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# THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. X. TORONTO, JAN. 1ST, 1878. No. 5

## Original Communications.

### ACETATE OF LEAD, IN LARGE DOSES, IN POST-PARTUM AND OTHER HÆMORRHAGES.\*

BY J. WORKMAN, M.D., TORONTO.

It is now nearly fifty years since a discovery was made by my preceptor, the late Dr. John Stephenson, of Montreal, which was regarded by him, and, as I think, very justly, as a very important therapeutic fact. About the year 1830 Dr. Stephenson was consulted by a man who was troubled with a varicocele. With but meagre expectation of doing his patient any good, he gave him a dose of epsom salts as a purgative, and two drachms of the acetate of lead to be used as a lotion on the scrotum. He did not again see the man for some weeks. Meeting him one day on the street he enquired how he had got on. The man replied he was cured. Dr. Stephenson was rather sceptical as to this favourable issue, and questioned him as to the effects of the two drugs. He replied that he used the large powder as a lotion, and dissolved and swallowed the other. It was very sweet, he said, but it purged him well. Dr. Stephenson afterwards examined the scrotum, and found that the varicocele had really disappeared. He was a man of sharp perception and rapid conclusion. He had twice nearly lost a lady from post-partum hæmorrhage, though using all the suppressive means then in favour. He resolved to try, in her next confinement, should hæmorrhage recur, the effect of a large dose of the acetate; but not to wait till it had set in. He gave it some time before the emptying of the uterus; and to his high satisfaction the organ contracted promptly, and no hæmorrhage took place. In every subsequent labour of this lady he took the

same precaution, and it was followed by a like result. Throughout his obstetric practice, which was pretty large, he treated every severe case of post-partum hæmorrhage with the acetate, generally in drachm doses, repeated if deemed necessary. Not in any instance did the slightest evil follow.

Shortly after his first test of its anti-hæmorrhagic action, a servant man of the late Professor Holmes was seized with a formidable hæmoptysis. He was placed in the Montreal General Hospital. The hæmorrhage resisted all the remedies prescribed by the attending physician. A consultation of the Hospital Staff was called. Dr. Stephenson related his experience of the efficacy of the acetate, and proposed it in this emergency, but none of his colleagues would venture on his large doses, for they had all been taught, and as in duty bound they all believed, that it was an irritant poison. The patient, however, was bleeding to death, and they yielded, but at the same time told Dr. Stephenson he must take the entire responsibility on himself, which he most readily and fearlessly did. I do not remember the total quantity of the acetate which was given to this patient, but I know it was large, several drachms in the course of a few hours. The man's life was saved. Some years after I saw him in Dr. Stephenson's office. The Doctor sounded his chest, and showed us that one lung was sealed up.

Dr. Stephenson, in his midwifery lectures, strenuously inculcated the theory of the anti-hæmorrhagic action of the acetate, and its perfect harmlessness in large doses. I have been a faithful disciple, both in my general practice, and as a teacher of obstetrics, and I am aware that a number of my fellow students, and nearly all my pupils, have realized the same valuable results as Dr. Stephenson and myself. I could corroborate this statement by many witnesses, some of whom now hear me. I think I may safely appeal to one of my fellow students, whose testimony will command the warm respect of this entire Association, need I say that that I mean our venerable and most sincerely esteemed Secretary? Alas! he is, I believe, all that now remains to me, in this city, of my contemporaries; you will not, therefore, wonder that I both esteem and love him.

I never but once saw the slightest sign of the evil constitutional results of the acetate, and that one exception occurred in a case of hæmoptysis, in which my consuing friend would not consent to

\*Read before the Canada Medical Association in Sept. 1877, and published in the transactions.

exceed five grain doses, and these he insisted on guarding by one grain of opium with each dose. As the case was his, and I could not dissipate his fears, I did not feel called on to contend against his scruples. In due course the peculiar lead gum put in an appearance. The acetate of lead given in its pure state, in large doses, not only requires no opium as a protective against its action, but it is my conviction it is always unwise to aim at any such protection; and in this relation I would also inculcate the inadvisability of the addition of acetic acid. I pretend not to go into the chemical merits of the question, but it is my impression that this addition of acetic acid is more likely to favour undesirable chemical transformation than to prevent it. I am, however, quite sure that no such precaution is necessary. I always took care to use a pure sample, free from any portion of the carbonate; but even should some portion of the latter be present, as it is insoluble in water, it soon falls to the bottom of the solution, and then we are perfectly safe in giving the clear fluid.

I remember one case of very profuse lung hæmorrhage in which I administered within twelve hours six drachms. The man was saved, and he lived several years after, but finally died of pulmonary phthisis. I gave eight drachms in the course of sixty hours to an asylum patient. In neither of these cases did any lead symptoms, nor, indeed, any other unpleasant result follow. My asylum patient survived her hæmorrhage three years, and died of phthisis also.

I was rather surprised, if not a trifle mortified to find that, in a total of perhaps one hundred and forty students of the two Toronto medical schools examined by me on obstetrics last April, only one gave, amongst the multifarious suppressors of post partum hæmorrhage, the exhibition of large doses of the acetate of lead, whilst dozens named it in paltry doses, guarded by acetic acid or opium. At Kingston, however, where midwifery is taught by my old friend and pupil, Dr. Lavell, I found a very different state of matters, and I felt I was not yet utterly ignored.

Not long ago a very clever medical friend, when discussing with me the merits of the acetate in post-partum hæmorrhage, exultingly asserted that before it could come into action the woman would be dead. My reply was, "I am convinced you have never tried it in large doses;" and neither had

he. So far from slowness of action being the fact, I have often been astonished at its quickness. More especially have I observed this when it has been speedily vomited. The uterus has appeared to me to shrink down into normal globular form, almost instantly. I do not believe we have, in all our materia medica, a more prompt, or potent promoter of uterine muscular contraction.

Why, in the name of Heaven, we should deluge a poor shivering woman with pailfuls of iced water, or inject into the uterus such irritants as the tincture of chloride of iron, when we have at command so harmless and efficient a suppressor of hæmorrhage as the acetate of lead, is quite beyond my comprehension.

A few days ago, in a conversation with my respected asylum successor, Dr. Daniel Clark, President of the College of Physicians and Surgeons of Ontario, I requested him to state his experience in the exhibition of the acetate in uterine post-partum hæmorrhage, and to inform me in what doses he had given it. His reply was that his usual dose had been a teaspoonful, its action had been prompt and efficient, and he had never seen any collateral result more remarkable than vomiting, in exceptional instances; but an invariable coincidence of this symptom was the complete contraction of the uterus.

Dr. C. has been even more heroic in his doses than Dr. Stephenson or myself. I more generally gave half a drachm than a whole one, repeating this when deemed necessary. Another of my old pupils some years ago informed me that his dose was two drachms.

I believe it will generally be found that in these large doses it acts as a moderate purgative within twenty-four hours; and, if it be desirable that, in order to avert transformation, it should be expelled from the bowels in this way, it may be better to err on the safer side, which certainly is *not* its exhibition in *small* doses.

I trust, gentlemen, you will not for a moment suppose that I inculcate the employment of this medicine in every case, however trivial, of uterine hæmorrhage, though I am firmly convinced of its harmlessness. You all understand too well the efficient mechanical means of inciting uterine contraction to imagine that where these are adequate to our purpose, I would employ uncalled for supplementary means.

## TRANSLATIONS FROM FOREIGN JOURNALS.

BY ——— M.D.

**OPERATION PER RECTUM FOR RECTO-VAGINAL FISTULA.**—A description of this mode of operating in certain cases of recto-vaginal fistula is given in a late number of the *Archiv. fur. Klin. Chirurgie*. Dilatation of the rectum is accomplished by the introduction of a well-oiled single-bladed speculum applied to the posterior part of the bowel, the sides and anterior parts being put upon the stretch by hooks and a tenaculum or two, or an additional flat speculum. When necessary the sphincter may be divided in the median raphe posteriorly; this facilitates access to the cavity. The edges of the fistula are now pared transversely, and silk sutures introduced by Simon's needle holder, or Langenbeck's needles used for staphylorrhaphy. In the after treatment, Simon administers strong cathartics every second day, instead of the common practice of giving opium to produce constipation, as he finds the latter dangerous to successful union. He removes the sutures through the vagina,—the slight ulceration around the threads having enlarged the canals sufficiently to admit of the knots being withdrawn. Cases of recto-vaginal fistula which had been unsuccessfully operated upon through the vagina, were cured by the above mentioned operation. Five cases are reported, in all of which this mode of procedure was successful. Some of them were complicated with vesico-vaginal fistula.

**CUTTING FOR STONE THREE CENTURIES AGO.**

—In the *Deutsche Med. Wochenschrift* the following account of cutting for stone (probably hepatic), is given, copied from the diary of Ludwig XI. :—  
 "In the month of January, 1474, a number of physicians and surgeons appeared before the king, representing that several persons of importance to the state were suffering from stone colic, and agonizing pain in the side, and that in order that they should be properly treated, it would be necessary to discover the origin of this complaint. They asked permission to open the body (during the) of an archer, who had been convicted of theft and sentenced to the gallows, he having recently suffered from several such attacks. Ludwig granted their request, and the operation was publicly per-

formed in the churchyard of St. Severin. After they had opened the abdomen, and examined sufficiently, the intestines—so says the diary—were returned, the abdominal walls were carefully united, and in 14 days the man had perfectly recovered. He was then pardoned and sent away with a sum of money."

**THERAPEUTIC USES OF AMYL NITRITE.**—In the *Med. Wochenschrift*, St. Petersburg, No. 12, 1877, Dr. Maximowitsch gives the results of some experiments in the use of nitrite of amyl. Out of sixteen cases of migraine in which it was administered, it afforded relief in twelve. It was given by inhalation in doses of from 5 to 20 drops, placed on cotton wadding. In some cases the patients felt better after the first inhalation. In one case it was repeated eight times in an hour; in another case it produced unpleasant effects and had to be discontinued, and in two cases no effects whatever were produced. In two cases of facial neuralgia, not malarial, rapid improvement followed its administration. In an anemic patient complaining of giddiness of the head, it afforded instant and complete relief in a short time; iron was also administered. He also found it of service in vertigo arising from dyspepsia, and also in fainting spells from whatever cause. Attacks of hysteria and hystero-epilepsy were cut short by its use, where chloroform had failed to do good. Paroxysms of hysteria of an hour's duration were almost immediately relieved by five drops of amyl. It will cut short an attack of epilepsy, and where the aura is present, it will prevent the attack if used in time. In connection with bromide of potassium and atropine, it has prevented attacks for months at a time. He also used it with satisfactory results in five cases of poisoning by carbonic oxide. The patients were speedily restored to consciousness by its use.

**TREATMENT OF RANULA.**—Prof. Michel of Nancy (*Gazette Hebdomadaire*), in a late contribution gives a short clinical history of six cases of ranula, and the surgical treatment, by excision of the cyst. He discusses the nature and situation of the growth, and states that the cyst in its development in the majority of cases has no connection with any of the salivary ducts. He does not deny that in some cases ranula may be due to dilatation of the duct; but from observations made

during the above mentioned operations, and also from dissection of a ranula in the dead subject, he is convinced that it is more frequently found to have some other seat of origin. All the cases investigated by the author were entirely unconnected with the salivary ducts. The tumor in each case had evidently originated in the areolar tissue around the frænum linguæ. The microscopical examination of the contents of the cyst in these cases revealed globular and tessellated epithelium, with crystals of cholesterine, and in no instance was there to be found a reaction resembling that produced by saliva. The author recommends excision of the ranula as the proper treatment, and preferable to injection of iodine, or incision and cauterization combined, being more speedy and attended with more permanent results. Two methods are adopted: in one the tumor is freely incised and the walls of the cyst dissected away; in the other the cyst is wholly removed at once together with its contents. If the wall of the cyst is very thick, the latter method is to be preferred.

**MULTIPLE PERINEAL CALCULI.**—The following interesting case reported by Dr. Roja in the *Annali Universali di Med. Chirurg.* A young man, aged eighteen years, had required occasional catheterism ever since childhood on account of retention of urine, but after each operation he remained for a considerable time free from trouble. On examination the Dr. found a large perineal tumor, the size of the fist, and on introducing a catheter, it came in contact with a calculus in that situation. The patient was put under chloroform, and an incision made in the perineum through which about one hundred calculi were removed, some of them as large as a filbert, one of which only causing the obstruction. The stones were faceted and of prostatic origin consisting of magnesium carbonate, urates, and ammonia-magnesium phosphate. The Dr. incised the prostate through the wound and explored the bladder with his finger to make sure that none remained in that organ. The case progressed favorably and a perfect cure resulted.

**QUININE IN EPISTAXIS.**—A writer in the *London Lancet* says quinine is *the* remedy in epistaxis. He says that he has tried it more than twenty times, often in aged people, and has never found it to fail.

## Correspondence.

### GREAT WESTERN RAILWAY MEDICAL TARIFF.

To the Editor of the CANADA LANCET.

SIR,—The Great Western Railway Company has adopted and officially promulgated a singular tariff of medical fees for attendance on their employes along their various lines. One might suppose that such a company as this would allow a fair and reasonable remuneration for professional services in cases of accidents to their men. But what is the fact? That the munificent sum of *one dollar* for the term of one year, together with a free ride over their line to and from the patient, is the total amount offered! A man may meet with a serious accident fifteen or twenty miles away, and the surgeon is sent for, it may be to perform a capital operation and give all the subsequent attendance, and this for the sum of *one dollar*. Can this be called a fair transaction? What astonishment would sit on the manager's countenance were he required to serve the public on a similar scale of fees? The strange thing is, that with few exceptions, this tariff has been accepted, and that too without remonstrance or effort to repel the insult offered to the profession by the medical men along the line. They must be aware that it is either an imposition on their generosity or an attempt to obtain their unrequited services on the vague and illusory hope that by this means they may enlarge their more remunerative family practice. In either case it is not legitimate business, and will be found in the end to be as unsatisfactory as it is unjust.

The medical profession has in general been amicably to agree upon a scale of charges of a fair kind, both to themselves and the public. Why may they not unite to tell this powerful Corporation that it cannot have their services on other than fair professional terms? Surgeons might be willing to concede something on the score of humanity and to the claims which accidental injuries to working men may have on their benevolence; but the concession should not all be on one side. The company should have equal consideration, not more, for men injured in its service, and be willing to secure for them on reasonable terms the best surgical aid. This is a question that demands

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the serious consideration of the medical profession of this Province, if not also of the whole Dominion.

Yours truly,  
D. L. P.

Brantford, Dec. 18, 1877.

### Selected Articles.

#### ARSENICAL POISONING TREATED WITH DIALYZED IRON.

A case of arsenical poisoning occurred lately in my private practice, which seems to be valuable enough for publication, both on account of the completeness of the details and the intelligence and reliability of the patient, but especially as it is, so far as I am aware, the first case where the new remedy "dialyzed iron" has been put to the test as an antidote.

