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# MONTREAL MEDICAL JOURNAL.

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# Original Communications.

#### THE COLD BATH IN TYPHOID FEVER.\*

BY GEORGE WILKINS, M.D., Physician to the Montreal General Hospital.

I wish to bring before the notice of this Association a method of treatment of typhoid which, so far as I am aware, is but little adopted in this Dominion, and from which I have experienced most gratifying results, during the past fifteen months, in those cases in which I have made use of it,—I refer to the cold bath treatment as advocated and adopted in England by Currie over one hundred years ago, and more recently by several German physicians in their Fatherland, as well as by many English-speaking physicians in various parts of the world.

That this method has been so recommended, I am well aware, is not news to any of you; but as I think it more than probable that you may have shared with me in the opinion that it was a heroic method of treatment, more suitable for the Teutonic race in their native country than for those peoples dwelling on this side of the Atlantic, I thought it might be of interest to relate my experience in its use during the period of time referred to, in private as well as in hospital practice.

I should state that my attention was more particularly directed to it by the enthusiastic manner in which Dr. J. C. Wilson of Philadelphia spoke of it to me, and by the recorded history of the cases I saw there a year ago last May.

<sup>\*</sup> Read at the meeting of the Canadian Medical Association, September, 1891.

Liebermeister and Brandt both recommend a procedure which differs slightly the one from the other. The former employs the cold bath principally during the night, writing out directions for the nurse as follows:

A bath is to be employed if the temperature is

104° or above between 7 and 11 P.M.

103° " " 12 and 3 A.M.

102° " 4 and 7 "

He rarely gives them in the day-time funless the temperature rises as high as 105°. During the night-time he has the temperature taken every two hours, sometimes even more frequently. Antipyretics he administers only in those cases in which the cold bath fails to reduce the temperature, or in which baths are contra-indicated—to which point I will refer later on.

Brand takes the temperature, without regard to time of day, as an indication for the cold bath. He advises it to be taken every three hours, and the bath at a temperature of 68° to be used every time the rectal temperature 102°.2.

During the first six months of my treatment Liebermeister's method was adopted by me, but since then I have adhered to Brand's instructions, with the difference that the temperature was taken in the mouth instead of the rectum, and the outside limit of the bath used by me is ten minutes, which I have found sufficiently long in all the cases. Of the two methods, I find the latter the more efficacious. I may say I do not use the bath In those in which I make use of it I proceed pretty in all cases. much as follows: Ordinary bathing trunks are placed on the patient, the bath placed by the bedside; the patient is either lifted into it or occasionally steps in himself; a nurse pours water on the head or cold compresses are placed on it; the patient is kept in the bath for a period of time varying from five to ten minutes; a dry blanket and sheet are placed on the bed, and in this the patient is rolled up and left for half an hour. At the end of this time he is uncovered and wiped dry, and his night-clothes placed on him and left until such time as the bath may be required again, according to the temperature. The almost universal rule is that the patient falls asleep as soon as removed

from the bath; in one case—a female—she fell asleep in the The temperature is always taken half an hour after the bath, and it very rarely occurs that it is not over two degrees below what it was previous to the bath. This procedure is repeated as often as the temperature rises above 102.2°. In one of my patients, a child of seven years, during the space of ten days, received thirty-five baths, seven of these having been given him during a period of twenty-four hours. When the temperature fell below the standard requiring the use of the baths, the nurse remarked to me that the child was more restless than during the bath treatment. This year, so far, convalescence has been very rapid, much more so than those in which the expectant method was pursued, or those in which the temperature had not risen high enough to necessitate this treatment before some contra-indication. One of these apparently mild cases was the most serious under my observation this year; a girl, aged 19, with a temperature in the early portion of her illness not above 102°, who had several severe hemorrhages and also paralysis of posterior fauces, as well as a remarkable paretic condition of both lower limbs and complete loss of deep reflexes. After the hemorrhage made its appearance, the temperature rose high enough for the baths to be of benefit in an uncomplicated case, but as hemorrhage was one of the contra-indications for the bath, this treatment was not adopted in her case.

The question naturally arises, How is the tendency to hemorrhage affected by the cold bath? I have not had a sufficient number of cases of my own to form a reliable estimate, but from the large number of cases reported to have been treated in this way by several German physicians, notably Liebermeister, Jurgensen, Brand, and also from the very instructive paper published by Dr. Hare, of Brisbane Hospital, in the March number of the *Practitioner*, there can be no doubt that unfavourable results are much less frequent, although, as far as the actual occurrence of hemorrhage was concerned, the percentage in Dr. Hare's 1173 cases was but slightly lessened, whilst the total mortality was reduced 50 per cent. The experience of the German physicians was somewhat different to this in the occur-

rence of the hemorrhage, having been actually lessened very materially. Theoretically we should expect it to be so. fever, part of the food intended for the nutrition of the tissues is diverted from its destination; the tissue elements themselves are more rapidly broken down with the resulting wasting of the body. The process of repair is always impeded where there is fever, and not only that, bat molecular death (ulceration) if occurring in an individual whose temperature rises above normal, is accelerated. We see this in simple ulcer of the leg. Should a patient suffering from such an ulcer be subjected to a high temperature, the process of repair will be retarded, if not quite arrested. The probabilities are that molecular necrosis-i.e., tho ulceration-will make more rapid strides until the temperature is again brought down to normal. The same state of affairs is also likely to occur in the ulcerated patches in the bowels, and more rapidly and consequently deeper, the higher the temperature. Lower the temperature and we restore for the time being the vis medicatrix naturæ, which in typhoid is all important in so far as the ulcerative condition of the bowels is concerned.

Speaking generally, a high temperature lasting only a short time is not likely to do much damage, even repeated high temperature, provided there is an interval oi the normal state, during which time the injured organs will probably have time to be restored to their normal condition. This we see frequently in intermittent fever. The more nearly we succeed in making typhoid resemble such a fever in its course, the greater the chances of success in treatment.

Not only does high temperature favour the necrotic condition to which I have just referred, but it causes degeneration of the parenchyma of the organs, such as liver, kidney, and other glandular organs, as well as the heart and voluntary muscles. Nor does the brain and other parts of the nervous system escape the deleterious effect of the continued high temperature. Hence the importance not simply of reducing the temperature, but of doing so rapidly. It is quite true that in quinine, salicin, antipyrin, antifebrin, phenacetin, as well as other new drugs, we

have powerful and useful remedies. None of them, however, act so rapidly as the cold bath, nor do they possess its soothing effect. The typhoid patient with a temperature of 104°, restless and sleepless, within ten minutes after the bath, if not asleep, will rest quietly. In the majority of cases he sleeps from half an hour to an hour after each bath. In nearly every case the temperature is lowered over two degrees.

