIC ACID IN SYPHILIS.**—In some therapeutical notes in the *Medical Press and Circular*, Mr. Griffiths remarks that Piroleau was the first to call attention to the anti-syphilitic virtues of hydrochloric acid, and among other authorities who have written favourably of it as a remedy in syphilis are Zeller, Rust, and Pearson. Rust considers that abstinence is an essential element of success in this treatment: he found that it invariably failed when a full diet was allowed. The formula used in the Vienna hospital was a drachm of the acid to two pints of barley water daily. In gangrenous ulceration of the genitals Van Swieten employed an application of the strong acid diluted with six parts of water with great success.

## A CASE OF ABSENCE OR NON-DEVELOPMENT OF BOTH UTERUS AND OVARIES.

BY A. H. GOELET, M.D., NEW YORK.

The following case will, I think, prove of interest to the profession, presenting as it does congenital deficiencies which are rarely met with:

Miss B., aged nineteen years, consulted me on the 12th of February, 1876. She had never menstruated, and complained of constant severe headache, and of bleeding from the nose. The headache she has had as long as she can remember; the epistaxis, off and on, for the last five or six years, but not with any regularity. Otherwise her health is very good. Within the past three or four years she has consulted several physicians, who made unsuccessful efforts to bring on her "periods." Her mother has also tried the usual domestic remedies, but likewise without success.

Her history led me to suspect some congenital malformation, and I therefore advised an examination, to which she reluctantly consented. The points revealed were these:

1. The *pudenda* were entirely devoid of hair.
2. The *vagina* was a mere *cul-de-sac*, not more than two inches in length, and there was no evidence of a uterus at its extremity.
3. There was *no uterus* found after a thorough exploration of the pelvis. By enjoined manipulation—the index-finger of the one hand in the rectum and the other hand on the hypogastrium—the excavation of the pelvis could be explored with ease, the patient being very thin; and not even a rudimentary organ could be detected.
4. I next examined for the *mammae*, and found them wholly undeveloped; and
5. She has never experienced any *aphrodisiac sensations*.

Now, judging from her history and what was revealed by the examination, there is not only absence of the uterus, but also absence of the ovaries, or they are in an undeveloped state. There being no effort at menstruation (the epistaxis signifying nothing, since it does not occur periodically), no venereal appetite, and no development of the *mammae* and *pudenda*, this conclusion would seem to be warranted.

I ordered a prescription of bromide of potassium and hydrate of chloral for the headache, and this, as I afterward ascertained, afforded some little relief.

Such cases as the above are extremely rare, though cases of the absence of the uterus only are more frequently met with. A somewhat similar case was reported to the Royal Academy of Medicine in 1826 by Dr. Renaudin, which is the only case of the kind I have seen recorded. A woman died at the age of fifty-two years. She had never menstruated nor experienced any venereal passions, and the breasts were undeveloped. At the autopsy only a cervix uteri the size of a writing-quill was found, but there was no uterus proper, and the ovaries showed very little development.—*N. Y. Medical Journal.*

#### CASE OF EXCESSIVE PTYALISM DURING PREGNANCY.

Sir,—I am induced to send the following case for perusal by your numerous readers, in the hope of some treatment being suggested by which my patient may obtain relief.

Mrs.—, aged thirty-four, mother of three children, and now about six months advanced in her fourth pregnancy, has suffered (from the third week from conception) extreme distress from a continual flow of saliva, which pours down the corners of her mouth, so as quite to have excoriated them. The quantity which flows away is about three pints daily. During sleep it ceases, but begins again an hour or so after awaking. In the earlier months vomiting was added to her troubles, but this has now passed off, but she still suffers from nausea. After meals she complains of a sour taste in her mouth, but this merely lasts an hour or so. The character of the secretion is quite watery and tasteless, though occasionally it assumes a thicker condition, and has to be retched or expectorated up from the back of the throat. She has used astringent waters for the mouth, and as she has excessive dislike to taking medicines internally, I suggested that belladonna liniment (B.P.) should be rubbed into the submaxillary and parotid glands as well as the epigastrium until she was under its influence; but

neither of these plans of treatment produced the slightest effect. Her appetite is fairly good.

In the pregnancy previous to this one she suffered in the same way from ptyalism; but it did not commence until after the third month, and only lasted a few weeks.

I am, Sir, yours &c.,

July 14th, 1876.

INQUIRENS.

\*.\* Ptyalism, when it occurs during pregnancy, usually comes on in the early months, and lasts for about three weeks. In severe cases no treatment seems to have any effect.—*Ed. Lancet.*

THE CAUSES OF STERILITY.—The two axioms in which the author, Dr. O. Von Grünwald, of St. Petersburg, sums up the views to which his researches have led him are as follows: 1. Conception is only one link in the chain of phenomena which are involved in the propagation of the species, and its importance is relatively much less than that of many other vital processes which occur during pregnancy. 2. The woman's capability of maturing the impregnated ovum is the important element of her reproductive power, and it depends for its part on a certain amount of integrity in the tissues of which the uterus consists. We shall only make one comment on Dr. Von Grünwald's valuable paper—namely, that it gives but little encouragement to a mechanical treatment of the causes of sterility. It rather lends its support to the views of those gynecologists who consider that general remedies which improve the tone of the whole system are as likely to be successful in affections of the uterus as in those of other organs.—*Med. Times and Gaz.*

THE SPIROPHORE.—Dr. Woillez, of Paris, has devised an apparatus for the treatment of asphyxia. It consists of a zinc cylinder in which the body of the patient is hermetically inclosed, the head alone projecting. A portion of the air in the cylinder is then exhausted, when the lungs immediately expand, and air is then pumped into the cylinder to cause expiration. The process is repeated at brief intervals.

## Materia Medica.

### ANALYSIS OF SIX NOSTRUMS SOLD AS AGUE-CURES.

BY O. L. CHURCHILL, PH. C.

Five of these articles were found to contain one or more of the cinchona alkaloids, (chiefly the cheaper alkaloid); the remaining one contained no alkaloid. None contained arsenic, strychnia, or mercury.

The quantitative determination of the alkaloids, from well known difficulties, is presented as only approximate. The following was the general plan of separation, modified in several particulars, as found necessary for each mixture. From a weighed portion of the mixture, the alcohol, if any, was evaporated; the residue diluted with acidified water and filtered (more than once if need be); the filtrate precipitated by a slight excess of caustic soda; in most cases, the precipitate dissolved in acidified water, the solution concentrated and dissolved with strong alcohol, the filtrate evaporated and the residue dissolved with water. Care was taken to avoid loss, by well washing the residues of extraneous matter, and not washing the precipitates of alkaloids at all or but slightly. Taking a final precipitate by caustic soda, the alkaloids were then approximately separated from each other by the use of ether as a solvent, potassium iodide to precipitate quinidia, potassium sodium tartrate to precipitate cinchonidia, &c.\*

1. *Ayer's Ague-Cure*.—Each bottle contains six fluid-ounces of a dark red, syrupy liquid, with a very slight white sediment. Taste, very bitter and slightly peppery, with a slight taste and odour of wintergreen oil. An alcoholic extract, (tincture) of cinchona bark, with additional and amorphous cinchona alkaloids (chinoidin), heavily saccharine and slightly aromatized. It contains a resin which presented the physical properties and gave apparently the physiological effects of podophyllum resin, but it was not so far separated from cinchona constituents as to be positively determined. It has free and combined sulphuric

acid, and the white sediment is calcium sulphate (from the calcium salts of the bark). In *one fluid-ounce*

Amorphous alkaloids (chinoidin),	3.2 grains.
Cinchonia,	3.0 “
Cinchonidia,	0.7 “
Quinia,	0.8 “
Quinidia,	1.0 “
Total,	8.7

The cost of a bottle will not exceed 35 cents—the price being at wholesale, 65 cents, and at retail, \$1.

2. *Wilhoft's Antiperiodic Fever and Ague-Cure*.—The bottle contains four fluid-ounces of a thin, dark-red liquid, with the odour of cinchona bark, a very bitter and acid taste, and acid reaction. It consists essentially of an infusion of cinchona bark made with water containing aromatic sulphuric acid (like those of the U.S.P.), and probably with an addition of quinia sulphate. One fluid ounce contains 3.0 grains of quinia and 5.4 grains of free and combined sulphuric acid (1.5 grains free). Cost of a bottle, not over .25 cents; price, \$9 per dozen, \$1.50 per bottle.