As I was leaving my office one morning, a few weeks ago, a young lady patient, Miss S., hastily entered, with a face indicative of intense pain and nervous disturbance, saying, "Doctor, I am poisoned." Her story was as follows. While attending to the wants of a valuable servant who was sick and confined to her bed, Miss S. found hidden away in the servant's trunk a paper of arsenious acid, which had been procured by Mrs. S. some weeks before, for use as a poison for rats. As this servant had been in ill health for some time, and morbid and melancholy, Miss S. at once very naturally, and no doubt very rightly, supposed that she had secreted the poison for the purpose of taking her own life. Quietly placing the packet of arsenic (which was open) in her pocket, she continued her duties, intending at the earliest moment to put it in a safe place. Days elapsed, the arsenic was forgotten, stored away in the pocket of her wrapper, until this unlucky morning, when, putting a couple of handfuls of gum-drops and bon-bons into her *arsenic pocket*, she sat down to her sewing-machine and her confectionery. She noticed from time to time, as she sewed, more powder upon the drops than seemed usual, but she continued quietly to dust them off as she ate, and went on with her work. *Can anything be more absurdly tragic than this unconscious suicide, deliberately eating gum-drops powdered with arsenic?* Probably an hour and a half passed in this innocent amusement, when suddenly, "becoming deathly sick, instantly followed by intense pain," as if, as she quaintly expressed it, "she had had a pure mustard-plaster on the inside of her stomach," she was roused to the consciousness that some strange mischief was at work. Terrified on remembering the arsenic, she attempted, unsuccessfully, to relieve her stomach with warm water; then, unwilling to alarm her mother, who was also an invalid,

she hastily threw on her dress and hat and hurried to my office, about two blocks away. Fortunately for both of us, I had on my table a sample bottle of dialyzed iron (John Wyeth & Bro.), and as soon as she told me she had taken arsenic, and before she began her story, I administered a half-tablespoonful of the iron well diluted in a tumbler of water. This gave her almost instant relief. I repeated the dose in ten minutes, and then gave her a bottle of the iron, directing her to take a similar dose every half-hour, and, later, every hour during the day. I saw her at her home in a few hours after, but she had had no return of her pain, except some slight cramp in the lower bowel and limbs; and a dose of magnesia at night, with mucilaginous drinks, soft food, with occasional doses of the iron well diluted, kept up for a few days, completed her cure. At my request, the day after her attack, Miss S. put into my hands the pocket cut from the wrapper, which she could not be persuaded to touch after her poisoning. This I transferred to a reliable analytical chemist, from whose report of his examination, now in my possession, I condense the following: "In the pocket of a chintz dress I found a small packet labelled Arsenic,—Poison,—and in this packet a second envelope, open on its long and upper side, containing a white powder. Both outer and inner envelopes were worn as letters carried in pockets are. Between the outer and inner envelope was a white powder, and in the pocket itself, mixed with the powder, I found two (2) sugar-crystallized, soft gum-drops, and one (1) sugar-coated bon-bon, all three (3) richly covered with the powder. The powder, which with a brush I took away from the gum-drops, and the dragée, weighed  $3\frac{1}{2}$  grains, and the remaining powder, after separating the gum and sugar, weighed  $2\frac{1}{8}$  grains. In the pocket I found also  $6\frac{1}{8}$  grains of the white powder. The powder obtained from the gum-drops and dragée gave all the tests arsenious acid gives."

What amount of arsenious acid my patient swallowed, it is, of course, impossible to say. It is certain that from this open package of arsenic a considerable quantity escaped into the pocket, and the gum-drops were mixed with it, as she states "that she had to dust the powder off upon her work as she ate," and the three remaining after, show  $2\frac{1}{8}$  grains of arsenious acid upon them on examination by the chemist. I have perhaps been unnecessarily full in the details of this case, but I think they have established several facts. 1st, that my patient did swallow, in the space of an hour or more, *numerous poisonous doses* of arsenious acid in powder; 2nd, that I found her with marked symptoms of arsenical poisoning; and, 3rd, that by the administration of moderate doses of dialyzed iron, well diluted, I was enabled to give her immediate and certain relief, and ultimate and entire restoration to health. I do not

propose in the limits of this paper to discuss the exact chemistry of the dialyzed iron. It is, I believe (when properly prepared, as I have since investigated carefully the process of its formation), a solution of peroxide of iron in the colloid form, with perhaps a trace of hydrochloric acid; but that it will, when very largely diluted with water, perfectly coagulate arsenious acid *in solution*, any one can satisfy himself in a five minutes' test. The only remaining point of interest professionally, will it neutralize arsenious acid when taken *in powder (bulk)* into the stomach? It is held by most authorities, I believe, that when arsenious acid is taken in bulk into the stomach, the iron antidote is not reliable. (See Dunglison, R. J. (latest paper on the subject), in his "Practitioner's Reference Book," page 229.) Yet we know from daily experience that arsenious acid is absorbed by the stomach when taken in minute doses, and I think the evidence in the case shows that arsenic powder did poison when presented to and acted upon by a comparatively empty stomach (at least three hours having elapsed since her breakfast), and that the solution of peroxide of iron (dialyzed iron) did prove a prompt and reliable antidote, coagulating and neutralizing the arsenic. Arsenious acid *acts as it is dissolved*, and the antidote (if supplied) combines, *pari passu*, with the solution formed by the liquids of the stomach, and renders it inert before damage is done to the mucous coat of the stomach or it is absorbed into the system. Within twenty seconds after I learned that arsenic had been swallowed I sent a full dose of the antidote after the poison, and with positive and immediate relief to the patient. My experience with dialyzed iron as a pleasant and efficient means of introducing iron into the economy is too limited for an opinion, but I feel disposed, from the history of this case, to strongly recommend it as a safe, reliable, and always-ready-at-a-moment's-notice remedy and antidote for arsenical poisoning.—*Dr. Reed, Medical Times.*

## TREATMENT OF FRACTURES OF THE SHAFT OF THE FEMUR.

CLINIC BY FRANK H. HAMILTON, M.D., NEW YORK.

First, I wish to remark that fracture of the shaft of the femur in the adult is almost always oblique. The fracture is usually very oblique, so much so, that it almost never happens that we can set it, in the ordinary sense of the term; that is, we cannot make the fragments set supporting each other. The fracture is so oblique, that unless the fragments are maintained in position by extension and counter-extension, they always overlap each other. This is the law. There are exceptions, of course,

as, for example, when fracture occurs in a paralyzed limb, etc.

When the fragments overlap, there will be a projection equal to the entire thickness of the bone. This is illustrated in the specimens you see here. In this specimen the fracture took place about the middle of the shaft, and the overlapping, as you see, is as has already been stated, and the projection is very marked.

The same thing can be observed in another specimen, in which the fracture occurred a little higher up, very near to, but not involving the neck of the bone. In this case there was no extraordinary obliquity, but the fragments overlapped each other fully two inches the lower fragment riding upwards until it impinged against the neck of the bone.

As a rule, then, there is no such thing as setting a fracture of the shaft of the femur, in the ordinary acceptation of that term. The bone can be placed in position, and held there, perhaps, if sufficiently powerful extension and counter-extension are employed, but it does not set upon itself so as to hold itself.

In this particular instance the plaster-of-Paris dressing was employed, and was applied while the patient was under the influence of chloroform, and while full extension was made with pulleys. The splint was worn for several successive weeks, and when the patient died, two or three years after, it was found that just such shortening as the condition of the bone would permit had taken place; the lower fragment had ascended until it struck the neck of the bone. Practically, there was no extension or counter-extension in the case.

How is the tendency in the fragments to overlap, from the action of the powerful muscles, to be overcome?

Certainly never by setting the bone, as it is called, and then locking it tight with bandages, because you will have cut off all circulation in the limb long before you can bind it sufficiently tight to maintain the proper position of the fragments. This is but plain common sense. No surgeon would dare to attempt to treat fracture of the thigh in that manner. He may put on lateral supports and apply bandages, and the position of the fragments may be in some slight degree maintained by pressing them against each other, but this dressing will not prevent shortening.

How then will you overcome the tendency to shortening?

Until the latter part of the last century all surgeons from the earliest periods employed the long straight splint. The method was generally to simply pull the limb out to a certain length, and then bind a long, straight splint to the side of the limb and side of the body. The old-fashioned long splint is illustrated by this simple and practical device employed by a surgeon under Stone-wall Jackson, that great soldier and good man. It

is the simplest and most prompt plan which could be carried into effect in an army constantly upon horseback. Essentially that plan was employed up to the time of Pott, who at the close of the last century wrote an essay, in which he declared that fractures of the thigh all united with great shortening, but that this tendency would be overcome by placing the limb in a flexed position.

This was a new theory, but one which was specious, and which was soon accepted by the English surgeons, a few American surgeons, but never by the French. It soon came to be known as the treatment by the use of the double-inclined plane, although the original idea of Pott was simply to flex the limb, hoping thereby to overcome the action of the muscles. This plan of treatment by the use of the double-inclined plane, or by the flexed position, as it is also called, has its advocates to the present hour.

In England there is, perhaps, no surgeon of eminence who employs it; in France it was never adopted; but in the United States the late Dr. Nathan Smith and Dr. Nathan R. Smith employed it. And Dr. Hodgen, of St. Louis, one of the most distinguished surgeons in the West, still employs this method of treatment. The Drs. Smith employed and Dr. Hodgen employ suspension in connection with it. There are, perhaps, a few other leading surgeons connected with large hospitals who prefer it yet, but almost universally it has been discontinued. These are simple facts, and with here and there rare exceptions, the profession has returned to the use of the straight splint; and I think surgeons have done so because they have found they can make longer and straighter limbs in this position. Let us then return to a consideration of the history and progress of the treatment in the straight position.

How did surgeons formerly contrive to get hold of the foot in order to make *extension*?

It was always done by means of some form of gaiter. They all were intended to get hold of the foot in its circumference, and in as comfortable a way as possible, to afford a means by which extension could be made. But all of them were liable to cause ulceration at some point; sometimes on the instep, sometimes on the top of the heel behind. Ulcers were almost certain to be made if very much weight was employed in making the extension.

As to the *counter-extension*, that was made in essentially the same manner—that is, by some mode of pressing against the tuberosity of the ischium. A variety of methods have been employed, but that which has been most generally used is the perineal band.

But what has been the experience in the use of the perineal band? Every now and then a deep ulcer has been caused by this means of making counter-extension.

We had then two evils to contend with: *first*, the extension apparatus, which was liable to give rise to ulcers upon the top of the foot and heel; and *second*, the counter-extending band, which was liable to give rise to ulcers in the perineum. The liability to make ulcers was so great that the limit of our extension was about ten or fifteen pounds.

At length Dr. Josiah Crosby, of Hanover, N. H., devised the method of making extension by the aid of adhesive plaster applied in strips to the sides of the limb. Broad strips of adhesive plaster were laid along the lateral surfaces of the leg, and secured in place by means of bandages. They take hold upon the skin and nowhere else, and it was soon found that an extension weight of twenty or twenty-two pounds could be used without the least liability of producing ulceration. That was the first great step of progress made in the treatment of these fractures. It gave us a means of making extension which was in every respect satisfactory.

Still there was need of some mode by which counter-extension could be made without incurring the risk that attended the use of the perineal band. It remained for Dr. Van Inger of Schenectady, N. Y., to suggest that, if the foot of the bedstead was raised, we need not use the perineal band.

It is now more than twenty years since my attention was first drawn to this suggestion, and I did not then believe that it would ever answer as a method of making counter-extension. It will not answer if employed as Dr. Van Ingen recommended, because he raised the foot of the bedstead so high that the patients could not endure the discomfort produced in their heads. But Dr. Moore, of Rochester, took up the suggestion and began to put it into practical application, and it was not long before we became satisfied that it was *the* method of making counter-extension. It has been many years since I have seen a perineal band in this hospital. We make our counter-extension in every case in adults by simply raising the foot of the bedstead about four inches, and it is sufficient to enable us to apply twenty or twenty-two pounds of extending force, if necessary, without pulling the patient down in bed at all, provided the head and shoulders are properly supported. This method of making counter-extension certainly never causes ulceration. We have then a means of making extension which does not give rise to any trouble, and the same is true of counter-extension.

In order that we may have the counter-extending force furnished by the entire weight of the body it is necessary that the pillow should support the *head only*, and not the head and shoulders.

I have said that we have a means of making extension which permits us to use twenty or twenty-two pounds weight, and that that is the full extent to which it should be carried.

Why may we not make greater extension?



Because the ligaments of the knee-joint will not permit of greater extension without becoming painful.

If we stand in a position in which the knees are thrown back to their full extent, they soon become painful, and the position cannot be maintained without great suffering.

We usually stand with the knees bent at an angle of one or two degrees, and if straightened more they become painful.

Some patients will bear fifteen, some twenty, and some twenty-two pounds extension, which is the extreme amount that should be employed. By no means put on such an amount of extension as causes the patient pain.

A few years ago, at the suggestion of German surgeons, who have done so much good and praiseworthy work, American surgeons began to use plaster-of-Paris in the treatment of fractures of the femur. In adopting that plan of treatment, they went a step backward instead of forward, for they adopted a method by which they could not secure any degree of extension and counter-extension, as any one can satisfy himself by watching a case throughout its treatment. It is easy of demonstration that it does not afford any extension and counter-extension. If the plaster is put on so that pressure is made on the perineum, it will cause ulceration. I have seen a case in which ulceration extended through the perineum, and up the back six or eight inches, and as deep as my hand. If you do not use the perineum to make pressure against, you must use the side of the thigh.

What kind of a surface does the thigh furnish? It is an oblique surface; there is a gradual decline from the hip to the knee, and inasmuch as the plaster will loosen within four or five days, so that you can run your hand in between it and the surface of the limb, there is no counter-extension at all; not the slightest.

The entire foot and limb may be enclosed in plaster as snug as you please, but you have no counter-extension; not a particle. While the plaster was being used in this hospital, I saw more shortening than I ever saw before in my life, and I saw two or three deaths, occasioned by the use of the plaster-of-Paris dressing.

These cases have been carefully recorded in the 5th edition of my work on Fractures.

I think we have gone several steps backwards when we use the plaster-of-Paris dressing, and I am happy to say that it is almost abolished. At the present time there is scarcely one of my colleagues in this hospital who employs it in the treatment of fractures of the thigh; there may be one, but I am sure you will not use it more than once or twice in country practice.

The apparel, when complete, as I usually employ it, is generally known as Buck's extension. But Dr. Buck was not the first to employ the adhesive

plaster, or to suggest raising the foot of the bed for the purpose of making counter-extension, and these are the most essential features of the treatment. So it is with other parts of the apparatus. We are indebted to Dr. Buck for a great deal in the treatment of fractures, but this apparatus has been so long employed in this country and so much modified that it may with more propriety be called American. In this case the apparatus is complete, and let us see what we have. *First*, we have two broad strips of adhesive plaster reaching from the knee to a few inches below the foot, and secured to the sides of the limb by means of a roller bandage. A piece of board is attached to the lower ends of the strips of plaster, and from the centre of the board a cord passes over a pulley fastened to the foot of the bedstead. In some of these cases you will notice that we have two pulleys, and in others only one.