No other antipyretic treatment has such a marked beneficial effect on the pulse. Even when the temperature rises temporarily to a high degree during the interval of the baths, there is an absence of that impairment of function of the heart which is so frequently manifested by the rapid and weak pulse. Quinine, when administered in doses of three to five grains, is a most useful cardiac tonic, but must be administered in very much larger doses to reduces the temperature equally with the cold bath. Several hours are required before its effect is perceived, and then it gives rise to other objectionable symptoms; in fact, in its antipyretic dose it possesses only one of the beneficial results of the cold bath.

Besides lowering the temperature and soothing the nervous system, it has been shown that lung complications, which are so frequent in any other treatment than that by the cold water baths, are reduced to less than one fourth in frequency.

It is a popular belief, shared, I fear to some extent by a few physicians, that the cold bath will tend to produce mischief in the respiratory apparatus—i.e., the patient will "take cold." Quite the reverse is proved to be the case. Liebermeister draws particular attention to his experience in this respect. With him, in the cold bath treatment, the percentage of cases presenting respiratory complications was much less than in any other method of treatment, and also the mortality amongst these lung troubles had a much lower percentage of mortality. Dr. Hare's experience was still more favourable than in the results given by Liebermeister. Fatal cases occurring with him, as mentioned by me a few moments ago, in only one-fourth the number of those treated by him in his so-called expectant method, which included cold sponging and the occasional administration of anti-

pyretics. These different results may be accounted for by the slightly different mothods of treatment. Hare followed strictly the rules laid down by Brand, whereas Liebermeister adhered to the method mentioned in the early part of this paper. Last summer the last method of treatment was the one followed by me in my wards in the General Hospital, but this year I have adhered strictly to Brand's instruction, with much better success generally. Out of fourteen cases of bath treatment this year, so far, none presented any lung complications; whereas in four cases in which it was not adhered to, two had bronchial affections.

To estimate the value of the bath treatment, we must consider the causes of these respiratory troubles in the typhoid. This is not far to seek in the weak heart, which may produce varied conditions. Collapse of the air-vesicles is one of these results. It may arise in the left side of the heart, the blood dragging lazily along the bronchial vessels gives rise to a catarrhal condition of the bronchioles, as a result of which they become choked up. A blunted sensibility of the nervous system, with, later on, weak respiratory muscles, prevents mucus being expectorated, with a resulting collapse of that portion of the lung. Or the right side of the heart may be the faulty one, with a resulting congested state of the branches of the pulmonary vessels in the alveoli of the lungs, developing probably a fatal pneumonia. Usually both sides of the heart are involved in the respiratory troubles, producing a more or less complete broncho-pneumonia.

Now in cases of this kind, the cold bath, instead of being injurious, is especially suitable. The contact with the cold water invariably produces deep inspirations, thus avoiding the tendency to collapse of the lung. Coughing is induced, the mucous plugs are expectorated, and the over-strained heart is relieved; and what is more, the heart itself is directly stimulated.

The object of this paper is not to go into the treatment of typhoid fever further than to add my testimony in favour of the cold water bath.

So far my practice has been to keep the patient under observation twenty-four hours, so that there can be no possibility of

doubt as to the nature of the case, and to see also that no contra-indications are present—the latter, of course, can be made out at once; and also to see that the case is a suitable one for this treatment. During this time the temperature is taken every three or four hours. Sometimes it is a source of trouble to overcome the objection of the patient to cold water. occurred twice this summer. One man during the space of three days had seventeen baths. On one of these days eight baths: that day his temperature kept in the vicinity of 104°, but was brought down to between 100° and 101° by each bath. He slept from half an hour to two and a half hours after fourteen out of seventeen of the baths. The last two or three baths he took most unwillingly, and at the last bath he growled and complained so bitterly that I ordered them to be stopped and sponging to be substituted. Even this he objected to. He was much more restless after the baths were discontinued, but continued slowly to improve, his temperature reaching normal for the first time on the morning of the nineteenth day after discontinuance of the baths.

Another patient who was delirious resisted the first bath so violently that it was not attempted again. He, however, made a fair recovery.

I have just now, Sept. 13, in private practice, a child of nine years old who is getting cold baths regularly, although on the day I am writing these notes (Sept. 13) I have had it discontinued temporarily because he has cold extremities and complained of being chilly in his last bath, although just before it his temperature had reached 106°.

I mention this case because it is the fourth case in the same family, and because one of these cases, I quite believe, was aborted by the bath treatment, if you can speak of such a thing in connection with typhoid. The first case in this family dragged along slowly by the expectant method, during which time I happened to mention my hospital treatment to the child's father. During my absence from town the second case developed, a child of seven years, when its father took upon himself the responsibility of putting into practice the method I had spoken of, with

the consent of the physician temporarily in attendance. The rules of Brand were strictly adhered to at the first onset of symptoms, with the result of complete subsidence of the fever in about six or seven days. I was rather skeptical of this being a case of typhoid until the other two cases developed. All four were subject to the same source of infection—well water in a country place. In another of these cases the bath treatment is being followed out, so far with marked success.

In only one case in which I made use of the cold baths was there a fatal result, and that was one which, from my present experience, I would hesitate in trying again, although the probabilities are I might do so. It was that of a man aged 21, who was admitted to the hospital on what he supposed to have been the fourth day of his illness, but must have been later, as there was present, on admission, slight broncho-pneumonia with traces of albumen in his urine. Respirations were rapid, as was also his pulse. Twenty-four hours after admission he was delirious, and twelve hours later subsultus tendinum was present. As the patient had not slept since admission, and was very restless, the cold bath was given, bringing the temperature down from 104.4° to 103, but quickly rising again, without much apparent relief to the prominent symptoms. Subsequent baths brought down the temperature on each occasion. He had seven baths in all during the space of four days, notwithstanding which he died of his lung affection, complicated with cerebral symptoms.

The contra-indications to the use of cold baths would be hemorrhage of the bowels, peritonitis, and a weak heart as manifested in the rapid pulse or feeble circulation. The latter might be overcome by the judicious use of quinine and other cardiac stimulants. To these contra-indications I may add the determined opposition of the patient to the bath. Mental excitement alone, we all know, in these cases, will cause the temperature to rise, and if we cannot prevail upon the patient to give his consent, there is but little use in trying these measures.

As heat abstraction is only one of the benficial effects of the cold water, its action on the nervous system being probably the most important in avoiding the tendency to death. This it does,

I believe, through its action on the peripheral ends of the nerves, which it stimulates, exciting the various reflexes. When the febrile condition has lasted a couple of weeks or more, the nutrition of the centres and the reflexes is so interfered with that they respond but feebly, hence the bath treatment in this stage of the disease is quite a different thing from that in its earlier stages.