3. *Christie's Ague Mixture*.—A bottle contains seven fluid-ounces of a very dark syrupy liquid, one-fourth filled with sediment, and having a very bitter and peppery taste and an odour of common molasses. The sediment was powdered capsicum and a little resinous matter. The solution consists of a tincture of cinchona bark (the alcohol being 30 per cent. by weight), with cinchonia sulphate, and common molasses. Cost, not over 25 cents per bottle; price, at wholesale, 62 cents; at retail, \$1.

4. *Peterman's Michigan Ague-Cure*.—Each bottle contains five-fluid ounces of a red, syrupy liquid, with much resinous sediment, a very bitter taste, and odour of cinchona. Contains an alcoholic extract of the bark, with chinoidin as the chief medicinal agent, and with a little sulphuric acid and syrup. Cost, complete, not over 25 cents per bottle; price, at wholesale, 60 cents; at retail, \$1.

5. *Jayne's Ague Mixture*.—In each bottle, seven and a half fluid-ounces of a mixture having an odor and taste of rhubarb, dandelion and common molasses. It contains quinia sul-

\* Pluckiger & Hambury's Pharmacographia, 327.

phate and traces of other cinchona alkaloids, but not enough to render the mixture very bitter. The alkaloids were, with some difficulty, separated by benzine in presence of alkali; other means having failed. Cost, about 35 cents; price, at wholesale, 60 cents; at retail, \$1.

6. *Rhode's Fever and Ague-Cure, or Antidote to Malaria*.—In each bottle twelve fluid-ounces of a black, turbid liquid, having a sweet and astringent taste. On standing, the sediment filled one-third of the bottle. The sediment is charcoal. The solution contains a little tincture of chloride of iron, partly reduced to ferrous salt by sugar, which is present; also a trace of sulphuric acid (a trifle of ferrous sulphate may have been added). Nothing more. "Bottle to be well shaken," etc.; one table-spoonful three times a day. "Most people could take three times the amount without any uncomfortable feelings." "Persons who find it to bring on unwished-for actions, should place the contents of two or more bottles in an open dish in their sleeping apartments." Price, at retail, \$1.

TREATMENT OF TETANUS BY CALABAR BEAN.—In the "Mirror" of the *London Lancet* (Nos. for Sept. 2nd, 9th, and 16th,) is reported the history of three cases of Tetanus, treated at St. George's Hospital, in the service of Dr. Dickenson and Mr. Pollock, "with the extract of Calabar Bean, either by internal administration or subcutaneous injection, or both combined." Two cases recovered. The Editor of the "Mirror" remarks: "That the result in these cases was due to the beneficial influence of the Calabar Bean, it would be useless to attempt to deny. Both patients were, to all appearance, rapidly getting worse, until the administration of the extract of Calabar Bean was begun; from that time they improved and soon completely recovered. In the third case, although extract of Calabar Bean was exhibited in large doses, and the system became distinctly affected by the drug, the patient unfortunately succumbed. The immediate cause of death was not evident, but it is worthy of note that the man seemed to breathe freely, and remained conscious up to the last." In this last case, between 2.15 p.m., and 6.15 a.m.,  $9\frac{3}{4}$  grains were hypodermically injected.

## EUCALYPTUS GLOBULUS AS A CURE FOR AGUE.

BY JOHN CURNOW, M.D., LOND.,

*Professor of Anatomy in King's College, Assistant-Physician to King's College Hospital.*

Whilst there is an almost complete unanimity as to the advantageous effect of the cultivation of the eucalyptus tree in the removal of malarial fevers from marshy districts, foreign observers differ greatly in their estimate of the value of its preparations in the treatment of these diseases, and very few, if any, trials have as yet been made of them in this country. The experiments of Fichter at Basle, and of Hertz at Copenhagen, gave almost negative results; whilst those of Groos in Hungary were extremely favourable. Further investigations are required to clear up these discrepancies, which are doubtless due to the difference of the preparations made use of, and the varying doses in which the drug was exhibited, as well as to the length of time that the disease had existed, and perhaps also to the place of growth of the trees from which the preparations had been made. Hertz thinks that old cases will yield better results than new ones, but that recent ones are sometimes very speedily cured by this drug is sufficiently evident from the notes of the two cases which are appended. The cases came under my care whilst I undertook the temporary charge of the patients at the Seamen's Hospital for my friend Dr. Harry Leach. The results are the more important because when I prescribed the eucalyptus I was very sceptical as to its value; for, with the exception of the cinchona alkaloids and arsenic, I had always before observed a signal failure of the numerous alleged remedies for intermittents. Amongst these were the sulphites of magnesia and soda, salicin, sulphate of beberia, picrate of potash, &c., and they had all been administered most freely. Moreover, both patients were under observation for some days before the medicine was exhibited, in order that the severity of the cases might be properly estimated, and that no fallacy might arise from the spontaneous subsidence of the disease, as occasionally occurs from a change of residence. The preparation of eucalyptus that I used was the tincture made by Messrs. Savory and Moore, and, except an agreeable feeling of

warmth in the mouth and pharynx, no appreciable effects but the rapid cure of the fever were noticed.

I had hoped to have made a more extended trial of the drug before publishing these cases; but ague is so very seldom seen in London that it may be a considerable period before I have another opportunity, and wider and more exact experiences can be so readily obtained in districts where malarial affections are endemic that I have thought it better to record them at once.

CASE 1.—S. S.—, aged eighteen, a Norwegian, was admitted May 23rd, 1876. He had been suffering from intermittent fever for four or five weeks. The attacks were moderately severe and of a well-marked tertian type. An expectant plan of treatment was pursued until June 9th, and during this period the paroxysms recurred on alternate days with the utmost regularity. They began at 10 A.M., reached their acme between 1.30 and 3 P.M., and passed off about 6 P.M.; thus lasting about eight hours. The highest temperatures varied from 104.8° to 105.6°. On June 9th the tincture of the eucalyptus globulus was given in one-drachm doses three times daily. The next day, on which another attack was due, his temperature only rose to 100°, and on the 12th to 100.4°; and after this date no further paroxysm occurred during the remainder of his stay in the hospital. On physical examination, a systolic bruit was heard over the apex of the heart, but this was evidently of some standing, and had so far given rise to no symptoms. The splenic dulness was normal.

CASE 2.—C. O.—, aged forty, a Dane, was admitted on June 19th, 1876. The attack commenced on June 14th, and was of the ordinary tertian type. The paroxysms were very severe, and extended over nearly twelve hours on an average. On June 27th the temperature was carefully taken at short intervals by Mr. Lacy, the house-physician. At 10.30 A.M. it was normal, at 11.30 it had risen slightly, and soon after rigors set in; at 12.40 P.M. it was 101.6°, at 2.20 P.M. 105.6°, at 2.40 P.M. it had reached its highest point, 106.4°, at 3 P.M. it had fallen to 105.4°, at 6 P.M. to 101.4°, at 9 P.M. to 100°, and at midnight it was still above normal at 99.2°. The fit on the 29th was quite as severe.

On July 1st, just before the next attack was due, the expectant plan of treatment which had hitherto been pursued was given up, and the tincture of the eucalyptus exhibited in drachm doses three times a day. The next two paroxysms were much shortened in length, and the temperature did not rise quite so high. On the 5th the dose was increased to two drachms three times daily, and he had his last attack on the next day. He was kept under observation until July 15th, and continued taking the medicine up to that date. This patient's splenic dulness was increased in extent, and the edge could just be felt. He had suffered from an attack of ague nine years before.

#### QUININE IN SURGICAL AFFECTIONS.

M. Verneuil, the well-known surgeon of La Pitié Hospital, lately delivered an interesting lecture on the utility of quinine in surgical affections. He referred to several cases in his wards in illustration of the efficacy of this most valuable remedy in all affections in which the element *pain* is one of the conspicuous symptoms. Thus, for instance, in two cases of cancer of the uterus, M. Verneuil succeeded in relieving the excruciating pain characteristic of the disease by the administration of the sulphate of quinine after having failed to afford the desired relief by the other means usually employed in such cases.

M. Verneuil then summed up by announcing that the sulphate of quinine would be found particularly useful in all cases of an ataxic or adynamic nature, in neuropathic affections, and in septicæmia. In ataxic cases the lecturer stated that it was not necessary that the symptoms should be of an intermittent character to justify the administration of the drug; and as for neuropathic affections, no remedy can compare with it in these cases. He has found it particularly useful after operations on the eye, and in septicæmia its efficacy is undeniable.

M. Verneuil explains its action thus in the latter affection: it diminishes the pus-forming process, and acts as a corrective of the septic elements generated at the seat of the lesion, whether caused by the surgeon's knife or by accident. Here the sulphate of quinine is doubly useful, not only on account of the above properties, but even when employed locally it acts as a powerful antiseptic.—*British Medical Journal*.