Originally, a simple straight piece of board, having a mortise in it, as you see, and carrying a pulley, was secured in the upright position to the foot of the bedstead. The upright seen here is iron and can be adjusted and removed with ease; it is an improvement; that is, it is somewhat more convenient than the original wooden board.

The piece of board to which the adhesive straps are attached must be of sufficient length, so that when extension is made they will not impinge upon the malleoli.

The strips of adhesive plaster need not go above the knee.

Then as to the counter-extension. We have, as you see, no perineal band. We have simply raised the foot of the bedstead about four inches, and have seen that the patient rests his head, *not his shoulders*, upon a pillow. We next apply four short side-splints to the thigh; three will not answer; it is necessary to have four independent side-splints, which nearly encircle the limb. We are employing here splints constructed of felt, which is made of several thicknesses of cotton cloth. This material is one of the best that can be employed for this particular purpose as it is easily worked, is sufficiently flexible, and at the same time possesses sufficient firmness.

These side-splints are secured in position simply by encircling the limb with four or five fillets and tying them with a convenient knot. In this manner the fragments are kept in proper coaptation, and the splints can be easily removed to afford an opportunity for inspecting the limb.

In addition, you see fastened to the side of the limb and to the side of the body a long splint, about four and one-half inches in width extending nearly to the axilla, and having at the lower end a broad cross-bar to prevent its tipping.

What is the use of all this? *First*, it prevents eversion of the limb.

*Second*, and most important, it keeps the limb and body in a direct line.

If the fracture is pretty high up, or even in the middle third of the femur, I regard the long side-splint as the most essential part of the apparatus in securing the broken femur in an absolutely straight line.

In the case before you the fracture is nine weeks old; union is not yet perfect, but the limb is perfectly straight.

This is the model dressing for fracture of the thigh occurring in adult life, and in its present improved condition is the splint employed by the larger portion of the surgeons throughout this city.

When plaster-of-Paris was first introduced as a means to be employed in the treatment of fractures, the idea was that the splint could be kept on until the treatment was completed.

I have treated a great many cases myself in that manner, and I know what I say. It was found that scarcely ever more than two or three weeks elapsed before it became necessary to cut the splint open, remove a piece, and then bring it together and secure it with a bandage, or else remove it altogether and adjust a new one.

When a plaster splint is cut open and a piece removed, it will never properly fit the limb again, so that it becomes an almost absolute necessity to expend a prodigious amount of labor in removing the dressing entirely every two or three weeks and applying another new splint.

In nearly all these cases treated by extension and counter-extension there is more or less shortening. That is the rule. In this case the amount of shortening is three-sixteenths of an inch. Formerly the average amount of shortening varied from three-quarters to one inch; now it is usually one-half inch, or less.

Here is a case, gentlemen, in which the plaster splint has been applied for purposes of illustration.

In order to secure extension even temporarily, the plaster splint must be carried over the foot, and then it must be extended up over the limb and through the perineum; then it is carried around the pelvis so as to embrace it completely.

If this splint remains on a week it will be loose—indeed, it is so loose now, and it was applied this morning, that the hand can be slipped in between it and the skin around the pelvis and perineum, and you can see that it affords nothing in the way of counter-extension.

This is the ordinary method of using plaster-of-Paris in the treatment of fracture of the thigh.

[Several cases were exhibited and brief allusion made to the peculiarities in each.]—*Medical Record*.

ON TESTICLES AND THE PROCREATIVE POWER.—  
Dr. H. A. Spencer, of Erie, Pa., in *Med. and Surg. Reporter*, reports a case of the removal of one testicle, which was followed by no apparent

diminution of the procreative power of the individual, he having subsequently begat a number of children.

## CONVULSIONS IN TYPHOID FEVER.

CLINIC, BY J. M. DA COSTA, M.D., PHILADELPEIA.

The rather sudden termination of one of our cases of typhoid fever, towards the close of its third week, makes it incumbent on me this morning to explain to you the mode of death, and to point out to you some uncommon features of the speedy and unexpected end.

Just as convalescence appeared definitely established and the patient seemed out of danger, he was seized with general convulsions, and in a few moments expired.

After refreshing your recollection of the case by reading the clinical notes, I propose to devote the remaining portion of the hour to discussing the significance of convulsion as a symptom of typhoid fever, and its bearing upon the treatment of the disease:—

Albert McD., a seaman before the mast, was brought, Dec. 30th, 1876, from shipboard into our wards, with the statement that he had been sick for two weeks, the principal symptoms being great prostration, fever, headache, and diarrhoea. The remainder of the crew were healthy, and no cause was assigned for his illness. He was 21 years of age, unmarried, of good physical frame, and, to all appearance, a man of temperate habits.

His axillary temperature on the evening of admission was 104°. During the night he was delirious, but the next morning he responded intelligently to questions, and gave a connected account of his illness. He stated that he had been suffering with diarrhoea for a week before, being regarded as unfit for work, and that he had been in his berth for only ten days before admission, during which time he was pursued by strange dreams. The headache was principally frontal, and was severe and constant. The record taken on his admission into the hospital, speaks of his tongue being dry and coated from the centre to the edge, and displaying a red wedge shaped patch, its base corresponding with the tip of the tongue. The gums and teeth were covered with sordes, and the breath was offensive. There was complete loss of appetite; the bowels were moved twelve or fifteen times a day, the discharges being watery. The abdomen was tympanitic, and a few rose-coloured spots were seen on the lower part of the chest and abdomen.

The kidneys performed their function well, and the secretion was of a light amber colour, acid in its reaction, of specific gravity 1020, and contained a small amount of albumen; a microscopical examination failed to discover casts.

He was ordered dilute nitro-muriatic acid, ten minims thrice daily, and eight grains of quinia daily. To relieve the diarrhoea, he received suppositories of acetate of lead and opium. During the next few days he gained rapidly, and the temperature-chart showed the declining gradations peculiar to this stage of the disease; thus his temperature on

Dec. 30 was		104° P. M.
Dec. 31	102½° A. M.	103½° P. M.
Jan. 1	102½° A. M.	103° P. M.
Jan. 2	101½° A. M.	102° P. M.
Jan, 3	101½° A. M.	100° P. M.

Jan. 4th the temperature in the morning was 101°, and the patient had a pulse of 96, of good volume, and only slightly heightened respiration, and no cerebral symptoms; yet he died in the afternoon after a convulsion lasting a few moments. During its progress his face became purple, the head was drawn back, the neck swelled; he seemed to be gasping for breath, and struggled so violently that his limbs had to be held by the surrounding patients to prevent his being thrown from the bed.

Passing by the minor details of the case, we notice, first, that the statement of the patient, that he had been ill for nearly three weeks, was confirmed by the temperature observations. The highest point marked was 104°, on the evening of admission; following this, the evening exacerbations, after each morning's fall, showed a declining series. Nor was the improvement to be found only in the vanishing fever heat; there was no fresh eruption of rose-coloured spots, indeed, those noticed upon admission were gradually fading, the discharges were reduced and under control, the tongue was cleaning, and he slept at night without delirium, when, without warning or apparent cause, we notice that he had a violent, general, and rapidly fatal convulsion.

Now let us see if the autopsy explains this unlooked-for result, or is able to throw any light upon the cause of death. In cases of sudden termination of typhoid fever, we naturally think of intestinal perforation, of exhausting internal hemorrhage, or of cerebral effusion; in the present case this is not a subject merely of speculation, as we have the organs before us; and it is to their appearance that I invite your attention.

*Autopsy.*—The lungs, with the exception of some engorgement posteriorly from hypostatic congestion, are found to be healthy and crepitating throughout. There is no evidence of pleurisy; there are no adhesions or effusion. The heart weighs 10½ ounces; the left side is firmly contracted, the ventricle being empty, the auricle full of fluid blood. The right side seems flabby, the ventricle containing some fluid blood and a white, fibrinous clot, the auricle having fluid contents and no clot. The cavities, walls, except as regards the flabbiness of the right side, and the valves appear healthy.

The stomach shows some congestion of mucous membrane, and holds coagulated milk; the membrane is reddened, and is softer than normal. The peritoneum contains some serous fluid, but exhibits no other sign of disease. The liver is healthy in every respect. The spleen is large and flabby; it weighs 19 ounces, and in section displays a currant-jelly appearance; the tissue breaks readily under pressure. The mesenteric glands generally are enlarged. In the small intestine there is no evidence of ulceration or perforation, but there is marked increase in size in Peyer's patches, and in the solitary glands of the large and small intestines. These look like shot under the mucous membrane; Peyer's patches are very much infiltrated, and darker in colour than the surrounding parts. There is nowhere a sign of perforation.

The kidneys weigh 7 ounces each. The left is large, firm, and irregular. The capsule is thickened, adherent, and on removal leaves a markedly granular surface. Upon section, a urinous odor is noticed the organ is congested, especially in the pyramids, and the cortex appears slightly swollen. A similar condition is found in the right kidney. The pathologist has just given me a report of the microscopic examination of the kidneys in this case, in which he pronounces them to be in a state of granular degeneration. The supra-renal capsules are normal. The brain is rather soft, but is perfectly natural on gross examination.

Now, looking at the post-mortem results, we find in the kidneys alone sufficient ground for the explanation of the convulsion seizure; and its uramic nature is further rendered most probable by the presence of albumen in the urine, and by the well-known fact of the favouring element of the accumulation in the blood of the products of waste and disintegration of tissue during the fever process. But before we adopt this view, let us consider what other causes may determine convulsions in typhoid fever; and thus see whether any of them is likely to have been at work in this particular case.

A patient may have a convulsion from overloading the stomach. Every hospital surgeon knows that the friends of the sick man have ways of eluding the most Cerberus-like of gate-keepers, and are thoroughly happy if they can convey quantities of apples and peanuts to the patient to fill his stomach with when the attention of the nurse is diverted. The smuggled articles may have all the proverbial flavour of forbidden fruit, but they often lead to disastrous consequences. Among these may be convulsions, and death may occur as the direct result of paralysis of a heart already weakened by fever. We have a parallel in the way feeble children perish from convulsions brought on by indigestion. In the case we are discussing there was some suspicion of improper food having been given; but at the autopsy none was found in the stomach.

Now as to the direct influence of the typhoid

fever poison itself. Could the nervous system be so excited by this as to produce a convulsion? In answering this question you will naturally think that the nervous symptoms are among the most prominent in typical cases of typhoid fever; you will recall the irregular chills at the onset of the disease, the pains in the loins and limbs, the ringing noises in the ears, the giddiness, the severe headache, and the profound prostration; you will reflect on the restlessness, the subsultus, vigilance, and delirium which belong to the course of the complaint almost as surely as do the diarrhoea and fever; you will think of all these evidences of great derangement of the nervous system, and be prone to conclude that convulsions are likely to be among them. But they are not. Convulsions in typhoid fever are rare, so rare as to be regarded almost as a clinical curiosity, and to be set down as something outside of the regular history of the disease. In nearly three thousand cases of enteric fever admitted into the Fever Hospital in eight years convulsions occurred in only six, Murchison tells us in his classical treatise. In typhus they happen much more frequently.

When I make these statements I allude to general convulsions. Spasmodic movements, such as jerking of the tendons, hiccough, twitchings of the muscles of the face, are, we know, not uncommon in typhoid fever; and choreic movements, rigid contraction of the muscles of the extremities and even cataleptic states, though far from common, have been often described. But convulsions from any cause in typhoid fever are extremely infrequent, and the most unusual kind is from the direct influence of the poison on the nerve centres. At least this is true of adults; a different statement must be made of children. But whether in children or in adults, convulsions due to the fever poison alone, happen at the onset, or in the first week of the malady.

Gentlemen, you know well that the vagaries of hysteria baffle any description. Among these vagaries is the occurrence of hysterical seizures in the early part of typhoid fever. I saw such a case a few years since with an eminent physician in this city. The hysterical outbreaks and convulsions in the first week of the fever were extraordinary and misleading; violent neuralgic pains in the head also existed, and the case looked like anything else rather than like one of typhoid fever. Nothing but the decided fever temperature and a certain irritability of the bowels excited even suspicion. On the eighth day appeared the characteristic eruption. I am sorry to add that the case became a very grave one, and died in the second week.

Epilepsy is among the causes of convulsions during an attack of typhoid fever. The wonder is that it does not show itself oftener. The reason I suppose to be in the strange law by which the affection is temporarily obliterated when an epilep-

tic is stricken with an acute disease. We see whooping-cough suspending it, fevers lulling it. But the malady is not dead, it is slumbering; and it may start up vigorously during the last stages of the fever or during convalescence. I attended a case some time ago, in which three epileptic seizures happened in the course of twenty-four hours in the third week of the enteric fever. There had been no kidney complication, and no cause other than epilepsy could be discovered for the attack. The patient was very drowsy after it, yet the recovery was not much retarded by the accident. A positive diagnosis in such cases can only be made by the aid of inquiry concerning the previous history. But the time of the occurrence of the convulsions should always arouse our suspicions.

Typhoid fever may become complicated in its course with apoplexy, and the effused blood lead to such damages as to give rise to long-continued palsy. A case of this kind, with right-sided hemiplegia of two years' standing, came under my notice recently at the clinic of the Jefferson Medical College, in the person of a sturdy young farmer. Where the clot is effused on the surface of the brain, convulsions may readily be associated with the apoplectic seizure.

I told you, at the beginning of the lecture, that I believed uræmia to have determined, in the case we have been investigating, the fatal convulsion. Irrespective of the diseased appearance of the kidneys which I have submitted to your inspection, you may judge, from the description I have given you of other exciting causes and how they act, that they do not here apply. Let us now study a little more closely how the uræmia with its dire results is brought about.

The noxious urinary ingredients may be absorbed into the blood in consequence of the distension of the bladder. It is well known what a paralyzing effect low fever exerts on the muscular coat of the bladder. The viscus may become greatly distended, as we can recognize by percussion, although the patient seems to be voiding natural amounts of urine. The result of the accumulation may be the poisoning of the system with urea or the products of its decomposition. I shall not readily forget the impression made on my mind by a case of this kind seen a number of years ago. The young man lay for several days in a state of semi-coma, associated with marked twitchings of the muscles of the face. He was more than once on the verge of a general convulsion; passing a catheter several times a day after the difficulty was recognized, removed the untoward symptoms.