I should be inclined to hesitate before adopting the cold bath treatment in such cases, but in all cases where seen during the first week, in the absence of the contra-indications I have just mentioned, I would most confidently recommend it.

### A CASE SHEWING DIFFERING AXILLARY TEM-PERATURES.\*

By W. H. HATTIE, M.D., Asst. Physician Nova Scotia Hospital for Insane, Halifax.

T. S., æt. 21, admitted to N. S. Hospital for Insane on August 28th, 1891, had the following history:—

Prior to Dec. 31, 1890, he had always enjoyed good health. On that date, while in St. Louis, he received a blow over the left temporal region, causing a fracture of the skull and rendering him immediately unconscious. In a few days, however, he was able to be about again, but was irritable and suspicious of those about him, and these symptoms increased until, on the 19th of January last, he was admitted to the Alexian Brothers' Hospital in St. Louis. There he was trephined, and a large clot of blood was removed from between the dura and the bone. An acute maniacal attack followed the operation, but after it subsided the mental symptoms began to improve slowly, and he was removed to his home in Halifax. The improvement, unfortunately, was only temporary, and he was very soon admitted to the Victoria General Hospital in this city for the purpose of having a further operation performed. The original wound was reopened, but nothing explanatory of the mental condition was

<sup>\*</sup> See Temperature Chart for a period when the variability was especially marked. The thermometric readings were carefully made by a competent attendant, and frequently checked by myself—the same thermometer being used throughout. The dotted line represents the right side—the continuous line the left.

The mouth temperature generally registered a little above that of the left axilla.

discevered, and though improvement followed this operation also, it was but of a few days' duration, and his admission to our institution was deemed advisable.

When he first came under our care he was fairly rational, but soon became cross and irritable, continually suspicious that those about him were planning to kill him, at times inclined to be violent, and frequently very abusive in his language. There was nothing to be noted about his physical condition, and we could obtain no hereditary history of insanity.

A few weeks after admission he was the subject of a peculiar febrile attack, for which we were puzzled at first to find an explanation, but which we now regard as having been due to an exacerbation of a latent, unsuspected tuberculous process. The interest attaching to this attack consists in the fact that while it lasted the axillary temperature differed on the two sides of the body, almost invariably registering higher on the right side (i.e., the side opposite the injury) than on the left. As is so often the case in insane patients, the mental symptoms markedly improved with the rise in temperature, and continued so for some time after the mercury ceased rising above the normal line. This improvement allowed us the opportunity of making thermometric observations (an impossibility in his times of excitement), and during the whole time that we were able to carry on these observations we found more or less difference in the heat of the two sides.

As will be seen by referring to the chart—where the dotted and continuous lines represent the temperature on the right and left sides respectively—the difference on the two sides is by no means constant, and though generally registering a degree or more higher on the right side, it on several occasions was equal on both sides, and was sometimes actually lower on the right than on the left side. This peculiarity adds to the difficulty in finding an explanation for the condition.

For many years physiologists have considered that there must be a heat regulating apparatus existent somewhere in the cerebrum, and in all probabilities above the pons. The nearest approach to an actual localization of such a centre probably

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results from the experiments upon dogs by Eulenburg and Landois. These experimenters found that injury to the cortex in the immediate vicinity of the motor area caused a rise of temperature in the opposite side of the body, and this elevation sometimes persisted for several months. Wood's experiments have afforded a practically similar result, as have those of Hitzig, Bechterew and others. Mr. Victor Horsley mentions having observed in man a higher temperature on the side opposite an injured motor area than on the corresponding side. The case I present, therefore, is not unique, but only goes to add to a literature which I think is scanty, and to give additional weight to the idea of a thermotaxic arrangement (having an inhibitory function) existing in the cerebral cortex.

There are many reasons for considering the existence of such an inhibitory centre in the cerebrum. In cases of hemorrhage into the pons, or of embolism in that situation, a rise of temperature is the rule. The same is true of many cases of lesions high up in the cord. Any of these conditions would cut off the supposed inhibitory centre from the conducting nerves, and thus, according to our theory, explain the increase of heat. But sometimes a fall of temperature is the result of such conditions. We must then suppose the explanatory element to be shock—in which the loss of tone in the vascular system is most favourable to the rapid and excessive dissipation of heat.

I think that the only explanation applicable to our case lies in the assumption that a heat regulating centre actually exists in or very near to the motor area of the cortex cerebri, and that injury in the neighbourhood may bring about more or less complete disorganization of this centre. The inconstancy of the difference between the temperatures of the two sides is a notable feature in the case, and makes its solution more difficult. But we well know that a disordered mind is liable to constant variation, and we must look upon mentalization as a function of the cerebrum. Why, then, should not the heat regulating function be as prone to variation when disordered as any other brain function?

#### SALPINGITIS AND PYOSALPINX.\*

By GEO. E. ARMSTRONG, M.D.,

Instructor in Surgery, McGill University; Surgeon to Montreal General Hospital.

My experience with a series of cases of disease of one or both fallopian tubes and sequelæ has made me think that the treatment of this condition, although plainly indicated by many writers, notably and in the position of a successful pioneer, Mr. Lawson Tait of Birmingham, is not yet fully appreciated by the great mass of general practitioners.

I have nothing original to add to the subject, but I have reason, as you will see, to advocate a treatment of this class of cases quite as radical as that taught by Mr. Lawson I believe that many women are to-day making the rounds of consulting rooms and being treated by pessaries, glycerine tampons, hot water douches, and local blistering, who are really suffering from salpingitis. I also believe that this treatment is wholly insufficient to cure, and this is proved by the fact of their changing one consulting room for another, or returning to the same consultant after a longer or shorter period of only comparative relief and comfort. Trachelorrhaphy has been performed a great deal, and too often has been regarded as a cure-all remedy. It is easy to recognize a lacerated cervix, and also easy to repair it, but it is not so easy to sit in your office three months after and listen to a rehearsal of symptoms similar to the ones complained of before the operation was performed. Every family physician here has probably one or more ladies among his clientele who have visited some medical centre and had an operation, and still appeal to him for relief from symptoms similar to those complained of before operation. I do not mean to belittle that most useful operation of trachelorrhaphy in properly selected cases, but I draw attention to the necessity of excluding disease of the appendages before advising it.

In this paper I purposely omitall allusion to that larger subject of the etiology of salpingitis and confine myself to two points only, the diagnosis and treatment of salpingitis and pyosalpinx. It is the duty of every one assuming the position of

<sup>\*</sup> Read before the Medico-Chirurgical Society of Montreal.

advisor to those suffering from pelvic disease to familiarize himself with the details of a thorough and systematic examination of the pelvic contents, and to persist in the practice of these details until he becomes an adept at it. The palpation of the tubes and ovaries, though not as easy in many women as some would lead us to believe, may yet generally be made to yield valuable information, especially when placed by the side of the subjective and other objective symptoms, and the decision may be the saving or losing of a life.