### VIBURNUM PRUNIFOLIUM; ITS USES IN THE TREATMENT OF DISEASES OF WOMEN, AND TO PREVENT ABORTION.

Dr. E. W. Jenks, of Detroit, read a paper on the subject of *Viburnum prunifolium*, or black haw. The virtue attributed to it was that it prevented abortions, by some sedative or other action on the uterus. The drug had been extensively used in the South by Dr. Faris, of Mississippi, with marked success. Dr. Jenks had used it in a hundred cases of suspected abortion, and had found that it was an agent to be depended on. The reason of embodying his experience in a paper was because of ignorance on the subject of a large number of his fellow-practitioners. The method of administration was to give from half a drachm to a drachm of the fluid extract of the bark for a few days before and a few days after the menstrual epoch. The action seemed to be directly the reverse of that of ergot. He had used it also with benefit in menorrhagia coming on at the menopause, and had found it to be very serviceable in dysmenorrhœa where there was no mechanical cause of obstruction.

Dr. Jenks presented some specimens of the bark of the plant, and said that he had found that the bark of other species of viburnum, as well as that of wild-cherry, had been used by the druggist, either wilfully or through ignorance. Dr. Bates, of New York, said he had been in the habit for some time of using viburnum. His attention had first been directed to it by reading an account of its properties in an eclectic periodical. The class of cases in which he had used it was those in which the abortion had become habitual. He was convinced that it was an agent of decided importance. The fluid extract could be obtained in this city. He had used the resinoid manufactured by Keith & Co., in doses of from two to four grains. The resinoid seemed to be as efficacious as the fluid preparation. Dr. White, of Buffalo, said the members of the Society would in all probability act personally on the suggestions of Dr. Jenks' paper, and be able to report on their experience at the next meeting. In reply to a question from Dr. Mundé, Dr. Jenks said it took the place of opium in controlling uterine action, while at the same time it was an agreeable tonic. His use of the drug had been empirical, and he was not prepared to give its physiological action.—*N. Y. Med. Jour.*

### BROMIDE OF POTASSIUM AS A CAUSTIC.

In a paper read at the recent meeting of the French Association for the advancement of Science, M. Peyrand, of Libourne, claims for bromide of potassium certain properties hitherto but slightly recognized—properties which will extend the already wide range of the therapeutical uses of this salt. He found that subcutaneous injection in rabbits of concentrated solutions of the salt led to sloughing of the skin, and from this he was led to try the value of what he considered to be the escharotic properties of bromide of potassium upon malignant and other growths, either by means of injections into the tumour or by the application of the powdered salt to a raw surface. The action of the salt is completely resisted by the tegument. His first clinical experiment on the subject took place in April, 1874, when, by means of daily applications of powdered bromide, he effected the removal within twenty-eight days of an epitheliomatous growth on the face. He has since had equally good results from this treatment of atonic ulcers of the legs, rapid cicatrization following the separation of sloughs produced by the application. In such cases he uses either the powder or an ointment of one part in five, or a mixture (one in ten) of glycerine and the bromide. In many skin affections, as chronic eczema, pityriasis, and acne, in phagedæna, ulcerative stomatitis, and many other local inflammatory disorders, he has found it of use. As a local hæmostatic, a solution of one in fifty has served for epistaxis, and as a general hæmostatic its success in many cases of hæmoptysis and metrorrhagia was very marked, where ergot, perchloride of iron, and rhatany had failed.

PHYSIOLOGICAL ACTION OF CONDURANGO.—Dr. T. Lauder Brunton has published in our excellent cotemporary, the *Journal of Anatomy and Physiology* (April, 1876), a number of experiments instituted by him to determine the physiological action of condurango. "The general result of all these experiments is that condurango is physiologically inert."



## SANTONIN.

There is probably no anthelmintic so popular with general practitioners as santonin. It must however, be within the cognisance of many that somewhat small doses have produced convulsions of a somewhat grave character. A German contemporary lately reported a case in which poisonous effects were produced in a child two years old by the ingestion of so small a dose as a grain and a-half. Convulsions commenced in the face, and extended to the extremities, while the respiratory action was greatly impeded. Under warm baths, enemata, and artificial respiration, the patient recovered. The physician in charge of the case then instituted a series of experiments on the lower animals, and found that chloral and ether inhalations controlled the convulsions produced by santonin. He naturally argues that the same treatment should be pursued in the human subject when a poisonous dose is taken. - *Lancet*.

**BROMOHYDRIC ACID.**—Dr. Milner Fothergill, in a short communication to the *British Medical Journal*, states that the acid can be obtained by dissolving ten ounces, six drachms, twenty-eight grains of potassium bromide in four pints of water, and adding thirteen ounces, one drachm, thirty-seven grains of tartaric acid. The bitartrate of potash is precipitated and the hydrobromic acid remains in a clear, bright, almost colourless fluid, possessing an acid taste and the ordinary acid properties as well as the peculiar properties of potassium bromide, as compared with any other salt of potash. Dr. Fothergill has had a twelve-months' experience of the drug. It prevents, he finds, the occurrence of headache, which some people suffer from, after taking a dose of quinine. It is useful in nervous conditions, and, combined with quinine, is excellent in those cases where there is much nervous exhaustion from excessive indulgence in tea or in alcohol. It proves very serviceable in forms of excited action of the heart connected with general nervous excitability or nervous exhaustion. Given with quinine (of which it is a capital solvent) it gives better results than the bromide of potassium

and digitalis. In all hysterical conditions, connected with ovarian excitement, it seems to have all the properties of the bromide of potassium. It is equally useful in the vomiting of pregnancy, and seems to exercise quite as powerful an influence over acts of reflex origin as does the bromide. It is especially adapted for the relief of hæmorrhage associated with sexual excitement, and is even more effective here than the bromides themselves. It is also of use in whooping-cough, combining conveniently with quinine. With spirits of chloroform and syrup of squills it forms a most agreeable and palatable cough mixture. Where there is gastric irritability it is the most useful of all acids. The dose, prepared as above, is one drachm as a full dose.—*British Medical Journal*, July 8.)

**THE PREVENTION OF MASTURBATION.**—This injurious habit is often most difficult to break. Dr. Yellowlees, of Glasgow, speaks of a mode he had tried in a dozen cases, and so far as it had gone he was very much satisfied with the results. The oldest case was eighteen days. The suggestion was founded upon the anatomical fact that the prepuce was anatomically necessary for the erection of the penis. Its anatomical use was to give a cover for the increased size of the organ. If you prevented the prepuce going to that use, you would make erection so painful that it would be practically impossible, and emission therefore extremely unlikely. What he had done was to deal with the prepuce at the very root of the glans, to pierce it with an ordinary silver wire, the ends of which he tied together. He had the case of a lad who was so extremely addicted to masturbation that his mother begged him to do what he could to prevent it. He used the apparatus first in the case of this boy with most excellent results. He had been masturbating night and day, and he was now so well that he was working as a carpenter. Dr. Yellowlees said further that he had eleven more patients all going about with wires in their penises. There was only one case where he had to take it off, the wire causing a good deal of irritation.—*Medical and Surgical Reporter*.

## Translations.

### ABSCESS OF LIVER TAKEN FOR A PURULENT PLEURISY, THORACENTESIS.

*From Le Progres Medical.*

On 29th July, 1875, a man named C. Felix, thirty-one years of age, entered the wards of M. Guyot; he was a turner by trade; had always been healthy, but now complained of a violent stitch in the right side, accompanied with cough, and fever at night. Six weeks previously he entered the Hospital Beaujon for this pain, and went out fifteen days later much relieved. He had been treated, according to his own account, for a dry pleurisy, and a large blister had been applied on his right side. On his admission there existed a tolerably large swelling extending backwards and to the right on a level with the 7th and 8th ribs; the swelling was painful on pressure, but devoid of either heat or redness of the skin. On percussion there appeared dulness over the lower fourth of right lung, together with absence of the vesicular murmur, and no friction. The thoracic vibrations were defective in the lower quarter of both sides of the chest. The liver appeared to be slightly depressed. The patient was feverish (axillary temperature  $39^{\circ}.3$ ); tongue white, appetite gone.

August 6th. Fever persists, the intumescence of right side increasing and affording a very clear sensation of fluctuation; the trocar of Potain's apparatus was thrust into the middle of the swelling, and some drops of pus ran out; the trocar was withdrawn, and a free opening made with a bistoury. The thoracentesis was made in the 9th intercostal space, and gave vent to a half-litre of badly formed pus, but without odor. Irrigations were performed twice a day by means of Potain's apparatus. During the first fifteen days after the operation the patient regained strength, the appetite was excellent, and everything gave promise of a speedy cure. Not more than 40 or 50 grammes of fluid could be made to enter the purulent cavity, but the fluid which returned was always coloured with blood.