But the most common cause of the uræmic poisoning, and of the convulsions that may attend it, is to be found in disorder of the kidneys. If, indeed, you will collect the recorded cases—they are, it is true, not many—you will find a condition of diseased kidney or antecedent albuminuria in the

majority of them, although the connection between this and the convulsion may have passed unnoticed. But is albuminuria always antecedent? Not to needlessly obscure the subject in your minds, but to warn you of a source of fallacy, I must state that, in some cases of fever, there may be an excess of urea and the products of tissue-waste in the blood, progressing even to the production of uræmic convulsions, without the presence of albumen in the urine. The secretion in this case is scanty. The urea is found in deficient quantity in the urine; while in the blood we find alterations produced by its presence, or of the substances it gives rise to. We may have to seek the advice of the professional chemist to determine this point; and I have more than once been most efficiently aided in solving the obscure clinical problem by the skill of our pathological chemist, Dr. Hare. Again, convulsions, at any time and from any cause, may themselves produce transient albuminuria, so that the detection of albumen in the urine for a day or two after the attack is not sufficient to establish its uræmic character.

In cases where albuminuria and undoubted disease of the kidney exist, and convulsions have happened, does the renal difficulty antedate the fever, or, is it a complication? It may be either. Chronic nephritis grants no immunity from typhoid fever; on the other hand, an engorgement of the kidney, an accumulation of epithelium in the tubules, and the beginning of a parenchymatous nephritis are met with, as part of the typhoid fever process, and may be sufficient to clog the kidney to such an extent as to interfere with its function. You will ask me how are we to know if the kidney disorder belongs to the fever or not? We cannot always know. It is true that considerable quantities of albumen, the presence of markedly granular or fatty casts would determine the antecedent nature of the malady. But some tube casts may also be found in the urine coming from the hyperæmic fever kidneys; and we may not detect them at one examination in the urine of a chronic renal affection. The presence of albumen from the onset of the fever would greatly favour the supposition of the latter; for in typhoid fever albuminuria is not an early symptom. Again, we may have the lesions determined by the fever process adding to the embarrassment of an already diseased organ; and thus producing the inaction which has led to the uræmic seizure. Such I take it happened in the case which we have been discussing this morning.

Now, I have conveyed to you a wrong impression if I have led you to suppose that convulsions must always happen in consequence of the uræmia met with in fevers. Coma is, perhaps, the more common result; or a state of half-coma with convulsive twitchings. We have recently had a case of uræmic coma in the hospital which some of you have seen.

But I must revert to the subject I have been at-

tempting to elucidate, convulsion in typhoid fever. We have found that it may be due to a variety of causes, though uræmic is the most prominent. The prognosis will of course depend very much on its exciting cause. It is generally unfavourable. The most favourable prognosis is, if the seizure be in an epileptic and an outbreak of epilepsy, or if the subject of the convulsion be a child overcome at the outset with the fever poison, or be affected with an apex pneumonia; of the uræmic convulsion, that associated with retained urine in a distended bladder justifies the most hope.

The treatment, too, will largely depend on our knowledge of the cause. I will merely point out how important it is to take care that the broken-down waste is not retained in the body, and that the kidneys are kept freely acting; and how readily careful attention to the state of the bladder may prevent a serious mishap. During or soon after the fit we must see to it that the head is kept cool, and the flow of blood in the body equalised. Cupping at the back of the neck, and even general blood-letting, suggest themselves among the remedies to diminish the vascular tension. These remedies are potent also for evil; and it must in an individual case always remain a matter for judgment, whether the patient is in greater danger from a local injury to brain or lung and the general turgescence of the vessels, or from the extreme debility that attends the fever. In deciding this the pulse and the state of the first sound of the heart are our chief guides. But I cannot now further enter into this subject; it involves much, having a wider range than can be accorded to my discourse. Let me only add that, if the convulsion be due to apoplexy, and associated with one-sided palsy, the abstraction of blood seems to me imperatively indicated. If the convulsions are epileptiform in a subject predisposed to epilepsy, bromide of potassium will be our main reliance. But, whatever treatment be employed, let it be active, and take into account the pathological condition which has occasioned the outburst.—*Med. News and Library.*

#### CLOSURE OF THE VULVA FOR VESICO-VAGINAL AND RECTO-VAGINAL FISTULA.

BY DR. GOODWILL.

Thirteen years ago this woman went into her first labour, during which she was attended by two most excellent obstetricians. It happened to be an arm presentation, giving no chance for turning, but showing a tendency to spontaneous evolution. While one physician was away and the other asleep the child was born. As a result of these complications she had very extensive sloughing of the upper and outer wall of the vagina, is

the course of which the base of the bladder and a large portion of the urethra were eaten away. Since that time the woman has menstruated but twice. Last spring she came to me to have the operation for vesico-vaginal fistula performed. This I found to be utterly impossible; there was nothing from which a flap could be made. So I passed the galvano-caustic wire (insulated completely except at its point) into her rectum, and made an artificial recto-vaginal fistula with the intent of converting the rectum into a bladder. At first the rectum objected to the presence of the urine, and as a result she was constantly obliged to go to stool. Afterwards, however, it became more accustomed to its new office, and she only had a passage two or three times daily. I took this first step in my operation some months ago with a purpose. Artificial recto-vaginal fistulæ are very loath to close up again, and the success of the operation for the closure of the vagina depends primarily, of course, upon the integrity of the opening into the rectum. I am going to perform an operation that, so far as I know, has been successfully performed but once before. You will find a note of this case on pages 43, 44, of Dr. W. W. Keen's Toner Lecture for 1876. The case he gives occurred in his own hospital practice. I intend to-day to close up this woman's vulva by sutures. Dr. Keen had to perform some thirteen operations to secure accurate healing of the sides, but the woman upon whom he operated was vastly improved.

I shall begin by shaving off the hair from each side of the vulva where I intend to put in my stitches. Now that the hair is out of the way I proceed at once to snip off the skin with a pair of curved scissors, beginning below so that the parts may not be obscured by blood. Every now and then a little artery spurts, which I secure at once by a *serre fine*. Scissors do not always behave well under such circumstances; the edges may not be perfectly true; still I prefer their half crushing action to that of a knife. They do away with a great deal of bleeding. You notice that I have been snipping off the skin and mucous membrane well into the vagina on each side. Every now and then I ask the assistants to relax their hold so that I may fit the sides accurately together and see where I am. Just here at the entrance to the meatus I must work with great caution. If any of the veins of the bulbs were cut I might cause very serious bleeding. I think I have pared off all the mucous membrane needful on each side now, and am ready to put in my sutures. But first I must cut off these "aprons," nymphæ, for they are no longer of use, and will only interfere with the accurate healing of the sides. These plastic operations are tiresome, but I must resist the desire to hurry through them for the woman's sake. I put my first suture in on a level with the

lower margin of the arms, and pass it through one side with a sweep. Always bring out the stitches on the edge of the denuded surface. I do not expect this to be nearly as successful an operation as that for perinæum. I have passed eight sutures through. I have included plenty of tissue in my stitches so that they won't tear out. For this purpose I thrust the needle straight back at first and then bring it round. If these sides do not heal completely I shall have to open the wound again. At the last stitch and that nearest the symphysis pubis I have passed my needle and wire all the way round. The great difficulty always is to see that the points of exit and of entrance of the sutures are exactly opposite. Now I am ready to draw the sides together. As I tighten each suture I syringe out the part carefully so as to wash away all the urine from the sides of the wound. In clamping the sutures I must use very large shot in order to make the fastenings secure. I will use two clamps for each of these lower stitches. The most difficult stitch for healing is the last, that just at the symphysis pubis. All the sutures are now fastened. It makes, you see, a very clean apposition. I shall have a sigmoidal catheter passed through the rectum into the woman's bladder, and the rectum drained by a flexible gutta-percha tube. Of course her knees must be bound together, and she must be given opium enough to dull the pain and keep her bowels locked for eight or nine days. Be sure that you always put a pad between the knees before binding them together. [When the stitches were removed on the ninth day, the union of the sides were found to be complete except the site of the meatus urinarius. At this spot a small fistulous opening remained, through which the urine trickled out. The doctor attributed this opening to the fact that, underestimating the strength of the sphincter ani, he had used a flexible catheter instead of a silver tube to drain off the urine, and that the contraction of the muscle had closed the catheter and so forced the urine to find another means of egress. He further stated that he would attempt the closure of the fistulous opening by cutting flaps from both sides. This secondary operation he would postpone for a couple of weeks, until the patient had time to regain flesh and strength.]—*Boston Med. Journal.*

#### THE EMPLOYMENT OF ANÆSTHETICS IN LABOR.

M. Piachaud read a paper before the International Medical Congress of Geneva, in which he advanced the following conclusions:

1. The employment of anæsthetics is, as a general rule, advisable in natural labor.
2. The principal substances which have been

used for this purpose up to the present time are ether, chloroform, amylene, laudanum, morphia hypodermically, chloral by the mouth and by injection.

3. Of these chloroform seems to be preferable.

4. It should be administered according to the method of Snow, that is, in small doses at the beginning of each pain, its administration being suspended during the intervals.

5. It should never be pushed to complete insensibility, but the patient should be held in a state of semi-anæsthesia, so as to produce a diminution of the suffering.

6. The general rule is never to administer chloroform except during the period of expulsion; but in certain cases of nervousness and extreme agitation it is advantageous not to wait for the complete dilatation of the os.

7. Experience has shown that anæsthetics do not arrest the contractions of the uterus or abdominal muscles, but that they weaken the natural resistance of the perineal muscles.

8. The use of anæsthetics has no unpleasant effect on the mind of mother or upon the child.

9. In lessening the suffering, anæsthetics render a great service to those women who dread the pain; they diminish the chances of the nervous crisis which are caused during labor by the excess of suffering; they make the recovery more rapid.

10. They are specially useful to calm the great agitation and cerebral excitement which labor often produces in very nervous women.

11. Their employment is indicated in natural cases until the pains are suspended or retarded by the suffering caused by maladies occurring previous to or during labor, and in those cases where irregular and partial contractions occasion internal and sometimes continuous pain, without causing progress of the labor.

12. In a natural labor, chloroform should never be used without the consent of the woman and her family.

M. Courty advocates the use of chloroform. He thinks it indicated when the pains are very great and irregular, or where the patient demands it.

M. Leblond prefers to use the hydrate of chloral. —*Gazette Medicale*, Oct. 20, 1877.—*Med. Record*.

**POISONING WITH TOBACCO.**—A singular case of narcotic poisoning in a child has been the subject of an inquest during the last week. A boy, aged three or four years, was playing with other children who were blowing soap-bubbles. The father of the child gave him an old wooden pipe, which had been lying by on a shelf for more than a year. The deceased was quite well at the time, but, an hour after using this pipe, he became sick and drowsy. A medical man was called in, and he

found the child labouring under the usual symptoms of narcotic poisoning. He was in a comatose state, and the pupils were slightly dilated. He could be roused to answer questions, but showed no sign of rallying. He died on the fourth day after using the pipe.

The medical witness attributed death to the nicotine which the wooden pipe had imbibed and retained. The deceased while blowing soap-bubbles with it, had sucked in sufficient quantity of this powerful poison to cause the symptoms observed and to prove fatal.

There can be no doubt that a very small quantity of nicotine would suffice to destroy the life of a child of this age; but it is remarkable that the child should have survived so long. There was, however, no other cause for the symptoms and death; and it is well known that children of this tender age are highly susceptible to the effects of narcotic poisons.—*Brit. Med. Journal*.

**MEDICAL LEGISLATION IN ILLINOIS.**—The Illinois State Board of Health is now issuing licenses to the physicians of this State, according to the new law.

A. This new law gives all educated physicians the power to protect themselves and elevate the standard of the profession, which they never before had. In less than twelve months every County Clerk in Illinois will have recorded the license of all physicians practising in his county. Every new comer can be investigated, by any man choosing to ascertain if the former is registered, by inspecting the County Clerk's record. If he be registered, well and good; if not, the County Attorney, in obedience to instructions from the State Board, will prosecute the new comer, who must show that he is a graduate, or "move on." Thus the profession can keep out of Illinois all uneducated, ungraduated men.

B. After January 1st., prox., physicians, in collecting fees in courts, must show that they are law-abiding citizens, in that they have qualified by conforming to the laws of the State—in short, that they are licensed practitioners of medicine and surgery. Failing in this, they will suffer immensely in their suit and be greatly embarrassed.

C. All advertising specialists and travelling quacks can be suppressed, by licensed physicians entering complaint to the State Board against them, alleging that they are violating the "code," and the Board will at once recall licenses issued to those thus giving offence. As long as the earth stands there will be charlatans, and no law can be framed that will completely annihilate them. Quacks are such by NATURE. Doctors must always expect to be pestered by this sort of vermin. This new law places in our hands, for the first time in our State history, the possibility of dealing summarily with all forms of quackery. The "codes"

of all schools are agreed as to what is "professional conduct."

From the foregoing, it can be seen that if the profession throughout Illinois will cheerfully come forward and array themselves on the side of law and order, give their hearty and united moral support to this Board of Health, the standing of physicians will be greatly enhanced thereby, and they only will be the gainers. On the general principle of opposition to special legislation, the Colleges, so far as is known, were opposed to the bill, and the fact that eight separate medical bills were introduced in the legislature last winter, and but *one* (and an imperfect one) passed, shows that there was no endeavour on the part of Colleges to secure the enactment of this law.—(*Chicago Medical Journal*.)

**BUISSON'S CURE FOR HYDROPHOBIA.**—M. Buisson, of Paris, was inoculated by hydrophobia virus while attending a patient who was affected. He felt all the symptoms of the disease, constriction of the pharyngeal muscles, &c. He entered a Russian vapour bath, 107° Fah., resolving to terminate his life by suicide. To his astonishment the symptoms gradually vanished, and he in time completely recovered. Since then he has treated eighty cases successfully. His mode of treatment is this: The person bitten should take a certain number of baths, and every night should induce a violent perspiration by wrapping in flannels and lying under a feather bed, and by drinking freely of warm decoction of sarsaparilla. So convinced is he of this mode of treatment proving successful that he will suffer himself to be inoculated with the virus. Dancing is also recommended to produce sweating. Animals which do not perspire—as dogs, wolves, and foxes—are most frequently affected with hydrophobia. Dancing was an old remedy for the cure of tarantula stings.—(*The Lancet*.)

**PHOSPHORUS IN LEUCOCYTHÆMIA AND ALLIED DISEASES.**—(*British Medical Journal*, Dec. 2nd and 16th, 1876.)—The Clinical Society, of London, in its meetings of Nov. 24th and Dec. 8th, 1876, listened to several papers and an animated discussion upon the above subject. The facts, that in this disease the glandular system is irregularly involved, in some cases the glands generally being affected, while in others only the spleen is enlarged, the striking variations in different patients in the increase of the white corpuscles and the decrease of the red, the accumulation of the white in the spleen and the marrow of the bones, led Dr. Broadbent to consider that the essence of the disease lay in the altered relationships of the blood and the tissues or the blood and the glands.

Taking into consideration the rapid degeneration which takes place in all the tissues under the influence of phosphorus, he concluded that per-

haps the glandular enlargements might be diminished by the careful administration of this substance. Several cases had been reported by him, in one of which the improvement was so remarkable that the patient had fully regained her strength, while in the others the success was far less satisfactory.

Dr. Gowers related one case in which a favorable change took place for a time, but the patient eventually died.

Dr. Greenfield spoke of another in which the symptoms became worse under the phosphorus.