Noeggerath, William Japp Sinclair and Tait and Virchow, have taught us much of the pathology and prognosis and treatment of these cases. They have taught us that in desquamative salpingitis the ciliated epithelium is destroyed; that the tubes deprived of the cilie which perform the double office of carrying the ovum along towards the uterus and preventing the spermatozoa from passing from the uterus along the tube, are the tubes in which an impregnated ovum may lodge and develop. The timely removal of such tubes would prevent the possibility of the occurrence in the patient from whom they were removed of the results of tubal pregnancy and rupture. They have also taught us that in salpingitis one or both ends of the tube may become occluded, and that constrictions or strictures result. Then between these strictures pus may form, increasing under favourable conditions, distending the tube, thinning its wall, and finally, in a percentage of cases, rupture, setting up localized and sometimes general peritonitis of more or less severity. These are the grave disastrous results that may follow a salpingitis, and I will illustrate them by briefly mentioning a few cases. The minor results of salpingitis being pelvic pain and distress, and malnutrition incapacitating the sufferer to a degree for the duties of an ordinary life.

It has been noted by several writers that a history of tubal disease precedes in many cases tubal pregnancy, as in the following cases:

Mrs. L., æt 30, began to menstruate at 11 years of age, and from the first suffered from severe premenstrual pain. Her first and only child was born twelve years ago.

Eight years ago she was treated for some weeks for pelvic

pain. In April, 1891, when shopping, she was suddenly

seized with a very severe pain in the right side of abdomen low down; she fainted and was unable to walk home. After a week's rest in bed she went out again and was once more seized with this same pain. The first seizure was five weeks after the cessation of the last menstrual period. On examination a large doughy mass was distinctly felt in right side of abdomen and pelvis. I removed it through a median incision. It consisted of a large blood clot surrounded by lymph, upon its upper surface lay the right fallopian tube. On the under surface of the tube was a large irregular shaped opening through which a cavity in the tube communicated with the blood clot. Dr. Wyatt Johnston kindly examined the specimen for me and found chorionic villi. Recovery was rapid and perfect.

Mrs. S., a patient of Dr. Allan of this city, who kindly asked me to see her with him, had a history of tubal disease beginning four years ago, and increasing every six or eight months since then, each attack lasting three to six days. When I saw her she had been ill eight days; her pulse was 120°, temperature normal; attack began with severe pain four weeks after last menstrual period. She complained of severe pain in right hypogastric region. A soft fluctuating mass distinctly felt per vaginam behind and to the right of the uterus. On opening the abdomen clotted blood welled up. The right tube and ovary were seized, a ligature thrown around them close to the uterus and removed. They presented the appearance shown in the drawing made for me at the time by Dr. Springle. The chorion is seen lying at the distal end of the tube. After its removal hemorrhage at one ceased.

Recovery was uneventful and without a bad symptom. In the coagula was found fragments of the yolk sac and parts resembling feetal structures.

In other cases the tube becomes constricted at points and sometimes one or both ends occluded, and these cases have a different history.

The first case that I report was very instructive, and complete as the condition was made out at a post mortem examination, and I can't but think that it represents a class of disastrous cases that are not always recognized, because too often the privilege of a post mortem examination is denied us.

On the 10th March, 1887, I confined Mrs. F., æt 36. Her labour was easy and rapid, the child was born at 10 a.m. At 4 p.m. I called and found my patient happy and jolly, enquiring how long I wanted to keep her in bed. I had scarcely left the house when she suddenly complained of a most intense pain in the abdomen. She rapidly developed a septic peritonitis, and though I opened and irrigated and examined her abdomen, she died thirty hours after her confinement.

I obtained permission to make an autopsy and then found a small abscess in left fallopian tube which had ruptured, and the escaped pus had undoubtedly set up the fatal peritontis.

This woman had suffered from an inflammation in the left hypogastrium ten years before. At that time she was ill and under medical care for nearly two years. Her recovery was fair though she never afterwards enjoyed perfect health. She always suffered at her menstrual periods, but recovered sufficiently to become pregnant, probably from the right tube. If her tubes had been removed during her first illness, I think her chances for life would have been greatly increased, and I think probably life is as much desired by the fair sex as by man, and as Dr. J. Price forcibly remarks, women should not be considered altogether as child bearing organisms.

Mrs. D., at 25, was admitted to the Montreal General Hospital on the 8th May, 1891, complaining of severe pain in lower part of abdomen and incessant vomiting. She was confined eight weeks before admission. Her labour was tedious and completed by forceps. She progressed favourably until the third day when she had three chills followed by a temperature of 102° F. and severe adomimal pain. The pain extended through to the back and down the right thigh. She got up on the eleventh day, and again on the twelfth day. On the thirteenth day she felt a soreness in the right side, and on the following day, the pain continuing, she remained in bed that day and the next. On the twenty-third day pain in right side again returned accompanied by vomiting, and a hard lump was felt in right hypogastric region. The history from this date until she was admitted to the hospital was one of pain, chills and profuse sweats. On admission she was pale, anomic and emaciated; eyes sunken, a pained drawn expression of face, she lays on her back with her knees drawn

up; temperature, 104; pulse, 140; respiration, 36; heart and lungs normal; urine scanty, specific gravity 1022, acid, no albumen or sugar. On the right side of the abdomen a hard, painful tumour was plainly to be felt and seen, extending nearly to the median line. Per vaginam, a bilatual laceration of cervix and a hard mass to right of uterus pushing it over to the left. After consulting with the hospital staff I opened the abdomen and found the right tube dilated into a pus sac and surrounded by more than the usual amount of inflammatory lymph. Her recovery was uninterrupted. She left the hospital on the 17th June.

It would be very interesting to learn how many of the cases formerly grouped together as cases of puerperal fever were really suffering from tubal disease, of course not all by any means, but probably a very considerable percentage.

It would almost seem from the history of some of these cases, as if pregnancy and the increased nutritional activity and hyperplasisa that take place during that time in the generative organs lighted up old tubal diseases. In the case of Mrs. F., her first illness dates back ten years before her pregnancy. During the last four or six of those years she had been fairly well. Her tube ruptured six hours after confinement.

Another case seems to point in the same direction.

Mrs. B., at 36, confined eight years ago. Recovery unsatisfactory, and accompanied and followed by pelvic pain. Four months ago became pregnant, miscarried, and had a severe attack of pelvic inflammation followed again by imperfect recovery. Became pregnant again in the early part of June last; miscarried in the end of July. Her miscarriage this time was followed by symptoms of acute peritonitis, acute pain, high temperature, and rapid pulse and vomiting. I was called to her in the middle of the night, and found, in addition to the above mentioned symptoms, a distended abdomen and a great degree of paralysis of the muscular coat of the intestines. On opening the abdomen a large quantity of pus was found in and about the fallopian tube of the right side and septic peritonitis.