In the beginning of the month of September, there was a return of the night-fever (night sweats?) and the appetite diminished; the patient complained constantly of a violent pain in

the side; he subsequently sustained a diarrhoea which nothing was able to control, and in the end he succumbed to marasmus, on the 26th October, 1875. The autopsy was made forty-eight hours after death. On opening the thorax the pleurae were found slightly adherent, but not sufficiently to prevent the adhesions being broken down by the hand, similar to those which are met with in nearly all necropsies. The right lung was slightly shoved up by the liver, was large and adherent by its right margin to the ribs, an adhesion which was broken down in making traction on its left margin. It then presented on its slight surface a large vegetation, with a central cavity communicating directly with the opening of the external wound. This cavity with its fungous, grisly, sprouting edges would contain a large hen's egg. The hepatic peritoneum was healthy throughout the rest of its extent. In cutting into the liver on a level with this excrescence it was seen to extend into the hepatic tissue for a depth of two or three centimetres, and to present in this plane a greenish-grey colour, then the liver tissue appeared of its natural colour. The liver was fat, and presented in its substance two or three abscesses containing laudable pus within organized walls. The microscope showed that these membranes were formed of lamellated coats of connective tissue, with some few connective tissue cells. No trace was found of echinococcus hooklets. Some greyish friable concretions of the size of a pea were moreover found scattered throughout the hepatic parenchyma. The right kidney was enlarged, encapsuled in a shell of false membranes; at the pelvis it was anæmic and fat. The state of the left kidney was similar, but its capsule was healthy. The lungs were emphysematous. Visceral pericardium showed some white patches; nothing in endocardium. Spleen normal.

### ON BLISTERS IN PLEURISY.

PAR. DR. BESNIER.

*(From Le Paris Medical.)*

"According to M. Besnier, blisters are exceedingly efficacious in pleurisy, provided that they are had recourse to it at the outset of the disease, or as soon after as possible.

This means gives medium results when they are employed late, that is to say, at the fall of the fever, as is the ordinary practice. M. Besnier prescribes no other treatment, and so far he has obtained with it the most satisfactory results, not only in the ordinary practice of the city, but also in the department of charity, that is to say, amongst a population which furnishes in the civil hospitals the most cases of pleurisy for thoracentesis. A blister applied thus early, at the beginning of the attack, is not prejudicial, and aggravates neither the general nor the local symptoms. The febrile movement produced by the blister is only transient and cannot at all effect that of the disease; besides that, injurious influence could not be explained, either by the reaction called forth by the irritation of the skin, or by that which would be caused by irritation of the kidney. In all times, blisters have been had recourse to in spite of febrile movement both in the malignant fevers, and in acute phlegmasias of all kinds. The experiments, reported in 1874 to the Biological Society by Dr. Gallipe, confirm the view of the Italian School, which regards this substance as a cardiac-vascular and antipyretic agent; the blister, far from being a cause of increase in the fever of the disease, would rather, in a given time, exercise a general, sedative action calculated to allay it (the fever); in any case, these experimental data are a proof much in favour of the innocuity of this means of treatment, so far as febrile complications are concerned. As to the local symptoms, if it sometimes happen that these resist the action of the blister and appear to be aggravated by it, this aggravation ought to be regarded as the effect of the disease and not of the blister, since this is much more frequently observed after the other forms of treatment, and when the inflammation has been left to itself. M. Besnier brought before the "Société Médicale d'Emulation" the last four cases of acute pleurisy that he happened to treat in the first quarter of the year, and in which resolution had been obtained by one or two blisters in the course of from eight to fifteen hours; in one instance it was a case of pleurisy supervening in a consumptive, in the other, a pleurisy which appeared in an individual who had already had the same affection in the same

side; the former attack having only disappeared after three months of treatment, and after the late application of nine blisters.

To conclude: M. J. Besnier does not pretend that this early application of the blister will be able to do away with thoracentesis altogether, but he hopes that such will be the case in the majority of instances.

#### TREATMENT OF TYPHOID FEVER.

(From *Paris Medical*.)

One can see in the mortality tables how large a number of deaths typhoid fever has caused in Paris during the last few weeks; and as the epidemic is not yet actually extinct some notes on the treatment of the fever will not be devoid of usefulness.

The experience of a large number of clinicians of various countries has fully established this fact, that the majority of the grave symptoms of typhoid fever can be controlled, and that the rate of mortality diminishes when the temperature of the body is systematically reduced. The statistics of a very large number of cases demonstrate the truth of this proposition. The numbers furnished by Liebermeister will serve as an example. Of 1,718 cases first observed in the hospital of Bâle (Basle) and treated by various methods, the mortality was 27 per cent., whilst of the 1,121 cases treated by the antipyretic method, that is to say, by a method designed to systematically lower the temperature of the body, the mortality has been 8 per cent. During the treatment, relying for the most part upon the expectant method, it is observed that amongst those patients whose temperature is maintained at 40°, ten per cent. succumb. The best means of reducing the temperature of the body has appeared to be the cold bath at 20°, lasting from 10 to 20 minutes, and repeated every time the temperature rises to 38°8 or 39°.

Next to the baths are to be ranked the febrifuges, of which quinine and sulphuric acid are the best. The sulphate of quinine is largely employed by the German physicians, and they insist upon the necessity of giving the remedy in large doses. Liebermeister attaches a great deal of importance to this particular, in 1,500 cases of typhoid fever he has employed quinine in doses of from 20 to 25 grains without causing any

appreciable unpleasantness. By giving from 20 to 40 grains at a time, or in the course of an hour, the temperature is reduced several degrees, sometimes even to the normal standard, sometimes below, in the course of 12 hours. The temperature gradually rises again. If the toxic effects of sulphate of quinine be noticed it is necessary to allow 48 hours to elapse before recommencing its use.

For a year or two, the German physicians have been largely using Salicylic Acid as a substitute for quinine. Care must be taken that this acid is very pure. The remedy is given in doses of from 60 to 70 grains; this dose may be repeated the same day, if necessary, or be replaced by the Salicylate of Sodium, a soluble salt which readily supplies the place of the acid. A remission of the febrile symptoms is usually observed in the course of three or four hours after the absorption of the medicine; the temperature falls gradually from one to several degrees, and often reaches the normal standard; afterwards it rises somewhat again, but then a smaller dose, from 30 to 50 grains, is sufficient to secure fresh remissions. One point, which is not to be despised, is that the price of Salicylic Acid is about a quarter of that of Sulphate of Quinine.

#### TREATMENT OF CARBUNCLE.

(From the *Paris Medical*.)

M. Jules Guérin wishes to save all carbuncles from the bistoury: this is the subject of a note he read at the "Académie de Médecine" at its last session. To his mind, all the occurrences which constitute the accidental malignity of carbuncle are the result of the absorption of septic fluids contained in the centre of the swelling; the indication, then, to be fulfilled is to prevent and neutralize the septic decomposition of indurations and pus in the carbuncle, and, on the other hand, to stop the decomposed material in its course, with a view of preventing local and systemic infection. To this end, M. Jules Guérin applies to the anthrax a large blister perforated in its centre, to permit of appropriate, topical applications for the neutralization of the septic germ, at the same time that they prevent its dissemination. This application has for its immediate object the mitigation of all the

symptoms, the relief of the pain, the diminution of the hardness and redness of the swelling, in a word, its conversion into a benign and inert tumour, whose enucleation, if it be permitted, promoted by the ordinary means, takes place without any necessity for having recourse to the employment of the knife. If, after the evacuation of the matter has been completed, there remain a deep excavation, it is useful to paint the cavity with a solution of nitrate of silver, with a view of provoking the obliteration of the vascular orifices opening on the surface of the excavation, and of thus preventing the absorption of the transformed fluids. A boil is, in the author's opinion, only a "reduced carbuncle;" the same treatment is applicable to it, and is no less successful. What is the mode of action of the blister? In carbuncle, as in all cases where there is inoculation by transformed, morbid fluids, it is on account of the penetration of these fluids that the surrounding parts swell and inflame, and, according to M. Jules Guérin, the blister only acts in these cases by arresting resorption, by giving issue to the infected fluid, by depleting the parts that have been invaded by it and by causing its arrest.

Imbued with this idea, M. Jules Guérin has made a multitude of abortive applications of the blister in erysipelas, in malignant pustule, and, like Dr. Grzymala, of whom we lately spoke, in all cases where an inflammatory intumescence develops itself around a focus of suppuration or around a deposit of some morbid material.