Dr. Goodheart communicated the details of one case in which the general health improved, but the glands remained unchanged. The patient was still living.

Sir William Jenner sent notes of three cases, in the first of which, after four months treatment, no benefit could be observed, in the second, the symptoms were aggravated, and in the third, after two months treatment, the patient died.

Dr. Moxon's experience was of the worst, as out of thirty cases he could not report one in which benefit appeared after the use of this remedy.

From these details it is apparent that the good expectations raised by the capital results of the phosphorus treatment in Dr. Broadbent's first case can now scarcely be held, although future results may be modified by employing the medication in some particular way as yet untried. Up to this time it has usually been given in capsules, in doses of gr. 1-30, thrice daily, as in the pill form it was perfectly useless, since the pills passed from the body unchanged.

Its action upon the kidneys must also be taken into consideration, for in many cases a marked fatty degeneration had already taken place at the time of death. The grand difficulty in the disease is our want of pathological knowledge of its nature and until such is obtained our chance for a rational and successful treatment is only problematical.—(*Detroit Medical Journal*.)

**CROTON-CHLORAL AND ITS USE.**—It is of greatest service in neuralgia of the fifth nerve, and in many cases appears to act as a specific.

2. Its effects and benefit are most favorable in the neuralgias of comparatively young patients, especially in the headaches of anæmic women or girls, in which class cure or relief was obtained in 86 per cent. of the treated cases. About the climacteric period success was obtained in only 50 per cent., while in later life the favorable results again rose to 60 per cent.

3. At the climacteric period bromide of potassium seems to be more reliable.

4. Headaches in patients with marked hysterical symptoms are rarely benefitted; the presence of hysteria always makes the success of the drug very doubtful.



5. In hospital out-patient practice he prescribes five grains thrice daily in half a drachm of glycerine and water, and if not sufficient to produce effects, four times daily. Elsewhere he gives the same dose every two, three or four hours, according to the urgency of the case.

6. There does not seem to be much danger in large doses of croton-chloral. Dr. Ringer has given it to a patient in five grain doses every hour for a fortnight, and Dr. Liebreich a sleeping draught containing a drachm and a half of the remedy.

7. Usually no unpleasant effects are observed after ordinary doses, though giddiness, headache, and vomiting have occurred in a few cases. If taken immediately after meals, emesis will usually cease.—(*Medical and Surgical Reporter.*)

A NEW MATERIAL FOR DILATATION OF THE CERVIX UTERI.—(*Med. Record*, July 14th, 1877.) Dr. Sussdorff, after an experience of two years in the use of tents made of the root of the Tupelo tree, heartily recommends them to the profession as being far superior to sea-tangle or sponge. The tree is a species of *Nyssa* indigenous to the United States, and of the five different kinds the *Nyssa Aquatica* is to be selected for making the best tents. It is a Southern species and grows in swamps and wet places of Georgia and Florida. The roots are the parts used, and though very heavy when first dug up, after being cut into smaller pieces and exposed to dry heat they become dry and light as cork. Messrs. Tiemann & Co. of New York, now prepare them compressed to a graduated scale. The advantages claimed for these tents are, that: 1. They are easily introduced, being smooth and firm. 2. They will not easily fall out of place as they are very light and soon absorb moisture sufficient to retain their place. 3. They are probably of an antiseptic nature themselves, as they do not decompose the fluids with which they are in contact; have none of the offensiveness always accompanying the sponge or sea-tangle, and being purely vegetable, are not likely to produce septic poisoning or local irritation. 4. The rapidity with which they will expand when in contact with the tissues and secretions of the uterus is perhaps one of their chief advantages. This rapidity can be controlled by selecting tents compressed to different degrees; thus one compressed to one-fourth of its original size, would not dilate so quickly as one reduced to one-tenth of the same.—(*Detroit Medical Journal.*)

HYDATID TUMOR OF THE KIDNEY SUCCESSFULLY TREATED BY ASPIRATION.—Bradbury. (*British Med. Journal*, 1877, Oct. 6.) A boy, aged 8, was admitted into the hospital on July 5th, 1876. His only complaint was of an enlarged abdomen. A large tense elastic swelling occupied

almost the whole of the left half of the abdomen, which was absolutely dull on percussion.

Superiorly the percussion-dullness extended to within one inch and a half of the nipple in the nipple-line, and tracing it to the right, it became separated from the liver-dullness (right lobe) by a band of well-marked resonance. It then passed down, about one inch and a half to two inches to the right of the mesial line and lost itself below in the dullness of the (full) bladder. On tracing it to the left, the dullness reached as high as the left rib in the axillary line, but at this level it did not quite extend to the spine. The whole of the left hypochondrium was filled with the tumor, and there was complete dullness down to Poupart's ligament. The percussion was tympanitic over the rest of the abdomen. At the upper part of the tumor the "repercussion thrill" could be obtained. The heart's apex beat immediately beneath the nipple, just under the fourth rib; heart and lung sounds, urine and liver were normal.

On July 6th, the needle of an aspirator was introduced into the tumor, and forty-four ounces of hydatid fluid were drawn off. No hooklets were found in it. After the operation the boy vomited several times, had slight fever, and an eruption of urticaria; but no tenderness of the abdomen. The urine was found to contain albumen, due to the presence of pus. July 15th, the abdomen was enlarging again. When the boy was made to sit up in bed he complained of pain in the loins, and four of the lumber spines were found to be prominent, and the skin over them reddened. They were very painful on pressure. The tumor was aspirated again, and thirty-one and a half ounces of a greenish opalescent fluid were withdrawn, which in the latter stage of the operation, was flaky and apparently purulent. After standing, the fluid deposited two ounces of pus. Under the microscope, pus-cells and the heads of numerous echinococci armed with hooklets were detected. The boy vomited again several times after the operation, but no urticaria followed the second puncture. On July 25th and 26th small cysts with hooklets were found in the urinary sediment. From this time the patient became gradually better. In November he was discharged from the hospital and under observation for some months. When last seen, he was quite well, the abdomen being perfectly normal and the urine free from pus and albumen.—(*Chicago Medical Journal.*)

OPEN AIR TREATMENT OF PHTHISIS.—Our object should be to find for our patients the climate so mild that their lives may be passed in open air.

In the Hawaiian Islands we have such a climate, which, in its average temperature and in equability, may be said to be perfect; where consumptives can literally live in the open air without fear of those

sudden changes so objectionable in nearly all the noted "retreats" for invalids.

These islands are situated between degrees 19 and 22 north latitude, in the region of the trade winds, which blow with great regularity about ten months of the year. Although lying within the tropics, where the heat might be expected to be oppressive and debilitating, the temperature is so modified by the constant fresh breezes coming over the wide expanse of the ocean, that it does not appear to be so great as the thermometer indicates.

Says the historian, Jarves: "The climate is everywhere salubrious, and possesses a remarkable evenness of temperature, so much so that the language has no word to express the general idea of weather. Physiologists give a certain point of temperature as most conducive to health and longevity. The mean heat of these islands approaches near to it, and is highly favorable to the full development and perfection of the animal economy." Again, when speaking of certain localities as favorable for consumptives, he says: "Many individuals by change of residence, have prolonged their lives for years, and others live with scarcely an admonition of their disease, who, in less favored regions of the North, were perpetual sufferers."

The most favorable situations for such patients are Honolulu, on the Island of Oahu, Lahaina and Ulepaekū on Maui, Kailua on Hawaii, and Ewa on Kauai, as these places have the best temperatures for constant out-door life, and afford comfortable residences for invalids.

The mean temperature on or near the coast of all the islands is 75°, with but little difference between summer and winter—it being 79° for the warmest months and 72° for the coldest, showing a difference in mean temperature of but 7°.

During an observation of twelve years at Honolulu, the maximum of heat was 90°, and the minimum 53°, a difference through that long period of but 37°.

At Lahaina, during an observation of ten years, the highest register of the thermometer was 86°, and the lowest 54°, a difference in one decade of only 32°.

But a range so great as that is very unusual. During my residence at Lahaina of four years, the maximum was 84°, and the minimum 61°, while the general average for the summer months was 82° at mid-day, and about 72° for the winter months.—*Dr. White, Kings Co. Med. Society Proceedings.*

NEW METHOD OF REDUCING DISLOCATIONS OF THE SHOULDER (*New York Medical Journal*, October, 1877).—Dr. Kuhn describes a new method of reducing dislocations of the shoulder. He calls attention to the fact that there is a loss

of force, due to the scapula following the traction made on the humerus, in the method ordinarily employed to reduce luxations of the shoulder-joint. He claims, on the contrary, that by making the humerus the fixed point, and reducing the scapula, there is no loss of power, and the resistance of those powerful muscles, the pectoralis major and latissimus dorsi, is obviated. With a passing reference to anaesthetics and to the prejudice which some practitioners entertain against their use, he proceeds to the *modus operandi*. A wedge-shaped cushion is placed in the axilla, the base of the wedge being downward; the surgeon, standing at the patient's side, lightly draws the arm downward, and at the same time firmly presses it firmly against the pad in the axilla, so as to make it into a lever of the first kind; then, taking the inferior angle of the scapula in the other hand, he raises that bone and gives it a seesaw motion. Coaptation soon follows, the two parts returning to their natural position by a simultaneous effort made on the lower extremity of the humerus and the inferior angle of the scapula. If the head of the humerus be displaced forward, the angle of the scapula should be directed outward at the same time that it is raised. It should be directed inward if the dislocation be backward. If any difficulty be experienced in making the reduction, the task of holding and directing the arm should be confined to an assistant.—*Med. Times.*

#### THE DOCTOR'S APPEAL AGAINST THE INCOME TAX.

The following lines were written by a country surgeon, in 1842, claiming exemption from the income tax. The author himself recited them when appealing. We believe that this is the first time the lines have been published.

I'm sorry to make so sad a confession  
Of the profits that emanate from my profession,  
But the fact is, that most of the villages round  
With surgeons, quack doctors, and druggists abound,  
So much so, that I am unable to clear  
The sum of one hundred and fifty a year.  
It would give me much pleasure could I return double,  
And save myself all this additional trouble.  
But opponents and bad debts beyond all redemption  
Compel me to fill out this claim of exemption.  
And what makes the matter so very much worse,  
I've a wife, and three children, and no private purse.  
So from these simple facts the collector must see  
He can gather no tax upon income from me.

—*Student's Journal and Hospital Gazette.*

COLONIAL MEDICAL DEGREES.—Some time since the General Medical Council passed a resolution recommending that medical men possessing certain colonial diplomas and degrees, should be placed upon the *Medical Register*. This, however, can only be done by an amendment of the Medical Act. Most of the Canadian Colleges which confer medical degrees, and those also

established at Barbadoes, Tasmania, New Zealand, and South Australia, will be favourably affected if the resolution be carried out.—*Hospital Gazette*, London.

**MALIGNANT ACUTE RHEUMATISM.**—D. Julius Pollock, Senior Physician to Charing Cross Hospital, London, says, in a recent lecture in the *Lancet*:—Every now and then, fortunately not often, rheumatic fever assumes a form for which I think the term "malignant" is most appropriate. In such cases, without any apparent reason, the temperature begins to rise, and may ultimately attain the height of 110° Fahr., or even more; the joint affection subsides, pain is no longer complained of, and the patient often expresses himself as better, just as the most serious symptoms are coming on. The profuse sweating ceases, the skin becomes dry, harsh, and intensely hot to the touch; very frequently a crop of sudamina breaks out upon the neck, chest, and abdomen (a very favorable sign); the tongue becomes dry and brown, there is great thirst, complete anorexia, the breathing is rapid, and the pulse very quick and generally weak; the patient is tremulous and restless, with a suffused and "ferrety" appearance look about the eyes. Low muttering delirium is generally present, though occasionally there is some excitement, and unless the disease takes a favorable turn, or relief can speedily be given, death ensues in a day or two, apparently from mere hyperpyrexia. Post-mortem examination gives us no clue to the cause of the excess of fever. In the cases I have examined there has been no pericarditis, though, I dare say, it is occasionally present. Certainly its existence is not essential to the hyperpyxia. The lungs are dark and congested, the liver and spleen friable and easily broken down, the blood is tarry and fluid, but the muscles are remarkable for their bright red color; the kidneys are unaffected. The odor of such cases, even when recently examined, is generally most offensive.

I am aware that this state of high temperature is not peculiar to rheumatic fever; that it occurs in continued fevers, in diseases of the brain and spinal cord, in pneumonia and other disorders; but it is in acute rheumatism that it has attracted most attention, and is most frequently encountered. It is not only the more severe attacks of the disease that drift into perpyrexia; comparatively mild and subacute cases, which appear to be doing well, will now and then take this remarkable course.

I use the term "malignant" for this condition, in the same sense that it is used for those terrible cases of small-pox, scarlet fever, or cholera, in which the chief force of the disease seems to fall upon the nervous system, overwhelming the patient before any distinctive symptoms are manifested, and because, from my own experience, and that of

others, I have come to the conclusion that, in the present state of our knowledge, the greater number of such cases die, in whatever way they may be treated. Indeed, I think it is doubtful, in those that do recover, how much the remedies had to do with the result; and Dr. Cavafy has recently recorded the case of high temperature in acute rheumatism that got well under the influence of food and stimulants only.—*Med. & Surg. Reporter*.

**LOCAL TREATMENT OF DYSENTERY.**—Dr. H. C. Wood, in the *Philadelphia Medical Times*, speaks of the "rational" treatment of dysentery as the application to the mucous membrane involved of a solution of nitrate of silver. From the value of this salt in sore throat he thinks it should be equally useful at the other end of the intestinal tube. Regarding dysentery simply as colitis, by means of a long tube carefully passed 8 to 12 grains into the rectum, he introduces about 3 pints of liquor containing 40 to 61 grains from a reservoir above. It can flow in gradually by gravity, and must be about the temperature of the body. If too hot or cold, peristalsis is too easily provoked. If not returned in ten minutes, a solution of salt could be injected. He has tried it in one case of dysentery, and in several of diarrhoea.—*The Doctor*.

**SULPHATE OF CINCHONIDIA AS AN ANTIPYRETIIC.**—Dr. H. L. Warren, of Illinois, writing to the *Chicago Medical Journal and Examiner*, says: "I have recently noticed two or three articles with reference to substituting sulphate of cinchonidia for sulphate of quinia, the writers claiming that the cheaper drug fulfilled every indication met by quinine. I know that many physicians are not aware of this fact, and wish to add my testimony to that already given. I find that in malarial fevers of whatever type, the cinchonidia salt has proved just as certainly a specific as the salt of quinia. Having had a large number of cases of this class treated almost entirely by the drug in question, I have learned to place just as much confidence in it as I have had in quinine, and with equal confidence predict a favourable result. It has not failed in a single instance to prevent the next paroxysm in a tertian, and the next but one, sometimes the next, in a quotidian ague, and is equally efficacious in remittent fever, being well borne by the stomach, and not producing any of the unpleasant head-symptoms which so certainly follow large doses of quinine. I administer it in five-grain doses, either in pill or powder, as the patient desires, every four hours, day and night, without any reference to paroxysm, intermission, remission, or exacerbation, until the patient has passed safely through the "chill day" in a tertian ague, and through two days without chills in quotidian; then continue in smaller doses, say two grains after each meal. Considering the fact that qui-

nine is sold at nearly four dollars per ounce and sulphate of cinchonidia at only eighty cents, every physician should be acquainted with the above facts. It will be seen that it only requires about a drachm (or ten cents' worth) of the drug to completely control the disease."