Clearly this was a case in which the timely removal of the pus tube could have been undertaken with every prospect of success, and had it been done at the start, it is highly probable that she would now be living and in good health.

One more case and I am done.

Mrs. W. had a history of recurring pelvic inflammation for six years, each attack followed by an imperfect recovery. In July last, her family physician went out of town and left her in my charge, she being at the time suffering from an acute recurrent attack of pyosalpinx. Unfortunate circumstances prevented my answering numerous urgent messages from this lady until evening. When I got there I found evidence of a ruptured tube and consequent beginning of peritonitis. No time was lost in getting instruments and assistants, opening the abdomen and cleaning out a quantity of escaped pus, securing and removing the tube, together with this fibroma of the right ovary. Fortunately here the operation was in time, before the inflammatory process had extended very far, that is, while it was yet localized and before paresis of the intestinal wall had occurred, and the result was all that could be desired.

These cases are primarily in the hands of general practitioners, and I believe it to be the duty of the family physician to thoroughly inform himself of the natural history of this disease, and not to discharge a patient suffering from salpingitis as soon as she can sit up and join her family at dinner, but to watch carefully over her for months and years if necessary, and to keep informed of the condition of the tubes, and thus discharge one of the highest functions of the family physician. And I believe that in recurrent cases of salpingitis, as in recurrent cases of appendicitis, the question of operation is a legitimate one for serious consideration.

# HEMICHOREA IN PREGNANCY CAUSED BY ACUTE RETROFLEXION OF THE GRAVID UTERUS.

AN INTERESTING CASE REPORTED BY DR. F. H. WETMORE, OF HAMPTON, N.B.

To the Editors of THE MONTREAL MEDICAL JOURNAL.

Sirs,—Chorea is a comparatively rare affection in pregnant women, not more than 80 or 90 cases altogether having been recorded. Judging from these statistics, chorea must be regarded as a very grave complication of pregnancy, the maternal mortality being 30 per cent. and the fœtal still higher. But as severe cases only seem to have been reported, it is highly probable that it occurs in milder forms more frequently than the statistics seem to show. Careful reports of mild as well as severe cases would help us greatly in solving the vexed questions of etiology and pathology in this disease.

The chief predisposing causes are hereditary influences and depraved conditions of blood, while violent emotions, acute rheumatism and local genital irritations are commonly set down as the usual exciting causes. Out of 66 cases collected by Barnes and Wenzel, 7 were traceable to violent fright and 7 to rheumatism and endocarditis. In many of the graver cases, an old chorea seems to have been excited into renewed activity, while in the milder forms mental emotion and peripheral irritation were evidently the causative factors. In the non-pregnant, peripheral lesions or cicatricial contractions may set up choreic movements, which subside as soon as the irritating part is excised; so in pregnant women peripheral irritation may be propagated from the uterus to the central organs, and may keep up choreic movements till the cause of irritation is removed. This is well exemplified in a case sent me by Dr. F. H. Wetmore of Hampton, New Brunswick, where an acutely retroflexed uterus was evidently the exciting cause of a chorea which subsided as soon as the cause was removed. The case is interesting on account of the unusual course of the disease. An anæmic, neurotic patient, subject to hysterical fits, bearing family rapidly, with a lacerated cervix and a tender retroflexed uterus, developed

chorea of the right side of the body in the fourth month of pregnancy; in a few days the left side became involved while the right side began to improve. By appropriate mechanical treatment the retroflexion was corrected, and the chorea disappeared in little more than a week.

The case has been so carefully observed and reported by Dr. Wetmore that I append it in his own words, slightly condensed.

Mrs. —, æt. 31, 3-para, with pronounced neurotic history, subject to hysterical fits,\* ceased to menstruate about the middle of November, 1890. She complained on January 13th of palpitation, dyspnœa on exertion, headache, lumbar and hypogastric pain, puffing of feet and eyelids. Has had two hysterical attacks since the cessation of menstruation. Is very anæmic. examination, the uterus was found to be sharply retroflexed, the os lacerated, the fundus tender. Urine normal. On the 28th she was complaining of epigastric pain, flatulent distension. vomiting and anorexia, frontal and vertical headache. On Feb. 6th she sent for me, being much alarmed at finding her fingernails purplish. She complained of vertical headache, or rather a feeling of lightness in the head. On the 10th she wrote that she was up, but complained of "shaking of the fingers, hands and flesh." On the 14th I found her suffering from paresis of the right arm and leg, with twitchings of the right side of the body which she could not control. The patellar reflexes were normal. I found the ovaries painful and the thyroid enlarged; there were headache and constipation, but no cardiac palpitation. On the 21st there were twitchings of the right half of the body, the right corner of the mouth, arm, shoulder, side and leg; twitching was especially marked in the toes. The movements were characterized by their slowness and the extent of space through which the part moved, this being particularly noticeable in the face and fingers. The movements were worse when her attention was drawn to them. Her husband said that they continued during sleep. She complained of numbness and coldness in the right leg. Said her tongue felt so thick at times that she

<sup>\*</sup> After her first confinement, I found the umbilical cord tied around the thigh for the cure of the fits.

could hardly speak. Tongue protruded in a straight line, but the point moved up and down. She complained of constant headache, pain and tenderness in the back and right iliac region, and difficulty in micturition and defæcation; the pain in right iliac region was sharp and cutting, and extended through to the back. On one occasion the urine was scanty and "thick like buttermilk." A mitral systolic murmur was heard, but she did not complain of palpitation or any cardiac symptoms. Per vaginam, the os was tender and patulous, the uterus markedly retroflexed, the tenderest point being at the angle of flexion—the uterus freely movable. Temperature, pulse and respiration normal. On the 23rd, pain and tenderness were felt in both hypochondria and in the left ovarian region, with pains in the back shooting up the spine. There was pain also in the left wrist, elbow and shoulder joint, and down the left leg. The left arm and leg felt numb, and the muscles of the left arm were beginning to twitch. Patient said the left side was beginning to feel and act the same as the right did. The choreic movements on the right side were declining as those on the left were beginning. No paresis of right arm and hand. Headache persisted, tongue furred, nausea after food, bowels regular. Urine 24 oz., acid, sp. gr. 1025, showed a flocculent deposit, no albumen or sugar. Pulse, temperature and respiration normal. On February 28th, patient much better. The chorea of the left side is gone; that of the right side improving, though there is still some movement of the right arm and shoulder. The pains and tenderness almost gone. The uterus almost completely straightened. On August 4th she was confined of a healthy female child.