#### FRACTURE OF THE SKULL, LACERATION OF THE MENINGES AND ESCAPE OF CEREBRAL SUBSTANCE—RECOVERY.

Dr. Sante Simconi (in the *Gaz. Med. Ital.*) records the case of a boy aged 14, of rather miserable constitution; pale skin, lymphatic temperament, light complexion, head large, almost hydrocephalic. He fell some ten feet, head foremost, striking on a small projecting stone. He did not lose consciousness, and at the time felt no pain, he rose with assistance and sat down. On examination the integuments over the left outer superior edge of the frontal bone were found divided by a wound

nearly four inches long, leaving a space filled with brain matter, squeezed out; deeper down is felt a depressed semi-circular fracture, convexity towards the right. The piece is fractured all around, but the greatest depression (nearly an inch) was at the right edge. It is about  $\frac{1}{2}$  inches long, bared, firm and immovable. Small fragments surround the escaped brain matter. The quantity of the latter (some on the ground) is that of a hen's egg.

Dr. Simeoni first and Dr. Messedaglia afterwards tried to elevate the fragment, but not succeeding by measures justifiable under the circumstances, the case was treated by wet cloths, tightly bandaged on, and kept cold by a bladder of ice. The boy had walked up stairs to bed by himself. No untoward symptom except a little fever on the evenings of the second, third and fourth days. In the daily injections a white, rather fluid, pus would come out mixed with little pieces of brain, some dead and some unchanged, while the boy would eat his sweetmeats.

"On the depressed piece, although largely denuded, as on a meadow which becomes covered with flowers, little red tufts sprung up everywhere, and transformed completely the poor bald hollow into a red concave field, on which stood in relief that white intertwin-  
"ing of inert brain matter," which was gradually washed away without making any effort at repair. The cavity was thus filled up by granulation, and at the time of writing was cicatrized over, the boy being out to play on the 23rd day.

caught up by Pean's forceps and perforated, and air is slowly pumped in by a force pump at the will of the operator. The same method holds good for the deeper layers. The different layers of tissue are thus separated the one from the other. Under the skin we find layers of cellular tissue more or less abundant, the succession of which does not vary with the morbid products; they are isolated by this method by means of a layer of air, and, the first incision being made, the finger of the operator does the rest. When the operation is to be made in very vascular regions, or the disease has invaded important organs, insufflation frees from the dangers inherent to operative procedures. If the principal vessels of the region, arteries or veins, or the nerves are involved in the degeneration, one finds all around them a layer of inflated cellular tissue, which facilitates their dissection; the same is true of tendons.

... If the operation is in the neighborhood of organs which might be easily injured, as the intestines, in strangulated hernia, inflation renders great service. One of the great inconveniences of this method is the artificial emphysema, which is produced by the insufficiency of means limiting it; but in this case we have never, says the author, observed ill effects. Along with this method the author, to arrest hæmorrhage, employs the continuous pressure by means of Pean's apparatus. — *Tribune Med.*

#### PHYSIOLOGICAL ACTION OF VANADIUM.

#### INSUFFLATION AND CONTINUOUS PRESSURE TO FACILITATE CERTAIN SURGICAL OPERATIONS.

In a recent number of the *Gaz. Med. Ital.* we find the following:—"Under the above title Dr. Julian Aguilas published in the *Reone Medico-Chirurgicale* of Buenos Ayres, a new operative procedure employed in that city. "Insufflation consists of the introduction of a certain quantity of air into the subcutaneous and intra (inter?) muscular cellular tissue, rendering more easy certain operations, especially the extirpation of tumours." The method of using it is simple: A fold of skin is

Priestly Platts arrives at the following conclusions:—1st. Vanadate of soda acts on the vaso-motor nervous centre, and on the intracardiac nervous ganglia; produces diminution of the vascular tension, and renders the pulse weak, irregular and intermittent. 2nd. It acts on the respiratory centres; at first accelerates the respirations, then diminishes them and renders them more or less intermittent. 3rd. It is without effect on the nerve trunks and their terminal expansions, but exercises its action on the spinal centre. 4th. It does not act in any way on the muscular fibres. (*Gaz. Med. de Bordeaux.*)

## CAPILLARY PUNCTURE OF THE BLADDER.

*(From the Paris Medical.)*

Dr. Edward Martelli, Surgeon to the Hospital of Novaro (Italy), has practised capillary puncture of the bladder eleven times in five days in a man suffering from ischuria, the result of hypertrophy of the prostate and associated with false passages in the urethra. The first puncture was made on the 19th of April, 1876, at 10 o'clock in the morning; the second at 10 in the evening; the third during the night; punctures were again made with Dieulafoy's aspirator twice on the 20th, 22nd, 23rd, and 24th.

Dr. Martelli, who had not succeeded in passing any sound before the first operation, was able to introduce a No. 2 gum-elastic after the 11th. This sound was allowed to remain in for three days. Before passing a larger sound into the bladder, M. Martelli desired to allow his patient to rest. He spontaneously voided some drops of urine; later, the stream of water became normal. In the end of May, M. Martelli stated that the patient had micturated easily and plentifully since he left the hospital (*Gazzetta delle Cliniche, Torino*).

This clinical fact demonstrates the harmlessness of capillary punctures of the bladder, but it mentally occasions the reflection that the obstacle to the introduction of the bougies could not have been a very serious one. Since after a No. 2 sound had been permitted to remain in the urethra for three days, the urethra regained its permeability. An operation, be it never so simple, is never entirely devoid of a certain amount of danger. Something evidently escapes us in this report; for the surgeon of the hospital of Novaro ought to have had very good reasons for doing this operation, which do not appear in the report.

## CYANIDE OF ZINC IN ACUTE ARTICULAR RHEUMATISM.

*Translated from the Paris Medical.*

The Cyanide of Zinc has been administered in nine cases, in doses not exceeding five centi-

grammes in the twenty-four hours, according to the following prescription:—

Cyanide of Zinc, 5 millegrammes.

Gum Arabic.

Sugar of Milk,  $\text{āā}$  9 centigrammes.

To be made into one pill; two to five of the pills to be administered daily.

M. Deschamps gives the results of nine cases, and makes the following remarks:—

“That the Cyanide of Zinc, in small doses, has proved a valuable remedy in acute articular rheumatism. Under its influence the pulse has rapidly lowered, sometimes even most remarkably; the pain has speedily diminished, but the temperature has not been lowered. On the second or third day there has always been an exaltation of temperature, notwithstanding that the pulse has been lowered in frequency.

**BUSINESS MANAGEMENT.**—Twenty-two physicians of Meadville, Pa., and vicinity, have adopted what appears to us a sensible and proper expedient to prevent unworthy patients cheating the doctor. Their action is shown in the following resolutions:—

*Resolved*, by the physicians of Meadville, that we, and each of us, will, within thirty days from date, furnish our accountant, \_\_\_\_\_, Esq., a complete list of our delinquents belonging to the class referred to.

*Resolved*, That Mr. \_\_\_\_\_ is hereby authorized to notify each of said delinquents, by printed circular, of such delinquency, the amount of arrears, and to whom due, with the information that if these arrears are not paid or satisfactorily arranged within thirty days from date of such notice, their names will appear on the general printed black list.

*Resolved*, That the undersigned hereby pledge themselves not to give prescriptions, medical advice or attention to those who permit their names to appear on said black list, unless the payment of the fee shall be secured before such services are rendered.

*Resolved*, That nothing in the above shall apply to those who are not able to pay, or interfere in any manner with that work of charity which every humane and honourable medical man delights to perform.

(So say we.—Ed.)

## THE CANADIAN

## Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, NOVEMBER, 1876.

## TO OUR SUBSCRIBERS.

☞ We shall be glad to hear from those who have not yet paid their annual subscriptions. We cannot afford to send the Journal gratis, and as the end of the year approaches printers' bills must be paid. Accounts will be enclosed to each subscriber next month, but we trust that few will need that intimation of their indebtedness to us. Our expenses are heavy, and even the great appreciation which has rewarded our efforts, gratifying as it is, is hardly *substantial* enough to meet them.

## PHYSICIANS' HOLIDAYS.

A short paragraph in our last issue headed "Premature mental decay," should be regarded thoughtfully by a large number of our readers.

There is no human occupation which taxes the vital energies equal to the practice of medicine. A physician, engaged in a lucrative, general practice, is often regarded with envy by his less favoured compeers, but it is a question if he is not rather to be pitied than envied.