In the *Louisville Medical News* of November 24th, Dr. A. G. Hobbs, writing on the same subject says: In malarious districts, such as in Southern Indiana, cinchonidia is the country practitioner's greatest boon. The difference in its cost as compared with quinine—one-fourth—is no small item to him who has his two or three ounces to buy. During the last three months I have used cinchonidia almost exclusive of quinia in nearly three hundred cases of chills, intermittent, remittent, and bilious fevers, and out of the whole number have been compelled to resort to arsenic in but five cases of chills. My experience in these three hundred cases of malarious fever is as follows:

1. I think it fully equal to quinine as an antiperiodic. Have never used it as an antipyretic in typhoid fever, pneumonia, etc.; but if I ever find it necessary I shall not hesitate to risk it as such.

2. It produces no tinnitus aurium; at least, I have never been able to discover it in the size doses that I give it to stop malarious attacks.

3. The stomach undoubtedly tolerates it better than quinine.

4. I find it, so far as I can observe, fully equal to quinine as a tonic in combination with iron.

I administer it in doses same as quinine by bulk, which is about one-third greater by weight.—*New Remedies*.

**VALUE OF RESPECTABLE PROFESSIONAL STANDING.**—In a recent trial in New York city a medical gentleman, "who openly boasted that he did not care to become a member of any medical society, was severely handled by the attorney of the opposite side, who made it appear to the jury that the gentleman in question was not regular, and that his testimony should be taken with the allowance given to all suspicious witnesses. The result was what might have been anticipated. There is no argument, even in a court of law, against respectable connection and high standing in the profession; while a suspicion of the contrary is always a handle for an adversary; the moral of all of which is that it is safer to be respectable, even if it does incur the necessity of belonging to some recognized medical organization."

**SALICYLATES IN DIABETES.**—Dr. Muller Warnech, of Kiel (*Berlin. Klin. Wochens.*), has tried the salicylate of soda in two cases of diabetes mellitus, and finds:—1. That it removes the symptoms, though not always permanently. 2. The symptoms disappear the more rapidly the larger

the dose. 3. In moderate doses (9 or 10 grammes daily), its influence soon becomes exhausted, but larger daily doses (14 to 16 grammes), exert an increasing effect on the diabetes. 4. Salicylate of soda can be used without disturbance of the general health for a long time in diabetes. Any symptoms of poisoning at once disappear on stopping the medicine for a time. 5. Salicylate of soda has only a slight irritating effect, even if given for a long time, on the kidneys. Ebstein, of Gottingen, used it in diabetes in 1876, with great benefit.—*The Doctor*.

**NIGHT MEDICAL SERVICE.**—The night medical service, whose organization in Paris we noted some months since, is working well. It will be remembered that the police authorities guaranteed the moderate fees agreed upon. It is stated that during 1876 the defaulting payments have amounted to less than two hundred dollars.—*Med. Times*.

### Reports of Societies.

**MICHIGAN STATE BOARD OF HEALTH.**—The regular quarterly meeting of the Michigan State Board of Health was held in Lansing on the 9th of Oct. Dr. Kedzie, Committee on Poisons, etc., read an important report on "Labeling Medicine." He gave many instances of poisoning by taking the wrong medicine through mistake because it was not labeled. He urged that every medicine, and every injurious substance which may be mistaken for medicine, should be distinctly labeled, "Never administer as medicine any substance of the composition of which you are ignorant or in doubt." The paper was accepted with thanks, and a committee, of which Dr. Kedzie is chairman, was appointed to investigate another branch of the subject in reference to danger from the dispensing of drugs or medicines by unqualified or inexperienced persons. This committee is to confer with the Michigan pharmaceutical association, which has already given attention to the subject.

Dr. Baker presented tables, diagrams, etc., on the subject of the death rate as relative to age, climate, etc.

Leroy Parker, chairman of the committee on legislation, made a brief report relative to the subjects of boards of health in cities and villages, and mentioned that since the last meeting considerable progress had been made in securing health officers for such boards. The secretary stated that the progress in this direction had been great, and it was largely due to Mr. Parker's efforts.

Dr. H. F. Lyster read a continuation of his paper heretofore presented on the subject of "Healthy Homes." He considered the subject mainly with reference to their location and the measures to be taken to secure good drainage, and traced much of the ill health of people to dampness in and about their dwellings. He had issued a circular to the correspondents of the board, and with this paper he presented the substance of about 40 replies received, showing the nature of the soil, practice as to tile-draining, sources of drinking water, character of cellars, disposition of decomposing organic matter, etc., about the homes in the several localities. He recommended that wherever the soil is not dry there should be tile-drains around the house or under the cellar.

In the discussion which followed, Dr. Baker deemed it important that such drains should never communicate uninterruptedly with a sewer, which may contain sewer gas which will thus permeate the house; but the connection should be through an open-air space or otherwise freely ventilated, on the house side of the trap.

Dr. Kedzie said that if box drains be used they should be placed with one corner down, so as to be self-cleansing.

Dr. Kedzie read a paper on persistence in efforts to "Resuscitate the Drowned." He reported a large number of cases where persons had been resuscitated a long time after they had apparently ceased to live. He claimed that deaths are constantly occurring for lack of thorough efforts at resuscitation, and that whenever such efforts are made they should be continued at least two hours. He cited one instance where only after six hours of constant work did symptoms of life appear, and yet this person was completely restored.

The secretary read an outline of a report of the work of his office during the last quarter. It included the distribution of about five thousand copies of the document on "Restriction and Prevention of Scarlet Fever," and sixteen hundred copies of the Fourth Annual Report of the Board; the printing of six thousand copies of the document on the "Treatment of the Drowned." Much time had been given to the compilation of "Weekly Reports of Diseases," and a large amount of miscellaneous correspondence and other business transacted.

Hon. Leroy Parker read an abstract of papers

read before the public health section of the American social association at Saratoga, which he had attended in the interests of public health in Michigan.

Dr. Hitchcock presented a report and abstract of papers read at the recent meeting of the American public health association at Chicago.

At the last meeting ex-president Hitchcock presented an address by title, and at this meeting it was read. The subject was: "Heredity in its relations to the public health, and to legislation in the interests of public health."

A valuable paper on the diet of infants, by Dr. Arthur Hazlewood, of Grand Rapids, an ex-member of the Board, was accepted with thanks.

The secretary read communications from Dr. G. W. Topping of DeWitt, relative to reports of prevailing diseases; from Dr. O. Marshall of this city, on the subject of opium-eating; from Dr. Edward Dorsch of Monroe, on lead-poisoning from tin cooking utensils lined or glazed with lead; from Dr. C. W. Marvin of Ithaca, relative to the recent increase of deaths from cancer; from Dr. J. D. Hull of Allegan County, relative to drainage in his locality; from Dr. Batwell of Ypsilanti, relative to sickness from damming the Hudson river; from Dr. Charles H. Fisher of Rhode Island, giving formula for preparation and an account of the first use of sulpho-carbolate of soda as a preventive in scarlet fever.

Dr. Lyster presented a paper on baths and bathing. He gave a history and description of all kinds of baths and their effects on the human body. His paper was also accompanied by numerous replies on this subject from correspondents of the board to a circular which he had issued.

#### BRANT COUNTY MEDICAL ASSOCIATION.

The above Association convened at the Kerby House, Brantford, on Tuesday Dec. 4th. Members present were Drs. Philip, Burt, Griffin, Kitchen, Marquis, Harris, Sinclair and Healy. Steps were taken towards forming a Divisional Association, embracing "Erie and Niagara district." A paper was read by Dr. Griffin on Rectal Abscess, and one by Dr. Healy on Chorea. Dr. Philip showed a case from his practice, and Dr. Burt a pathological specimen. Drs. Marquis and Sinclair were each requested to give papers at the next regular meeting.

# THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

*Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.*

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TORONTO, JAN. 1, 1878.

## THE PAST YEAR.

Another year has come and gone, and another leaf has been added to the history of medicine in the nineteenth century. The retrospect is an interesting one, and although nothing very startling in the domain of medicine has to be recorded, yet the rapid and steady progress which is being made in all departments is very gratifying, and we may be pardoned if we refer with pride to the great advances which are being made in our noble profession. As time rolls on we find ourselves at each recurring year, a long way in advance of what we were at the close of the last. The departments of medicine, surgery, obstetrics, therapeutics and pharmacy have been almost completely revolutionized within a few years past, and yet much remains to be done. Preventive medicine too, has had a large share of attention, and has given birth to a literature specially its own. This branch of the science of medicine is every year enlarging its scope and extending its usefulness, and will force itself upon the notice of the Legislatures of every civilized country. Sooner or later will be established "State Boards of public Health" by every nation, and government and measures adopted for the promotion of health and the lessening of preventible diseases. These things are all in the near future, and the sooner a wise foresight on the part of our statesmen leads them to consider these matters aright, the more creditable will it be to their wisdom.

The world's Medical Congress met the past year at Geneva, and remained in session four days. It was announced that several well known physicians were to have taken part in the proceedings, but the reports of the meeting which have reached us, have been very meagre regarding the success of

the meeting. In the field of Medicine and Therapeutics much progress has been made during the year. Further and more extended experiments have been made regarding the action of salicylic acid in rheumatism, and as an antipyretic in fevers, and with gratifying results. The influence of this medicine in lowering the fever heat and diminishing the excited pulse, is as marked as its power to relieve pain. In cases of typhoid fever with high temperature, its use has been attended with very beneficial results in diminishing the excessive fever heat. It is generally combined for administration with soda, and glycerine or syrup of lemons. Only in a few cases have any unpleasant effects been observed from its use. A new preparation of this remedy has been lately manufactured by Messrs. Evans & Co., of Montreal, viz., granulated effervescent salicylic acid, and effervescent salicylate of soda. These preparations are very elegant in appearance, and palatable to the taste as compared with the crude drug, and will, no doubt, come into general use. A new and simple treatment for burns and scalds has lately been brought under the notice of the profession by Dr. Waters, of Boston. It consists in the immediate application of bicarbonate of soda to the scalded surface, which almost instantly relieves the pain and promotes the healing process. The soda is dusted over the burned parts, and a wet cloth applied and retained—a single application being generally all that is necessary. In the treatment of epilepsy, bromide of arsenic has been used with varying results. It was recommended by Dr. Clemens, of Frankfort, who has used it in his practice for several years with most gratifying results. In some cases in which it was tried by other observers it proved serviceable in checking the fits for a time at least, and greatly diminishing their frequency in others. It may be administered in the form of bromide of potassium and liquor arsenicalis, or prepared by adding one and a half drachms of pure bromine to eight ounces of Fowler's solution, and given in from two to four minim doses.

The treatment of diphtheria has come in for a more than ordinary share of attention during the past year. This interest was heightened by the fact that this disease has prevailed pretty extensively in different parts of Canada during the year. The use of sulpho-carbolate of soda has, in the hands of some, proved of great benefit in the treat-

ment of this disease, while others claim to have better success in the use of chlorine water. Others again trust to quinine and iron internally, and local applications of sulphate of iron and carbolic acid as a wash to the throat, or chlorate of potash and tincture of iron. Two cases of ascites successfully treated by injection of iodine, were reported by Dr. Ford, of Norwood. This plan of treatment is not wholly new to the profession, but is deserving of a passing notice. It has been used with success in some cases of ovarian cysts.

Hypodermic medication has also received increased attention during the past year, and among the agents used hypodermically chloroform may be mentioned. Some cases of inveterate sciatica which had resisted all the usual remedies were relieved by deep injections of from 20 to 40 drops of chloroform in the buttock near the sciatic nerve. In some instances a single injection sufficed to produce a cure. Its use was occasionally followed by temporary anæsthesia of the leg, but no other unpleasant effects were observed. It was tried in one or two cases in the Toronto General Hospital with partial benefit to the patient. Ergot or ergotine has been used extensively in uterine fibroids, hemoptysis, hematemeses, enlarged spleen, and in purpura hæmorrhagica, with most favourable results; also ammonia in collapse, and woorara in tetanus. A report of fifteen cases of tetanus treated by hypodermic injection of woorara is given in *Schmidt's Jahrbucher*; of these two cases of rheumatic tetanus and seven out of thirteen cases of traumatic tetanus recovered.

The use of galvanism has been largely extended. It has been applied to the treatment of ovarian cysts, hydrocele, tumors and nævi. In the *Weimer Med. Presse* three cases of ovarian cysts were reported cured by galvano-puncture after a treatment of from two to six weeks; no unpleasant consequences ensued and none of the cysts refilled. Dr. Cutter, of Cambridge, Mass., also reports three cases in which he employed it; but says its use is not unattended with danger, and great care must be exercised in regard to the needles, which should be insulated. Hydrocele has also been rapidly and permanently cured by the introduction of the needles into the sac, and Dr. Beard, of New York reports four cases of nævus successfully removed by electrolysis;

Among some of the advances in surgery may

be mentioned the suspension of the body and the application of the plaster-of-Paris jacket in curvature of the spine. This treatment was introduced by Professor Sayre of New York and has been tried in a large number of cases with satisfactory results. Dr. Sayre has been in England during the past summer, and has had abundant opportunity for demonstrating his method of treating diseases of the spine. He was everywhere cordially received, and large numbers attended his lectures and witnessed his demonstrations. His method of treatment received the endorsement of the surgical section of the British Medical Association. Esmarch's bandage still continues to be used in certain cases, though not so generally as formerly. It has lost favor in amputation, owing to frequent excessive capillary hemorrhage after its use. Its value has been further tested in the treatment of aneurism. A case of popliteal aneurism is reported in the LANCET as having been cured by the application of Esmarch's bandage for fifty minutes. The treatment of acute orchitis by puncturing the testicle, attracted considerable attention. In cases in which it has been tried, it afforded immediate relief to the pain and diminution of the hardness. It is done by means of a grooved needle which is thrust into the testicle, and a little serous fluid allowed to escape. The relief is instantaneous and permanent. Three cases of extirpation of the rectum for epithelioma are recorded during the year; one each by Drs. Briddon and Wood of New York, and one by Dr. Agnew of Philadelphia. One patient recovered and two died. The diseased part is removed by making an incision around the anus, dissecting away the diseased rectum and afterwards bringing the bowel down and stitching it to the integument. Another operation for the removal of the spleen has been performed by Billroth, but the patient died from hemorrhage in four hours afterwards. A successful case of removal of the kidney from a child two years of age, by Dr. Jessop of Leeds, has been reported in the LANCET. The child was doing well at last reports. A new treatment for the cure of piles has been successfully employed during the past year. It consists in puncturing them with the actual cautery after they have been drawn well down. They are then returned and morphia administered for four or five days, after which an injection or laxative is used. The scars heal rapidly, and the patients

are cured in a week or ten days. Another case of gastrostomy is also reported by Dr. Lannelongue, of Bordeaux, for stricture of the œsophagus. The patient lived 26 days and was fed by the stomach, but died of pulmonary trouble. The operation was performed after the manner of Verneuil, by stitching the stomach to the abdominal walls before the opening is made. Dr. Foulis, of Glasgow, reports the 11th case of removal of the larynx in the living subject. At last accounts the patient was doing well, and was about having a Gussenbauer's voice apparatus applied. Of the 10 cases operated on during the past few years, only one case—that of Bottini—was known to have been alive 6 months after the operation. Billroth has operated twice, Maas twice, Heine, Schmidt, Schenborn, Bottini, Langenbeck and Kosinski each once. The treatment of compound fractures by sealing them with compound tincture of benzoin, has been attended with marked success in Guy's Hospital. In fourteen cases so treated the results obtained were almost uniformly satisfactory. The open treatment of stump, and other wounds has been practiced both at home and abroad during the year. It is claimed that there is less liability to sloughing, pyæmia, and secondary hemorrhage, and that it secures perfect drainage. It is not likely however to come into general practice, but may be of advantage in certain cases. The operation of subcutaneous section of bone for the relief of certain deformities still meets with favor, and several operations have been performed during the year on both sides of the Atlantic. A new treatment for the cure of deafness has lately been introduced by Dr. Bonnafont. It consists in trephining the tympanum by means of a special trocar, the canula being left in for some weeks, until the opening in the tympanum is fully formed. Hearing was restored by this process.