The treatment consisted of general tonics, bimanual manipulation of the retroflexed uterus for the purpose of straightening it, and the frequent use of the genupectoral position. I regret that I did not test for the muscular sense, which would be probably impaired or absent.

J. C. CAMERON.

## Betrospect Department.

### QUARTERLY RETROSPECT OF SURGERY

By Francis J. Shepherd, M.D., C.M., M.R.C.S., Eng. Surgeon to the Montreal General Hospital: Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

At the recent meeting of the Congress of American Physicians and Surgeons one of the most interesting and instructive discussions was that on the Conditions Underlying the Infection of Wounds. Prof. Welch of Baltimore (Amer. Jour of the Med. Sci., Nov. 1891), in his address (which is too valuable to quote in abstract and too long to reproduce), considered the subject under the following heads: (1) What are the micro-organisms concerned in the infection of wounds, and how do they act? (2) How are we to explain the great differences in the effects produced by pyogenic micrococci—their apparent harmlessness under some conditions and their fatal influences under others. (3) What are the ways by which bacteria gain access to the wound? (4) How often are bacteria to be found in wounds treated antiseptically or aseptically? What are the characters of these bacteria and where do they come from? (5) What are the best means of surgical disinfection? Dr. Welch's observations on the colon bacilli are most interesting. He says they are most frequent invaders in intestinal disease, and their chief interest lies in the fact that they furnish an illustration of the possible predisposition to infection afforded by intestinal lesions and explain the much disputed point of auto-infection. danger of infection of wounds comes chiefly through the instruments used, the hands of the operator and his assistants, and the skin of field of operation. Instruments should be sterilized by heat and hands and skin are advised to be treated in the following manner:-

- (1) Nails to be kept short and clean.
- (2) Hands should be washed thoroughly with soap and hot water for several minutes, and a brush used which has been sterilized by steam. The excess of soap should be washed off with fresh water.

- (3) The hands should be immersed from one to two minutes in a warm saturated solution of permanganate of potash and rubbed over thoroughly with a sterilized swab.
- (4) They should then be placed in a warm saturated solution of oxalic acid, where they should remain until complete decolourization of the permanganate occurs.
- (5) They should then be washed off with sterilized salt solution or water.
- (6) And, finally, they should be immersed for two minutes in a sublimate solution, 1-500.

Dr. Roswell Park and others also gave addresses, for an account of which the reader is referred to the proceedings of the Congress in the various journals published towards the end of September, 1891.—(See N. Y. Medical Journal, Sept. 26th; Phila. Med. News, Sept. 26th.)

Infection through Drainage Tube.—Drs. Robb and Ghriskey (Johns Hopkins Hospital Bulletin, July 1891) came to the following conclusions: (1) That dressing a wound should be avoided except when absolutely necessary. (2) That without strict asepsis the drainage tube may be a source of great danger. (3.) That the disrepute into which the drainage tube has of late fallen is due to want of proper care in carrying out the technique for the maintenance of an aseptic state of the wound. In this connection I might quote a conclusion from the paper of Dr. Roswell Park read at the recent Washington meeting. It is this: "When this work is strictly aseptically performed, the use of drains or further employment of antiseptics is either an expression of mental uncertainty or of fear. It may be in the interest of humanity—undoubtedly it often is—but it is not

Mr. Lawson Tait, in a clinical lecture on The Details Necessary in the Performance of Abdominal Section (Lancet, Sept. 12th, 1891) says, regarding antiseptic methods: "A good deal has been written the last ten years upon so-called antiseptic methods of performing operations and antiseptic precautions to be taken during the performance of the operation and after it. I do not propose to take up further time in discussing a matter

obtaining the ideal scientific work."

which clearly has come to its end, save to note that the last assertion of those who advocate these antiseptic precautions is that antisepsis really means absolute cleanliness. not the case. It is mere perversion to say anything of the kind. . . . . We who are opposed to the antiseptic doctrines and antiseptic practice argued that the germs were harmless if dead and dying material upon which they might feed were removed from the wound. . . . I venture to predict that four or five years hence the use of the term 'antiseptics' will be dropped, and we shall hear no more of this strange phase of surgical eccentricity." This dictum of Mr. Tait's seems to me most unscientific and illogical, even when applied to abdominal surgery only. teaching seems to be doubly absurd and even dangerous when perused in connection with the masterly, logical and most scientific address of Dr. Welch, who leaves nothing to blind conjecture, but works out every point in the most painstaking and scientific manner, every stage of the process being verified by experiment on man and the lower animals. It is the difference between the inductive philosophy of Bacon and the empiricism of Paracelsus. Time will show where the truth lies, but antiseptic and aseptic surgery will live and be adhered to long after Mr. Tait has been gathered to his fathers.

Laminectomy for Spinal Compression.—At a meeting of the Clinical Society of London, held Oct. 23rd, 1891, Mr. Abuthnot Lane read brief notes of eleven cases of laminectomy performed for compression paraplegia resulting from spinal caries. He pointed out (1) that in every case, with one exception, where the granulation material had not yet broken down, the cord was compressed by an abscess; (2) that in none of these cases was there observed any such fibrous neoplasm involving the posterior surface of the dura mater as was described by that distinguished pioneer of spinal surgery, Dr, Macewen, showing that that condition must be of infrequent occurrence; (3) that the conditions found at the operation appeared in every case to preclude the possibility of recovery of the spinal column and cord without surgical interference; (4) that several of these cases would have of a certainty died from chest or bladder complications from

which they were suffering, and which only disappeared when they recovered power over their intercostal and abdominal muscles: (5) that though several of the patients were dangerously ill. they have the operation well; (6) that in the only case in which death was consequent upon the operation, the child was extremely feeble: (7) that in only one case was the subsequent formation of tuberculous matter so rapid as to obliterate very quickly the benefit derived from two operations; (8) that apart from the presence of the symptoms resulting from pressure on the cord, the very large amount of disease present in every case but one and the size and extent of the abscess cavities rendered it impossible for the bodies to ankylose and the spinal column to become useful without operative interference; (9) that in most of these cases the cord was compressed about the level of the 3rd or 6th dorsal vertebra. In the face of these facts he thought he was quite justified in urging that every case of paraplegia due to spinal caries should be operated on with as little delay as possible. He considered that the treatment by prolonged recumbency was bad both in principle or practice. Operative interference involved very slight risk. It was followed by very little. It relieved the patient of the compression symptoms, and lastly, but not of least importance, it enabled the surgeon to treat the diseased vertebræ directly not only by spooning, irrigation, and the thorough removal of all carious material and diseased bone, but also by the repeated local application of iodoform, from which he believed he had received the greatest benefit. The operation of laminectomy was recently performed at the Montreal General Hospital by Dr. James Bell on a young child paraplegic from spinal caries. No pus was found, only an excess of granulation tissue.