There is no doubt we may have too much of a good thing, and while it is very gratifying to be in receipt of a large income, yet if that income is secured, as it must be in our profession, at the expense of every home comfort, of necessary rest, constant mental anxiety, fatigue and annoyance, only to culminate in premature mental decay, and early death, then we say, that man is best off who has only a moderate share of the world's good things. It is far better to practise a little economy in

order to make ends meet and provide for a growing family out of a moderate income. There is no calling under the sun wherein haste to get rich is more fatal and likely to be followed by more disastrous results than in the practice of medicine.

In the severe study imperatively required to secure an honourable position in the profession and the constant application of the mind in one line of thought, entailed by the close pursuit of a large medical practice, we have just the conditions most favourable for a premature break down in the delicate mechanism of the human brain and body. We do not say that close mental work, however severe, if there be variety enough, is likely to bring premature decay, but we do assert that the constant drudgery of our profession has such a tendency to the exercise of one set of faculties and the development of one train of thought, that unless we forcibly take ourselves away, into some other field of thought or play, we shall certainly rue the day when we refused to hear the admonitions of prudence and friends. We believe it is far better to charge more, if need be, and do less, and take time for recreation and rest, than to go on foolishly at high pressure, "till the silver cord be broken," and our families left alone when they most need our presence and counsel.

"My parting words of advice are, never mind at what loss, take your six weeks of holiday," said Dr. Golding Bird a short time before his death, at the early age of forty, after he had secured a reputation and an income rarely equalled, in our profession. What a pity he had not acted upon his own advice, but like some we know, he could not believe that hard work and close application would injure him, till too late.

Sir Henry Holland made it a rule to take two months every year for travel and change, and he has said he never lost a patient by it and often began a full round of visiting from the railway station on his return, before reaching his own house. All may not be so fortunate as Sir Henry, who was born under a particularly lucky star, but we know, from a personal experience of many years, that a physician can take his annual holiday of three, six, or eight

weeks without losing a single patient worth retaining, and with the most beneficial influence on his own health and life, and with great advantage to his clients.

We all know how hale and hearty Sir Henry Holland and Lord Palmerston were at three-score years and ten, and it is a matter of history how hard they worked and how regularly they played.

An editorial in the *London Lancet* for September 16th, under the caption of "A Medical Vocation," is so pregnant with truths and wholesome admonition of paramount importance, not only to the profession at large, but, and especially, to those upon the threshold of its pursuit who are about to cast in their lot with the many young aspirants of utility or fame who already crowd the avenues to that walk of life, and who are continuously waging an unequal strife against circumstances and contingencies which must inevitably predominate over the great majority in the end, that we cannot refrain from, and make no apology for, inserting a large quotation.

"The prizes within reach of the medical profession are not rich, and they fall to the lot of few. An equal amount of labour expended in almost any other department of energy will secure a better return. Looking to the simply worldly rewards of medical industry, it is strange that any well-meaning counsellor should instigate a youth with no particular ambition to distinguish himself in the applied science of physic, to choose the profession of medicine as a career. It cannot be an agreeable occupation to those who discern nothing beyond the daily duties of the physician and surgeon, and it will probably prove so distasteful to the uninspired practitioner as to destroy his chances of even average success. . . . It is impossible to put the case too strongly, and we would ask those upon whom devolves the responsibility of advising or permitting an unwilling or apathetic choice of the profession to look once more around, and at the prospects before them, before it is too late to avoid a false step, which may land the victim of mistake or unwise influences in life-long discomfiture. . . .

"Each year makes the financial success of a

routine practitioner in medicine more improbable, and it is the hope and aim of genuine professors of the science and art of physic and surgery to render this low form of success speedily unattainable. . . . It is not alone that the examination tests are being augmented in severity, a new mode of higher intelligence, and more exacting, is beginning to replace the old method of practice in all its grades and branches.

. . . "Let the friends and advisers of youths about to enter the state of medical pupilage fully recognise the responsibility they are about to thrust upon them. Unfortunately there is no 'noviciate,' and seldom an opportunity of retreat after the choice of a profession, and that to which these young men are devoting themselves is of necessity so exclusive—so fenced about with preliminary branches of study and shut out from view—that, possibly, not one man in a score clearly understands the future to which he is committing himself until some of the best years of his life have been spent in preparation for its practical duties, and in ignorance of its cares, its obligations, and its ever-increasing and heightening responsibilities. It is not only because medicine cannot be advanced by unambitious and unskilled professors, we thus speak, but men entering the profession without enthusiasm and a constraining love of enterprise in science cannot succeed; and their failure brings discredit on our craft, bitter disappointment to minds crippled by a first mistake, while lives are blighted which might have been happy and useful if the beginner had been better advised."

Words of ours can add nothing to this powerful, earnest and spirited appeal to the reason and common sense of those concerned; and we, therefore, send it forth to our readers without further comment than the assurance, to those who are not fully cognizant of the fact, that every word which we have quoted is as applicable to our own condition as to that of the profession in the Motherland—earnestly commending the facts therein set forth to the careful attention and deep reflection of all.

At a meeting of the New York Academy of Medicine, on September 21st., the inhalation of 4 or 5 drops of Nitrite of Amyl was strongly recommended as an antidote in Chloroform Narcosis.



### Book Notices.

*The Collateral Circulation in Aneurism.* By A. W. Smyth, M.D., New Orleans.

*Intra-Pelvic Phlegmonous Tumour.* By Edward J. Berningham, M.D., New York.

Proceedings of the Medical Society of the County of King, Brooklyn, N. Y.

*Atlas of Skin Diseases.* By Louis A. Duhring, M.D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania. J. B. Lippincott & Co., Philadelphia.

Part first contains four plates, viz., eczema, (erythematosum), Psoriasis, Lupus erythematosus, and Syphiloderma (pustulosum). The *Atlas* will appear quarterly, with text explanatory of the case represented, &c., and will be completed in eight or ten parts. The illustrations are chromo-lithographs painted from life, and nearly life-size. They are admirably executed, and will enable American practitioners to become familiar with the appearances of those diseases of the skin which are most commonly met with on this side of the Atlantic.

LONGEVITY OF JEWS.—ITS CAUSES.—These are stated by the *London Medical Record* as follows:

1. *Keeping of two Sundays* in a week, besides which Christian and political holidays. Thus they have about twice as many days of rest as Christians.

2. Their *employments* are devoid of hazard as they do not engage in mining, mechanics, etc.

3. *Dietetics*, as enforced by biblical and traditional commands, are favourable to longevity.

4. The *sentiment de la famille* is better developed in the Jews than in the Christians. This assures to children, and aged and infirm parents a more active solicitude, to the newborn a mother's nursing, to the poor a more efficient assistance.

Their charity is unequalled, their morality demonstrated by judicial statistics. Their profound faith in Providence gives them a marked serenity of spirit and firmness of character. They rarely use alcoholic liquors to excess. They seldom marry out of their own race, and have little hereditary disease.

### Miscellaneous.

SIR WILLIAM FERGUSSON.—We are glad to hear that Sir William Fergusson continues to regain strength, and, on the whole, maintains his ground. He intends to return to London about the second week of October.—*Lancet*.

THE CENTENNIAL WOMAN IN POLITICS AND MEDICINE.—It was a Kentucky statesman, Dr. Henry Watterson, who this year laid down the broad principle of Parliamentary law that no question is in order while a lady has the floor. Now comes the Philadelphia Reporter, and informs a correspondent that he not only has a right to consult with female practitioners, but is apt to be much improved thereby.

SICKNESS AT DIFFERENT AGES.—Dr. Reginald Southey has recently been delivering a course of valuable lectures on "Individual Hygiene" in London, and in one he introduced a table of "Expectation of Sickness," which he had prepared, and which is as follows:—At 20 years of age, calculate on 4 sick days yearly; at 20 to 30, 5 or 6 days; at 45, 7 days; at 50, 9 or 10 days; at 55, 12 or 13 days; at 60, 16 days; at 65, 31 days; at 70, 74 days. Of course this refers to people of average good health, and not to those who may be afflicted with any ineradicable or chronic ailment.

PROLONGED INCUBATION OF VACCINIA.—Dr. Jas. F. Pressley, of Suisun City, Cal., says, in the *Pacific Med. Surg. Jour.*:—As is always the case when we have a small-pox scare—every one desires to be vaccinated. Among the number who came into my hands, I had one case which was rather a curiosity. I vaccinated Miss ——— on the 20th of July: it shewed no disposition to have the slightest effect, till the 30th day of August, forty days after, when the arm began to show signs of the vaccinia taking, and did take as well as any case that I have ever vaccinated.

Now might not this young lady have been exposed to small-pox, and forty days after, the disease develop itself?