The question of the use of antiseptics in surgery is still *sub judice*. The visit of Prof. Lister to America, in the summer of 1876, gave a fresh impetus to the use of this system, and for a time it was largely practised in the American hospitals and in private practice. Lister's method was used for the first time in a case of ovariectomy by Sims on the 23rd of Nov. 1876. The case did well, but it is a noteworthy fact that Lister himself does not believe his system applicable in ovariectomy. Its use occasions delay, and the evaporation of the

spray has a cooling effect on the exposed parts which is most undesirable. In the field of obstetrics several new and improved methods of treatment in uterine affections have been introduced. The injection of hot water at a temperature of from 90 to 105°F. in uterine hemorrhages, may be mentioned as a new departure in obstetric practice. One of the advantages of this method, besides its prompt action, is that it does not produce any of the unpleasant sensations and after effects which follow the use of cold. Prof. Schoeder, of Berlin, gives the use of hot water injections his unqualified endorsement in cases of uterine hemorrhage. The application of ether spray to the abdomen and genitals, has also been practiced in several cases of uterine hemorrhage with successful results. Dr. Griffiths mentions two cases. (Practitioner) in which it succeeded after all ordinary means had failed. A new material for dilating the os uteri has been introduced, which promises to displace the sponge and sea-tangle tents. It consists of the dried roots of the Tupelo tree, a species of *Nyssa*, indigenous to the United States. When dried, the roots shrink up and become light as cork; the fibre is fine grained, smooth, and absorbs water readily, the root swelling out to its original size. The removal of the uterus for disease, although a formidable operation, has now taken its proper place in obstetric surgery. Mr. Thornton (*Obstetrical Journal*) reports a successful case of removal of a fibroid uterus and ovaries. The patient was able to go out on the 27th day after the operation. In this case all the pedicles were tied with silk, and left free in the peritoneum. Dr. Noeggerath also removed the uterus for cancer of the fundus, but the patient died from shock 36 hours after the operation.

Among the most important new remedies which have been introduced during the past year may be mentioned, jaborandi, dialyzed iron, digestine, lacto-peptine, vaseline, &c. Jaborandi has been highly extolled as a diaphoretic, and has succeeded where other remedies entirely failed. The dose is one drachm of the leaves infused in three ounces of water, or 15 to 30 minims of the fluid extract. Dialyzed iron, formerly imported into this country, but now manufactured by Wyeth & Bro., Philadelphia, has special claims upon the attention of the profession. The points of superiority over the common preparations are that it is nearly tasteless,



does not interfere with digestion nor produce constipation. It is readily assimilated and has been successfully employed in all cases in which iron is indicated. It has also proved of great value as an antidote in cases of poisoning from arsenious acid. Lactopeptine is a most important preparation, lately introduced to the notice of the profession. It contains the active agents of digestion, and has been endorsed by the leading practitioners in the United States and Great Britain as a valuable remedy in those diseases of the stomach in which its use is indicated. Digestine is the active principle obtained from the gizzard of the fowl, and has been successfully used in the vomiting of pregnancy and as an aid to digestion. It is claimed to be much superior to pepsine, and invaluable in chronic vomiting not due to organic disease. Vaseline has lately acquired a special reputation as a dressing for burns and scalds. The unfortunate sufferers by the late accident in New York, had their burns dressed with this substance immediately on their admission to the Hospital.

Early in the year great dissatisfaction was felt at the action of the Imperial Board of Trade in excluding Canadian surgeons from serving on board the Allan steamers. After remonstrances from the Dominion Government, and the medical schools the obnoxious resolution was rescinded. The British Medical Council also took up the matter at its meeting and recommended that all holders of Colonial qualifications should be entitled to register in the United Kingdom, but in a separate alphabetically arranged section of the register. The several meetings of the professional body politic in different parts of the world during the year were more than usually well represented. The American Medical Association met in Chicago in the month of June and was largely attended. Dr. Bowditch the president delivered the annual address, in which he dwelt among other things, upon the proposed amalgamation with the Canadian Medical Association. It was however decided to continue the system of delegates as at present. Drs. Hingston, Grant and Buck, were present as delegates from Canada, and were cordially received. The chief points of discussion at the meeting were concerning extirpation of the uterus, plaster of paris bandages in fractures, shortening in fracture of the thigh, and plaster of paris jacket in curvature of the spine. Dr. Kimball detailed 13 cases of extirpation of the

uterus, 6 of which had been successful. Dr. Hamilton and others were opposed to plaster of paris in the treatment of fractures, and a resolution by Dr. Hingston was adopted, to the effect that shortening in fracture of the thigh was of frequent occurrence notwithstanding the judicious employment of the most approved means hitherto devised. Dr. Richardson of Louisiana was chosen president for the next year, and Buffalo was named as the next place of meeting, on the first Tuesday in June 1878. The meeting of the British Medical Association was also a very successful gathering. The annual address was delivered by Dr. Roberts on the "contagium vivum theory," in which he stated his belief, that bacteria were the active agents in decomposition, and that their source was from the air or water. Spencer Wells delivered the address in the surgical section, on "*Surgery past and present.*" Both the social and scientific aspects of the meeting were as usual, highly entertaining. The Canada Medical Association presided over by Dr. Hingston held its annual meeting in Montreal in September, and was, from a scientific point, the most successful ever held, nor was the social element in any degree lacking. Dr. Lyon Playfair, C. B. and Dr. Taylor of Edinburgh were present also Drs. Kimball and Brodie, as delegates from the American Medical Association. The proceedings and papers have been published in the Transactions, and may be obtained by application to Dr. Osler, Montreal. Dr. Workman was chosen president, and the next meeting was appointed to take place in Hamilton on the second Wednesday of September 1878.

Many of our medical brethren in this country and in Great Britain, ever ready to alleviate suffering humanity in whatever form, have undertaken the uninviting task of giving surgical assistance to the wounded in the Turko-Russian war. They have not been very cordially received by the inhuman Turks, and have actually been forbidden in several instances to perform operations necessary to save the lives of the unfortunate soldiers. The English aid societies have actually to compel them to receive help for the sick and wounded. The supply of surgeons is totally inadequate, and there is room for many more who may feel disposed to undertake the duties.

In England the Penge case has been the subject of much discussion among the medical profession.

The case was terminated by the Home Secretary granting a free pardon to one of the convicts and commuting the sentence of the others to imprisonment for life, a memorial having been signed by upwards of seven hundred medical men to the effect that in their opinion the post mortem appearances of the body of Harriet Staunton were not such as to justify the conclusion that death was caused by "starvation or any other form of murder." The failure of the medical evidence in this case, has led to a consideration of the propriety of appointing medical men noted for their experience in observing post-mortem appearances, to be present at all cases in which death has taken place under suspicious circumstances.

Among matters of purely local interest may be mentioned the procuring from the Local Legislature of an Act of Incorporation for Trinity Medical School; its subsequent affiliation with Toronto University, Trinity University, and the University of Halifax; the illegal exclusion of the representative of this School by the Medical Council, and his re-instatement by legal process. In regard to the exclusion of Dr. Geikie, it should be stated in justice to a large and respectable minority of the Council that they very much disapproved of the action of the majority.

The following books have been published during the year:—Ziemssen vols. vii. xi. xii. xv. and xvi; Burnett on the Ear; Durkee on Venereal Diseases; Skin Diseases by Duhring; Carpenter's Physiology; Dobell on Coughs, Consumption and Diet; Fothergill on Therapeutics; Reference Book by Dunglison; Loomis on Fevers; Biddle's Materia Medica, &c., &c.

Among those of our fraternity who have passed away, ripe in years and full of honors, we may mention Sir Wm. Ferguson and Somerville Scott Alison, of London; Cazenave of Paris; Drs. Gordon Buck, Martin Paine and Crosby, of New York; Paul F. Eve, of Nashville; Nathan R. Smith, of Baltimore; Sager, of Detroit, and many others. Among those of our brethren in Canada whose death it becomes our painful duty to chronicle are Drs. Hamilton, Dundas; Dewar, Port Hope; Landor, London; McColl, Wallace-town; Hostetter and Hornby, Toronto; Cline, Smith, Patton and Carpenter, Montreal; Padfield, Norwich; Moore, Amherst, N.S.; Johnston, Picton, N.S.; Lewin, Lancaster, N.B.; Forest, St.

Claire, Que; Beaubien and Germain, Ottawa; Henderson, Belleville; Betts, Kingston; Sparham, Kemptville; Aishton, Bath, &c., &c.

We conclude by wishing all our readers a happy new year, a long life of usefulness, and many happy returns of the season.

#### POSTMORTEMS IN CRIMINAL CASES.

When writing on the Penge case last month, we overlooked the fact that Dr. Howard of Montreal, at the meeting of the Canada Medical Association last September, made a motion similar in substance to the suggestion contained in the close of our remarks, viz: "That it is in the interest of justice that when post mortem examinations are to be made, experts familiar with such scientific work, should be employed by the Crown when procurable." As we before said, there are such men to be found in the larger towns attached to the medical schools, engaged in teaching this branch of professional education, who for that reason enjoy exceptional facilities for familiarity with pathological appearances, and it would be well that coroners should have the power of calling in their assistance in all cases where inquiry is to be made into the causes of a death occurring under suspicious circumstances.

It has been suggested that an improvement in the existing way of performing post mortems might be effected by following the German practice of issuing definite rules to the coroners indicating the mode in which the work is to be done, what parts are to be examined, and the order in which the report is to be drawn up. This would doubtless act well in ensuring thorough examination, as the requiring of a report on the condition of each organ would prevent the possibility of a morbid condition in any one being overlooked, and so far it would be useful.

It is also gratifying to know that greater attention is being paid to pathological teaching in the medical schools in Canada than was formerly the case. Care is now being taken in instructing the classes in the performance of autopsies, and in directing their attention to the appearances of diseased organs, and the teachers in all the schools on this branch, we believe, utilize to the utmost the material at their command. This does not,

however, meet the fact that the majority of medical men are not called on more than once or twice, in the course of a long practice, to perform post-mortems in cases that are afterwards to be the subjects of judicial enquiry, and private post-mortems are almost equally rare. The whole time of the medical practitioner is taken up with the requirements of his practice, and he has, too often, but little leisure or inclination to keep up his acquaintance with pathological appearances where the difficulties of doing so are as great as they commonly are. However well grounded on the subject he may be at the outset of his professional career, as other subjects of greater immediate importance fill his mind, his ideas on this become more hazy and uncertain as time advances.

We hope that this subject will not be allowed to drop, but that, as the Penge case is almost certain to result in legislative action regarding the conduct of post-mortems in criminal cases in England, so we in Canada may take warning by it to remove as far as possible the element of doubt as to the cause of death in such cases, by appropriate legal enactment on our part, and we have already indicated the course we think such action should take.

#### SULPHATE OF CINCHONIDIA.

In view of the fact of the continued high price of quinine and the intrinsic value of sulphate of cinchonidia in itself, and as a substitute for quinine, we desire to call the attention of the profession in Canada to its valuable properties. Sulphate of cinchonidia is not a new remedy, but is one whose value is not as well known and recognized as its merits would entitle it to be. In fact it is only within the past few months that it has been more than casually brought under the notice of the profession. It has now had a fair and impartial trial, and the verdict has been almost unanimous in its favour. It is not too much to claim that it possesses tonic, febrifuge and anti-periodic properties, almost equal to quinine. It has been used with complete success to cut short intermittent fevers, to dispel the malarial complications that sometimes complicate pneumonia, and to lower the temperature in acute rheumatism.

As a tonic it ranks equal with quinine, and as an anti-periodic in intermittent and remittent fevers it arrests the paroxysms with rapidity and certainty, and without producing any of those unpleasant effects on the sensorium which are the result of large doses, or the long continued use of quinine. The price of sulphate of cinchonidia, which is about one-third that of quinine, is of itself an item worthy of the serious consideration of the profession, especially when added to the fact that it is almost, if not entirely, equal in value as a remedial agent. This is a matter of considerable moment, especially to country practitioners, who have to supply their own medicines at great expense annually, not only to the wealthy but to the indigent from whom they never expect to receive a single farthing for their services or medicines. We would never advise the use of cheaper medicines from mere mercenary motives. No one could conscientiously do so, but when we find them equal in therapeutic value, and less expensive, we feel it our duty to recommend them. It has been asserted by some who have never given it a fair test, that it takes three times as much cinchonidia to produce the same effects as a given quantity of quinine. This is not true, as may be found by experiment. The majority of observers agree in the statement that the quantity used is slightly in excess of the quantity of quinine which would be required in any given case, and that neither the headache, ringing in the ears, sensation of fullness in the head, nor the suffusion of the eyes, is so great as when quinine is used. In a number of cases of intermittent fever, treated side by side with quinine and cinchonidia in the Louisville Hospital, the latter gave the most satisfactory results.

Sulphate of cinchonidia is a most beautiful preparation. We have a sample before us manufactured by Powers & Weightman of Philadelphia, which it would be difficult to distinguish from quinine. Some time ago the Madras Government appointed a commission to test the respective efficacy of the different alkaloids of cinchona in the treatment of malarial fevers. From this report it appeared that there were fewer failures from the use of cinchonine and cinchonidine than any other of the alkaloids, and the Government has officially advised the more free use in India of these alkaloids, and especially sulphate

of cinchonidia, which is procurable in abundance from red bark. Several practitioners both in this city and the surrounding country are now using the sulphate of cinchonidia instead of quinine, and all bear testimony to its reliability and efficacy in the treatment of all cases in which quinine was formerly used.