In a paper read before the American Surgical Association on the *Present Status of Brain Surgery*, Dr. D. Hayes Agnew (*Univ. Medical Mag.* Oct. 1891) comes to the following conclusions:—

(1) That all fractures of the skull attended with depression, however slight and entirely irrespective of symptoms, should, in view of the late after effects, be subjected to the trephine.

- (2) That trephining for traumatic epilepsy promises only palliation at best.
- (3) That trephining for abscess, in view of the fact that all such cases left alone almost invariably terminate fatally, is entirely proper, and that the earlier such operation is done the better.
- (4) That trephining for intra-cranial traumatic hemorrhage is both an imperative and highly promising operation.
- (5) That trephining for cephalalgia or traumatic headache, medical measures having failed, should be undertaken with every prospect of success.
  - (6) That trephining for hydrocephalus is a useless operation.
- (7) That trephining for microcephalus, independent of athetosis, confers no credit on surgery.
- (8) That it is more than probable that as our observations multiply the sphere of the trephine, as a preliminary for the removal of brain tumours, will be lessened rather than amplified.

Leonte and Bardesco of Bucharest (*Rev. de Chir.*, Oct. 1891) state that since 1886 they have trephined twenty-two times on twenty patients for injury and disease, with the result of 13.50 per cent. of fatal cases. They come to the following conclusions:

- (1) Trephining, when performed in accordance with the rules of modern antiseptic surgery, is not a dangerous operation; the indications for the operation and the frequency of its performance are increased by the doctrine of cerebral localization.
- (2) Intervention is justifiable in cases of paralyses or convulsions when these conditions are due to direct irritation or to functional destruction of the brain centres.
- (3) In considering the propriety of operative interference the surgeon should take into account not only disturbances of mobility, but also subjective sensorial troubles, as the occurrence of such signs might indicate the place where he ought to trephine, whilst trephining is expressly indicated in the presence of symptomatic paralyses and convulsions; in cases of genuine epilepsy, on the other hand, the operation is empirical and its results difficult to appreciate.
  - (4) The earlier the date of operation and the shorter the in-

terval between the first appearance of the nervous symptoms and its performance the more assured are the prospects of success.

(5) The coexistence of monoplegias with convulsions decidedly indicates trephining.

They conclude by stating that the results of treatment are sufficiently good to encourage surgeons to continue this line of practice.—(Quoted in Sup. of Brit. Med. Jour., Nov. 4, 1891).

In a paper on Craniectomy for Microcephaly by Victor Horsley (Brit. Medical Journal, Sept. 12, 1891), he concludes as follows: "The personal experience of but two cases will not justify any dogmatic statements on this operative treatment of microcephaly and premature synostosis; but from collection of published instances, I am convinced that it should be carried out in all cases, inasmuch as the condition is otherwise absolutely without hope, and interference has evidently secured notable improvement in some cases. Obviously there are special risks to be guarded against, but these can be readily avoided by limitations of the extent of the operation undertaken at the time."

Laparotomy for Intestinal Perforation in Typhoid Fever.— According to R. H. Fitz of Boston (Proceedings of Association of American Physicians, 1891), intestinal perforation is found in about one per cent. of all cases of typhoid fever, and is the cause of death in six per cent. of fatal cases. It rarely occurs in children, and is twice as common in men as in women. the treatment of this affection, early laparotomy was reported to have been tried in two cases, but with only one successful result; while of twenty-seven patients with circumscribed peritonitis in typhoid, largely attributed to intestinal perforation, three recovered after incision, seventeen after resolution, and nine after a spontaneous discharge of pus. He recommends that immediate laparotomy be employed for the relief of suspected intestinal perforation in typhoid fever only in the milder cases of this disease. In all others, evidence of a circumscribed peritonitis should be awaited, and might be expected in the course of a few days. Surgical relief of this condition should then be urged as soon as the patient's strength would warrant it.

Dr. Weller van Hook, in a paper on the same subject (Med.

News, Nov. 21st, 1891), reports three cases of laparotomy for perforation with one recovery—a female, aged 31. He states that so far the operation has been performed nineteen times with four recoveries, though two of them were doubtful cases of typhoid fever. The author concludes his paper by stating that there is no rational treatment for perforation in the course of typhoid fever but laparotomy, and early laparotomy offers the most hope. He also states (though why I cannot say) that the published statistics of laparotomy for this condition are strongly in favour of operation, for he also states in the preceding page that "if we include only closely diagnosticated cases, it (his case) is the twelfth and the first recovery." The statistics of Dr. Fitz would encourage us to leave these cases to nature and not trust to a laparotomy, the result of which, even in the most carefully performed operations, are anything but encouraging.

Removal of the Vermiform Appendix in a Child Twenty-two Months Old.—Dr. J. E. Summers reports this operation, which was successfully performed for suppurative appendicitis. Fenger reports a fatal case of appendicitis in an infant aged seven weeks. Matterstock reports a case at seven months, and Fitz and Matterstock each report a case at twenty months. Fitz found, out of 247 cases of this disease in children, 80 per cent. occurred in males. Dr. Summers' case rapidly recovered after the removal of the gangrenous appendix.

Surgical Treatment of Pyloric Stenosis.—Dr. Nicholas Senn read a paper on the above subject before the recent meeting of the New York State Medical Society (N. Y. Medical Record, Nov. 7th and 14th, 1891). He divided his subject into (1) the operative treatment of cicatricial stenosis of the pylorus, and (2) the operative treatment of carcinoma of the pylorus. Dr. Senn stated that cicatricial stenosis of the pylorus frequently followed ulceration or traumatism in this situation. The usual results followed—first, obstruction to outflow of food, and, later, compensatory hypertrophy and dilatation of the walls of the stomach. The operative treatment of a cicatricial stricture at the pyloric end consisted in pylorectomy, digital divulsion after Loreta's method, by the formation of a new pylorus, by the pyloro-plastic