FORMATION OF EPIDERMIS BY THE TRANSPLANTING OF HAIRS (*Boston Medical and Surgical Journal*, June 1, 1876).—Dr. Schweininger reports successful results in inducing cicatrization by transplanting to granulating surfaces hairs pulled out by the roots. Placed upon ulcers, they formed as many centres of new epithelial growth, which spread outwards, coalesced, and produced rapid and complete cicatrization. These islands proceeded without doubt from the cells of the outer rootsheath, which is continuous with the epidermal cells of the rete mucosum, so that epithelium is here developed from pre-existing epithelial cells.

DEATH FROM CHLOROFORM.—A death from chloroform is reported from St. Thomas's Hospital. The patient, a labourer, aged forty-five, was admitted as an in-patient suffering from some disease about the trochanter of the right femur, and in order to make a thorough examination, and open up some old sinuses, he was placed on the operating-table and chloroform administered. Before complete anæsthesia had been induced, the pulse suddenly stopped. The breathing continued for some two or three minutes afterwards, during which every available method was tried to restore the heart's action, but without success. At the post-mortem examination, fatty degeneration of the heart was found, but all the other organs were healthy.

DOMESTIC DOSAGE OF MEDICINES (*British Medical Journal*, February 26, and *London Practitioner*, May, 1876).—Dr. Farquharson's Drop Table.

56 drops distilled water	= 60 minims.
113 " tinct. opii	= 60 "
114 " tinct. digitalis	= 60 "
100 " liq. morph. hydrochl.	= 60 "
80 " oxymel scillæ	= 60 "
75 " syrup papaveris	= 60 "
45 " glycerine	= 60 "
114 " spts. atheris nitrosi	= 60 "
112 " tinct. camph. comp.	= 60 "
55 " acid. sulph. dil.	= 60 "
55 " olei ricini	= 60 "
110 " spts. terebinth.	= 60 "
100 " ol. anisi	= 60 "

#### THE ST. PETERSBURG LYING-IN ASYLUMS.—

In a recent inaugural dissertation, Dr. Stoltz gives an account of the working of the ten Lying-in Asylums that have been recently established at St. Petersburg. Established on account of the danger that exists in the agglomeration of puerperal women, these asylums have only three or four beds in each; and although many of these are placed in very insalubrious districts, a six years' experience has proved their great utility. Of the 7,907 women who have been delivered in them, only eighty, or 1.1 per cent., have died, while at the three hospitals the mortality has been 3.6 per cent.; so that the lives of 200 women have been saved which would have been lost in the old establishments. Besides their great convenience in being distributed over the city, the cost of these asylums is much less than that of the hospitals, the expense of each patient being in the latter from nineteen to twenty-three roubles, while in the asylums it is only twelve roubles.—*St. Pet. Med. Woch.*

FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—M. Tripier, of Lyons, drew attention to certain dangers attending the administration of ether to children. In three patients, aged from five to eight years, this anæsthetic produced stoppage of respiration—but not, fortunately, of the heart. From experiments on animals, M. Tripier concluded that this result was due to the action of the ether upon the nervous centres, and not to the local irritant effect of the vapour upon the bronchial mucous membrane, as he at first believed. In such young subjects, then, he had discarded the use of ether, and had returned to chloroform.—M. Gallard read a paper "On some Changes in the Mucous Membrane of the Stomach," referring especially to the rupture of minute miliary aneurisms as an occasional cause of hæmatemesis.—M. Letieyant, in a paper "On Resection of the Superior Maxilla," advocated the desirability of preserving the integrity of the infraorbital nerve, in order to avoid the muscular atrophy that follows its division. He drew a striking parallel between two cases—one in which this nerve was, and the other in which it was not, divided.—*Lancet.*

**A BATTLE OVER A BED-BUG.**—A sprightly quarrel is in progress among the homœopaths on the subject of bed-bugs. A number of years ago this interesting animal was introduced into their materia medica, in company with *pediculus capitis*, *crotalus horridus* and other lively medicines. In spite of some opposition from individuals, it gained a footing, and now holds a permanent place in *Allen's Homeopathic Materia Medica*, a standard authority. Dr. J. P. Dake, one of the strong men of the sect, wages war against it, his last demonstration taking the form of a lengthy article in the June number of the *Hannemannian Monthly*. In this, however, he almost surrenders, declaring that "as it had been admitted to the pages of the *Encyclopædia* by Dr. Allen, I will no longer protest against its remaining there, as it may be, after all, the 'right thing in the right place.'" Now that the question is stilled, it is to be hoped the demand for the valuable medicine will be so active as to prove beneficial to those localities where bed-bugs are *not* regarded as "the right thing in the right place."—*Pacific Med. and Surg. Jour.*

**DEATH FROM CHLOROFORM.**—We believe that this is the third death from chloroform which has occurred at Leicester within six months, that in all the cases the patients were men, between fifty and sixty years of age, and that in each there was a history of hard drinking. These cases should press very strongly on the profession of Leicester the question of chloroform *v.* ether. We believe that some of the best London surgeons have long settled the question in favor of ether on account of its unquestionably greater safety, and that for years they have not performed an operation under the influence of chloroform. The same lesson is taught very clearly by one of two deaths which occurred in London last week, while the patient was under the influence of chloroform. The history was that so common in such cases—violent struggling, stoppage of the pulse, death, and fatty degeneration of the heart discovered afterwards. The other case was the result of the administration of chloroform when the stomach was full of food, and illustrates too well the danger of such a practice, in this case unavoidable. A vomit was followed by a deep respiration, and the trachea and larynx filled with half-digested food, so that even tracheotomy did not restore the power of breathing.—*Lancet.*

**A PULSE OF 21.**—A remarkable instance of slow pulse is at the present time in M. Tillaux's service at the Lariboisière. The patient, a *chiffonnier*, seventy-seven years of age, came in to be treated for hydrocele, in all other respects seeming well, and jovial in his manner. It was almost by accident discovered that he had a pulse only of 21. It is regular, the two sounds of the heart and the short interval of silence that separates them occupying scarcely half a second. But the "grand silence" is extraordinarily prolonged, so as to continue nearly two seconds and a-half. During this absolutely nothing is heard in the heart—not the slightest soufflé. But with the first sound a very distinct soufflé is heard, which, continuing during the "petit silence," terminates suddenly with the valvular clap which constitutes the second sound. The heart seems large, its apex beating more externally and lower down than in the normal state. There is some emphysema of the lungs. The pulse was counted carefully four days in succession, and the intervals were found to be perfectly equal, and the same on both sides. The patient, who entered the hospital on August 5, has had some attacks of syncope since then, and at the present time he is suffering from considerable œdema of the legs.—*Gaz. des Hôp.*

**CHOLERA INFANTUM—ITS TREATMENT.**—Dr. E. W. Emerson (*Boston Med. and Surg. Jour.* July 27, 1876) gives the following views respecting the treatment of cholera infantum. The indications are :

1. To correct the dangerous and unfair distribution of the blood in the body, to which the purging, vomiting, cramps and coldness seem to be directly due, and later the greater danger of coma, convulsions or paralysis of the heart.
2. Failing in this, or not succeeding until too late, we should supply the water and perhaps the salts drained from the blood, as the thickening of the blood would prevent the good effects of a natural turn of the disease, and perhaps dispose to various organic lesions.
3. We should attend to the general hygiene, diet, etc., of patients.

To meet the first indications he recommends

either a hot bath of from 99° to 104° F., or hot mustard packs. Some cases treated by the writer in this way did admirably. They were suddenly wrapped to the chin in cloths wrung out in hot water and mustard, with a blanket outside, and fed with ice water and a little brandy. This was continued for a half hour or more, the mustard sheet then withdrawn and the child left enveloped in the warm, moist blanket. The second indication is fulfilled by feeding constantly with ice or spoonfuls of ice water, or small enemata of salt water after a dejection.

**AORTIC REGURGITATION TREATED BY DIGITALIS.**—Dr. G. W. Balfour (*Edinburgh Med. Jour.*) says that in no other disease is digitalis of more value than in aortic regurgitation, and there is none other in which its curative action can be more sufficiently demonstrated than in this. The great danger in aortic incompetence is death from asystole, depending upon over distension of the left ventricle. As soon as any regurgitation takes place the interior of the left ventricle is (when the patient is in the erect posture) being constantly dilated by a force equivalent to the weight of a column of blood the height of the cranium above the heart, and of the diameter of the ventricular lumen. The hydrostatic pressure accordingly increases with the gradual dilatation of the ventricle. Now the value of digitalis consists in this—that by its judicious administration it can produce such an amount of tonic contraction of the ventricle as shall rather more than counterbalance the dilating power of the arterial column. In order that this effect may be produced, the drug requires to be given freely to cause a certain amount of contraction of the apex and diminution of the cavity of the ventricle. There is no danger of pushing the drug too far so long as the flow of urine continues free. If the quantity of urine begins to fall and the pulse commences to thump or falter, the drug should then be discontinued.