#### THE ONTARIO MEDICAL COUNCIL.

In another column will be seen a notice to the effect that the legal counsel, to whom the case was referred, have decided that Dr. Geikie is entitled to his seat as the legally elected representative of Trinity Medical School. The unwarranted and high-handed proceeding of the Council at its late meeting, which resulted in the illegal exclusion of Dr. Geikie, is probably without a parallel in the history of any similarly constituted body. It also shows more forcibly than anything else the corrupt state into which a corporate body may fall by reason of a prolonged term of office. The Council as at present constituted, is almost entirely in the hands of the schoolmen, the territorial representatives being completely overpowered. The schoolmen, with the aid of the homœopaths and eclectics can, and do, carry everything their own way.

We all know how persistently the Council set the well understood wishes of the profession at defiance in the matter of the constitution of the examining board, and in other matters. This would never have occurred and continued so long had it not been for the long term of office enjoyed under the five year clause—and the powerlessness of the territorial representatives, although several of the latter, notably Drs. Allison and Hyde fought valiantly in the interests of the profession. The only remedy is an increase of the territorial representatives, so as to give each division two members instead of one. The only possible objection to increased representation, is the increased expense which it would entail. This is, however, not so great an objection as would appear at first sight. The five eclectics, now representatives at large, cease after 1879, so that there would, in reality, be added only seven more than at present. There are about 1,500 medical men in the Province of Ontario, and these are represented in the Council by only 12 members, while the colleges and teach-

ing bodies have eight, the homœopaths five, and the eclectics five. As the latter have merged in the general profession, we propose to give this representation to the general body—and by giving two members to each territorial division, we proportionately increase the representation, and will thereby bring the outside profession more in harmony with the Council. We have no doubt that certain members of the Council will oppose any reform in the direction indicated, as of course it would interfere with their little game—monopoly, but that is only the greater reason why the profession should take the matter into its own hands.

**HYDROBROMIC ACID.**—This new and popular remedy is now coming into extensive use as a substitute for bromide of potassium, combining all the qualities of that salt without any of its unpleasant effects. It is produced by the decomposition of bromide of potassium and tartaric acid. When given in combination with quinine (which readily dissolves in it) the tendency of the quinine to produce headache is entirely prevented. This is a valuable piece of information to practitioners having patients to whom the administration of quinine was impracticable for that reason, and this alone should recommend its use instead of the mineral acids as a solvent of quinine. Dr. Fothergill who appears to have devoted much time to its study, recommends its use in combination with quinine and digitalis in forms of excited action of the heart, connected with general nervous excitability or nervous exhaustion. He claims better results from the use of the acid than from bromide of potassium. It has been used with success in whooping cough and also in combination with other remedies in cough mixtures to allay troublesome coughs. In many other affections such as gastrodynia in combination with quinine it is useful, also to check the vomiting of pregnancy, and in hemorrhagia associated with excessive sexual excitement. The dose of the acid (as usually diluted) is from thirty to sixty minims, which we quote from the label of a specimen bottle sent us by Messrs. Kenneth Campbell & Co., of Montreal. The profession will not be slow to avail itself of the services of so valuable a drug.

**CHRYSOPHANIC ACID IN PSORIASIS.**—Dr. Whipman of St. George's Hospital, London, Eng., (*Med.*

*Times & Gazette*), has been using chrysophanic acid recently with great success in the treatment of psoriasis. It is used in the proportion of half a drachm to the ounce of lard and applied as an ointment. This substance has succeeded after failure of various other remedies.

TRINITY MEDICAL SCHOOL REPRESENTATIVE IN THE MEDICAL COUNCIL.—After considerable delay and much vexatious opposition, the legal counsel on both sides have agreed that Dr. Geikie is the legal representative of Trinity Medical School and is entitled to his seat, and that the costs which have been incurred by reason of his illegal exclusion, shall be paid by the Medical Council. This is what comes of the attempt, on the part of a few interested individuals in the Council, to exclude the legally elected representative of the largest medical school in Ontario. An action for damages will now be in order.

DEATH FROM ETHER INHALATION.—Several cases of death from the inhalation of ether have occurred lately. Two cases are reported in the *Brit. Med. Journal* of recent dates. In one of these cases nitrous oxide gas was given with the ether, and in the other chloroform was first given and afterwards ether—to the extent of two ounces. Another case is reported in the *Med. Times & Gazette*, in which after ether had been given to complete anæsthesia and the operation about to be commenced, the patient became faint, and the breathing was suddenly arrested. All attempts at resuscitation were unsuccessful. A case is also reported in the *Va. Med. Monthly* somewhat similar to the foregoing, except that resuscitation from the primary effects of the ether took place and the operation was completed, but in a few minutes the patient vomited and immediately sank.

THE WARREN TRIENNIAL PRIZE.—The Warren prize committee, consisting of the visiting physicians and surgeons of the Massachusetts General Hospital, have awarded the prize of the present year, to E. O. Shakspeare, M.D., of Philadelphia, for an essay On the Healing of Arteries after Ligation. The committee also announce that the subject for 1880 will be Original Observations in Physiology, Surgery, and Pathological Anatomy. The object of the prize is to stimulate original researches. This is the second prize which has

been given. Essays were sent in from distant parts of the country, and even from across the Atlantic. The next prize, amounting to \$400, will be given for the best essay received on or before the 1st of February, 1880. Essays should be forwarded to the resident physician, Massachusetts General Hospital, Boston, on or before that date.

OVARIAN CYST COMPLICATED WITH PREGNANCY.—Dr. Erskine Mason reports (New York Pathological Society) a case of ovarian cyst and pregnancy combined, the latter condition not being diagnosed until the trocar was plunged into the uterus during the operation of ovariomy. The wound in the uterus was immediately closed up by silver wire sutures. A large cyst was found in the left ovary, but was not removed. The wound in the abdomen was closed. The patient passed a restless night, and the following morning gave birth to two fetuses of 5 or 6 months, after which she sank rapidly and died 18½ hours after the operation.

LARGE DOSES OF IPECAC. IN DYSENTERY.—Dr. Sprague of Stirling, Ont., writes in reference to an article on ipecac. in dysentery, in the September number of the LANCET. In 1873, during an epidemic of dysentery in Iowa, he treated over 15 or 20 cases with large doses of ipecac—giving generally to adults half a drachm, but before administering it he always gave 20 drops of laudanum and applied a mustard blister over the epigastrium. In many cases he noticed slight nausea, but no emesis;—he has tried the remedy mentioned in many cases since and has seen it prove equally successful when tried by other physicians. He says he has every reason to consider it a specific. It originated not with him to verify its efficacy, as Flint in his work alludes to it, and the U.S. Dispensatory highly endorses it, but unless it is used as above described it will disappoint many.

COMMUTATION RATES.—For the present year we will supply the CANADA LANCET with any of the following periodicals for the amount set after each respectively:—With Braithwaite's Retrospect, \$5; New York Medical Journal, \$6.00; Philadelphia Medical Times, \$6.00; London Lancet Reprint, \$6.50; Dominion Monthly, \$4.00; Scribner's Monthly, \$5.00; St. Nicholas, \$4.50; Appleton's

Journal, \$5.25; Popular Science Monthly, \$6.75; Harper's Monthly, Weekly, or Bazaar, \$6.25; Canadian Illustrated News, \$6.00. Estimates for any other journals will be given if required. The amount of subscription *in advance*, must in all cases accompany the order.

**SALICYLIC ACID IN ACUTE RHEUMATISM** (*The Lancet*, October 13, 1877).—Dr. Whipham reports at length an extremely interesting case of acute rheumatism complicated by pericarditis and broncho-pneumonia, which was relieved at once, when the patient was apparently dying, by salicylate of sodium, after failure of a fair trial of the alkaline treatment. The remedy was given in twenty-grain doses every two or three hours.—*Med. Times*

**DEATH FROM CHLOROFORM.**—Another death from chloroform took place at Ancaster, Ont., a few weeks ago. The patient, an elderly lady, was about to undergo an operation for the removal of a tumor in the axilla. Only a small quantity of chloroform had been given when she suddenly died. Fatty degeneration of the heart was discovered at the *post mortem*. The medical men were fully exonerated from any reflection.

**NITRIC ACID IN HOARSENESS.**—A few drops of this acid in a little syrup of tolu and water is an excellent remedy for the sore throat and huskiness of voice in public speakers and singers. A late physician of eminence was in the habit of prescribing the nitrate of ammonia in five grain doses in cough mixtures with surprising success.

**ELEVATED POSITIONS AS HEALTH RESORTS.**—The highest inhabited place on the globe is the Post House of Ancomarco in Peru, at nearly 16,000 feet above the level of the sea. This and other high levels, according to the authority of Herman Webster, are particularly favourable to persons suffering from consumption, as Colorado and the mountains of Switzerland, where altitudes of from 7 to 14,000 feet can be attained; but the south slopes of a mountain or other elevated positions should be chosen.

**ANNUAL ACCESSION TO THE PROFESSION.**—The medical schools of the United States of America turn out about 3000 graduates every year. Add to this the annual produce of the European and Canadian schools, and we have an army of no mean proportion annually added to an already overcrowded profession.

**APPOINTMENTS.**—John Gillies, M.D., of Teeswater, to be an Associate Coroner for the Co. Bruce.

W. A. Comfort, M.D., of Campden, to be an Associate Coroner for the Co. Lincoln.

J. W. Alway, M.D., of Grimsby, to be an Associate Coroner for the Co. Lincoln.

### Books and Pamphlets.

**A GUIDE TO THE EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND**, by J. Gant, F.R.C.S. Third Edition. London: Bailliere, Tindall & Cox, King William Street.

This comprehensive little work contains information which will be found invaluable to those who purpose presenting themselves for examination at the Royal College of Surgeons. The work is well known and highly prized in England by the students, many of whom have to thank Mr. Gant for the success they attained at their examination.

**LECTURES ON FEVERS**, by Alfred L. Loomis, A.M., M.D., Professor of Pathology, &c., in the University of New York, pp. 362. Wm. Wood & Co. Toronto: Hart & Rawlinson.

The lectures which comprise this volume, thirty in number, were delivered to the class in 1876-7, and phonographically reported by Dr. W. M. Carpenter. The author has adopted an etiological basis in the classification of fevers, and has "endeavoured to include in a few general classes all the numerous types described by different writers." The work may be said to contain a summary of the literature of fevers in this country, and such foreign literature as is of interest to the profession. All the fevers incident to this climate are treated of, also the exanthematous fevers—small-pox, scarlatina and measles. The work is thoroughly practical in its character, and will be a welcome addition to the practitioner's library.

**COMPENDIUM OF HISTOLOGY**, by Prof. Heinrich Frey, and translated from the German by G. R. Cutter, M.D., New York. Illustrated with 208 engravings on wood. New York: G. P. Putnam's, Sons. Toronto: Willing and Williamson.

The science of histology has made rapid strides within the past decade and has become an integral part of medical studies, but the text-books on this subject are so voluminous that we feel assured

this compend will be gladly welcomed by students and practicing physicians. It consists of 24 lectures in which are embodied all the recent advances in this department. The translator has done his work well, and the typography and finish of the book leave nothing to be desired. With the exception of the introductory papers, which contain a few rhetorical flourishes, the author has confined himself closely to the subject in hand.

**MATERIA MEDICA FOR THE USE OF STUDENTS**, by Prof. J. B. Biddle, M.D., Jefferson Medical College. Eighth edition, revised and enlarged. Illustrated. Philadelphia: Lindsay & Blakiston; Toronto: Willing and Williamson.

The fact of this popular little compendium having gone through seven editions within a few years, speaks more flatteringly than any words we can offer. The new edition has been carefully revised, and in some parts re-written, and contains all the important new additions to materia medica and pharmacology. The author has succeeded in presenting a succinct account of all the remedies in use in this country, and the work will be found of especial value to medical students, to whom it is dedicated.

**A PRACTICAL TREATISE ON THE ANATOMY, PHYSIOLOGY AND DISEASES OF THE EAR**, for the use of medical students and practitioners, by Chas. H. Burnett, A.M., M.D., Ear Infirmary. Philadelphia: H. C. Lea. Toronto: Willing & Williamson.

The author first describes the method of examination of the ear, and the instruments used, the diseases of the canal, tympanum, middle and internal ear, and the appropriate treatment in each case.

Part I is devoted to the anatomy of the ear; Part II to the diseases and treatment.

The work contains about 600 pages, and is got up in the very best style of Lea's publications. It is well illustrated with wood-cut engravings, and is quite an accession to practical medical literature. It will be found of interest to the specialist as well as the student and practitioner.

**OUTLINES OF MODERN ORGANIC CHEMISTRY**; by Prof. C. G. Wheeler, M.D., University of Chicago. Price \$1.75. Toronto: Willing & Williamson.

This work has been prepared with special reference to the requirements of medical students. It will be found to meet the requirements of

teacher and student, and to be wholly modern in its methods and theory, as well as wholly up to the present in its scientific data. It has a copious index, in connection with which the molecular weights and formulæ of the various compounds are given. The typographical execution of the work is excellent.

The following popular magazines have also been received:—Scribner's Monthly for January, 1878, also St. Nicholas Monthly for children. The former is clubbed with the LANCET for \$5.00, and the latter for \$4.50 per annum. Appleton's Journal and Popular Science Monthly for January, 1878. The former will be supplied with the LANCET for \$5.25, and the latter for \$6.75 per annum.

**HYGIENE IN AMERICA**—being the Centennial Address delivered before the International Medical Congress in 1876—by H. J. Bowditch, M.D. Boston: Little, Brown & Co.

**TRANSACTIONS OF THE INTERNATIONAL MEDICAL CONGRESS, PHILADELPHIA, 1876**. Edited for the congress by John Ashurst, Jr., A. M. M. D.

**THE SPAS OF AIX-LES-BAINS AND MARLIOZ, SAVOY**: Their physiological action, modes of application, clinical effects, &c., by F. Bertier, M.D. Paris. London: J. & A. Churchill.

### Births, Marriages, Deaths.

On the 18th Dec., R. A. Alexander, M.D., of Grimsby, to Sarah Harriet, elder daughter of Alfred Booker, Esq., Montreal.

At Albion, on the 19th Dec., H. A. Donnar, M.D., of Chesley, to Miss Maggie, daughter of Alexander Munsie, Esq., of Albion.

At St. Claire, Que., Dr. Wm. Forrest, on the 10th of Nov., in the 74th year of his age.

At Montreal, on the 13th Dec., Dr. W. P. Smith, in the 67th year of his age.

At Bath, Ont., on the 4th of December, 1877, Dr. Aishton, in the 77th year of his age.

\* The charge for notice of Births, Marriages and Deaths is fifty cents, which should be forwarded in postage stamps with the communication.