**FRESH BRAIN TISSUE—A RAPID AND SIMPLE METHOD OF PREPARING, STAINING AND MOUNTING.**—Dr. John H. Arbuckle (*Glasgow Med. Jour.*, April, 1876) gives the following method,

which, for observing the minute details of structure, is superior to all others:

The glass slide is first made perfectly clean; a small thin section of brain is made with a sharp scalpel, previously wetted with water; the section is placed on the slide. The under surface of the cover is well oiled with a drop of oil of cloves and placed over the brain substance with the oiled surface next to it. It is then pressed till the thinnest film of brain only remains between the cover and the slide. The whole is then immersed in a small saucer containing methylated spirits, which gradually finds its way between the slide and cover, and dissolves the oil of cloves. After remaining in the spirits for a few moments the slide is taken out; a few drops of spirits are put upon the slide, and the cover is at one edge gently raised, when a greater quantity of spirits gets between the cover and the slide. The cover is now lifted off, and the brain substance remains upon the slide in a thin film.

To stain this film it is first placed in spirit and after a few seconds removed, and the spirit allowed to run off. A drop of solution of aniline (g. i to 5 i) is now placed on the film. This is allowed to act for a couple of minutes, and then all the superfluous solution washed off by placing the slide in a basin of clear water. On removing the slide from the water it is placed in clear spirit or absolute alcohol to further dehydrate it.

To mount the film the slide, after fifteen minutes, is removed from the spirit; the film is cleansed by a drop of oil of cloves. When transparent all the oil is run off, the slide cleaned, and a drop of Canada balsam dissolved in benzole is put upon the brain film; then the cover is placed on it, and when allowed to dry it is permanently mounted.

The whole process need occupy but a few minutes.

**OATH OF PHARMACISTS.**—We translate from the weekly journal of *Pharmacie*, (1870, No. 50), the old French oath of pharmacists of 1336, curiositatis causa, and of illustration how much tempora mutantur:

*Oath of the Christian and Godfearing Apothecaries :*

*First.* I swear and promise before God to live and die in the Christian religion.

*Item.* To honour, to esteem and to serve as much as I can, not only the doctors of medicine who instructed me in the knowledge of rules of pharmacie, but also my preceptors and masters with whom I learned my trade.

*Item.* Neither to put an affront upon one of my old doctors and magisters, or upon others, however they may be.

*Item.* To add as much as I can to the glory, honour and majesty of medicine.

*Item.* Not to give any emetic to an acute diseased person without before asking the advice of a doctor of medicine.

*Item.* Not to touch the pudenda of a woman, except in case of urgent necessity, id est, if there a remedy should have to be applied.

*Item.* Not to give poison to any one and never to advise anybody to do so, even not to my worst enemies.

*Item.* Not to give an abortive.

*Item.* To execute minutely the orders of physicians without adding or omitting anything, as far as they are according to the rules of art.

*Item.* To contradict and to avoid like the pest the scandalous and the most destructive manner of practising of charlatans, empirics and alchymists, the high disgrace of the magistrates who allow them.

*At last.* Not to keep poor and old drugs in my shop.

The benediction of the Lord be with me as long as I follow these vows. So be it!—*Deutsche Medic. Wochenschrift.*—*Can. Med. Record.*

COMPARATIVE RESEARCHES ON MILK.—Langaard has recently made some comparative researches on human milk, and that of the mare and of the cow. He corroborates the statements made by Biedart in regard to the differences between the milk, and especially between the casein of the cow and that of humankind. Langaard notices that in koumiss the casein exists in the form of extremely fine flocculi. He finds that mare's milk (*stutenmilch*) is of alkaline reaction when fresh, and retains its alkalinity for two or three days, but

then passes into an acid fermentation. It does not then, however, like cow's milk, assume a gelatinous form, but the casein separates in small flocculi. Dilute acids precipitate the casein immediately, but it is readily soluble in an excess. In the case of cow's milk the casein falls in dense masses, which do not readily redissolve in an excess. Alcohol and tannin precipitate the casein of mare's milk completely. If the casein be precipitated by alcohol and deprived of fat by ether, it may be obtained in the form of a fine, loose, slightly yellow powder, that resembles the casein of human milk in its solubility in water, dissolving much more easily than the casein of cow's milk. The watery solution is slightly opalescent, foams on being shaken, and has a neutral reaction. The dry casein is digested as rapidly as that of the woman. Langaard suggests that it would answer well as a preserved preparation.—*Lancet.*

ORGANIZATION OF THROMBUS.—An interesting memoir on the organization of thrombus has just been published by Dr. Paul Baumgarten, of Königsberg. His observations were made both on arteries and veins, to which two ligatures had been applied. He finds that both in the segment to which the double ligature has been applied, and in the parts of the vessel immediately above and below it, a new cell formation takes place beneath the lining membrane. Nuclei first make their appearance beneath the endothelium by which they are invested; these increase in number, and speedily undergo a differentiation, those nearer the lumen of the tube becoming elongated and concentrically arranged, representing a new muscular coat (though they do not give the usual picric acid reaction), whilst those situated more internally send out processes and form an irregular network. The coagulum or thrombus retreats before the growth of these cells without presenting any indication of cell-proliferation. Near the points where the ligatures are applied new vessels penetrate into the cell-growth, which are derived from the neighbouring connective tissue, and thus gradually a vascular connective-tissue growth is formed. M. Baumgarten attributes the formation of the new growth to the proli-

feration of the endothelial cells of the vessels; first, because in the early stages of the process all intermediate stages between the endothelial cells and the fibre-cells resembling muscle-cells may be seen; and, secondly, because he has been able to follow similar changes in a portion of vein confined between two ligatures, when the blood has been evacuated and replaced by some irritating fluid. It will hence be seen that he considers the self-organizing power of the red clot to be *nil*. The only remains of it that are left after the lapse of some time are particles of pigment scattered through the new growth. —*Lancet*.

### Births, Marriages, and Deaths.

#### BIRTH.

At Richmond, Surrey, England, on October 4th, the wife of Dr. A. H. Wright, of a son.

#### MARRIAGES.

At St. James' Church, Dundas, on the 10th inst., Charles O'Reilly, Esq., M.D., son of the late Dr. O'Reilly, of Hamilton, to Sophia Elizabeth, eldest daughter of the late Geo. Rolph, Esq., of Dundas.

On Tuesday, the 10th inst., at Grace Church, Brantford, by the Rev. R. H. Starr, M.A., Mr. Geo. R. VanNorman, jr., to Hettie S., youngest daughter of Dr. Mason.

#### DEATHS.

At Newcastle, on the 12th inst., Elizabeth Ogg McKenzie, wife of William N. Rose, M.D., aged 67 years.

At his residence, King street, Dundas, on Wednesday morning, October 11th, Henry Charles Rutherford, M.D., aged 68 years and 4 months.

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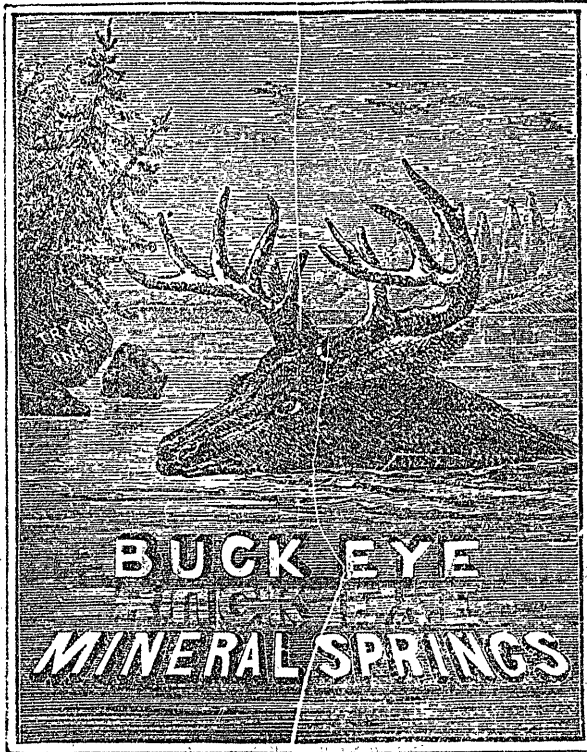
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