operation of Heineke-Mickulicz, or the operation of gastro-enterostomy. The operation of pyloro-plasty was the safest and functionally the most efficient for cicatricial stenosis of the pylorus; it not only removes the mechanical obstruction, but at the same time creates a new pylorus. The operation is performed by cutting the anterior wall of the strictured pylorus and extending the incision about an inch towards the stomach and the same distance in the direction of the duodenum. straight incision in the long axis of the pylorus divides the stricture and the contracted pylorus becomes the posterior wall of the new pylorus by retracting the margins of the wound on each side at the centre with tenacula and suturing in an opposite direction to the incision-that is, transversely to the long axis of the stomach. The new pylorus is made up of tissue taken partly from the anterior wall of the stomach and partly from the duodenum, the posterior wall being composed of the narrow, contracted pylorus. In suturing the wound, it is advisable to tie the sutures from each angle of the wound, tying the central sutures last. Ten rows of sutures, deep and superficial, are employed, the same as in closing a wound of the stomach or intestines. Dr. Senn says recurrence of the stricture is a physical impossibility, as the new pylorus is composed of healthy tissue, and the danger of the operation is not greater than that which accompanies an ordinary intestinal wound of stomach or intestines. Two cases are reported in the paper, both successful, and six others have been done with gratifying results. also reports thirteen cases of gastro-enterostomy for carcinoma of the pylorus, of which five died from the immediate effects of the operation. He concludes by stating that pylorectomy in the treatment of carcinoma is a justifiable procedure when the disease is limited to the organ primarily affected and the patient's general condition furnishes no contra-indication. Gastro-enterostomy by the aid of large, moist, perforated plates of decalcified bone should be resorted to in the treatment af malignant stenosis of the pylorus as soon as a positive diagnosis can be made and a radical operation is contra-indicated by the local or general condition of the patient.

Case of Combined Pylorectomy and Gastro-Enterostomy for Carcinoma of the Pylorus.—Mr. F. B. Jessett reports a case of this kind with a most successful result. (Lancet, Oct. 24th, 1891.) Dr. Bull of New York (as was mentioned in this Retrospect at the time) had a successful case of the same kind in the spring of 1890. The operation as performed by Mr. Jessett took only one hour and forty minutes. After cutting through the stomach he immediately sutured it by an internal continuous and an external interrupted suture, and then divided the duodenum and treated it in the same way. The omentum he ligatured off as he would an ovarian pedicle. Then a portion of the upper end of the jejunum was inserted to the stomach parallel to and about an inch from the great curvature by means of Senn's decalcified bone plates.

Radical Cure of Hernia .- Dr. Gustav Kolischer says (Central. f. Chir., No. 45, 1890) that the well attested fact at the present day of comparatively frequent occurrence of relapse following radical operation for the cure of hernia is to be accounted for not only by peculiar predisposition which results from the spermatic cord passing through the inguinal canal, but by the giving away of the cicatricial tissue to the intra-abdominal pressure, and the author proposes to overcome the latter by the following procedure: After the performance of the radical operation in the usual manner, without suturing the pillars, he 'makes an archshaped incision along the lower edge of the symphysis pubis, which incision passes through the periosteum and is prolonged to the insertion of the adductors. The pyramidalis muscle is dissected from the symphysis together with the periosteum, and is thus loosened, with its sheath, from the rectus muscle. A flap of muscle is thus obtained which is turned up over the external ring and fixed by sutures. The author has so far only operated on the cadaver.—(Quoted in Annals of Surgery, March 1891.)

Flap-splitting Operation for the Radical Cure of Inguinal Hernia.—Dr. B. E. Hadra, of Galveston, Texas, in an article on the above subject (N.Y. Medical Record, Nov. 21st, 1891), says the operation is performed in the following stages:—

(1) Skin incision extending from the outer ring parallel to Poupart's ligament as far as necessary, say 4 to 6 inches.

- (2) Exposing the external ring and abdominal fascia over the canal, or freeing them with blunt instruments and finger.
  - (3) Detaching the contents of the canal from its anterior wall.
- (4) Slitting the abdominal wall with knife or scissors or finger in the axis of the canal for three inches, curving the incision somewhat inwards at its upper third.
- (5) Attending to sac and testicle; either simply returning contents of former into abdominal cavity or ligating sac above the level of the internal aperture. Should the testicle be diseased or undeveloped, remove it.
- (6) Carrying a fine long-bladed knife flatly around the lips of the wound so as to split the adjoining abdominal wall into two layers for the distance of a half to one inch.
  - (7) Carrying a continuous suture through both raw surfaces in as many longitudinal rows as may be necessary to bring the surfaces well into contact.
  - (8) The tendinous pillars below and to the sides of the external ring may now also be split and sewn together in the same manner as the canal.
  - (9) Finally, the wound is closed in the usual way with or without drainage, and dressed with cotton wool fixed in place with iedeform-collodion.
  - Dr. Hadra says the operation is much simpler than it appears from this description. He cites one case only in which the operation was performed.

Treatment of Hernia by Median Abdominal Section.—At the British Medical Association held at Bournemouth in July, 1891, Mr. Lawson Tait read a paper advocating the reduction and radical cure of all herniæ by abdominal section. (Brit. Med. Jour., Sept. 26th, 1891.) He considered the replacement of protruded viscera by traction from within much safer than by pressure from without. Ordinary adhesions, he stated, are very easily undone by traction. The pieces of omentum that have been removed by traction from their sites of adhesion bleed, but the sites themselves do not bleed. It will only be necessary to examine the ends of the piece of omentum to be sure that everything is satisfactorily accomplished. In some cases, of course,

the sac will have to be opened to undo adhesions, but as experience grows this procedure will necessarily be rarer and rarer, and when the second incision is made the replacement of the gut can take place without enlarging the hernial aperture and the removal of the hernial sac will not be necessary. In cases of incarcerated hernia, any objectionable contents of the sac may be readily cleared out and the condition of the gut accurately ascertained; and if it is necessary to make an artificial anus, the proper place will be the central incision and not the unyielding ring in the groin. Again, incomplete operations will never occur, and no internal strangulation can remain after operation. This is also the best method for the purpose of performing the radical cure. Two common Glover's needles, armed with one piece of salmon silkworm gut, are fastened in some convenient needle-holder at a very slight angle to one another, so that their points completely coincide, and can be made to enter through one hole in the skin. The left forefinger covers or occupies the inner aperture of the sac. The needles are made to enter from without, and are then separated; the outer needle is made to dip deeply into the outer pillar of the ring, and the inner needle similarly into the inner pillar. The needles are then pulled out through the central incision, and as many sutures as are thought desirable are inserted in this way. When the insertion of stitches is completed, they can be tied from within and cut short. The abdominal wound is then closed and the operation is over. Mr. Tait says he has permanently cured many inguinal and crural hernize in this manner.

The majority of speakers who discussed the paper seemed to think that the abdominal method was only suited to special cases, and many of them narrated cases where the bowel could not be reduced by traction from within.

Dr. Maunsell of Dunedin, N.Z., stated that he had performed this operation for some years with the most satisfactory results, and that when any difficulty occurred in the reduction of the bowel he used an instrument like a button hook, which stretched the constricting structures from within. His paper, which is illustrated, is published in the same number of the *Brit. Medical* 

Journal (Sept. 26th, 1891), and is well worth reading. See also papers—

- (1) On the Radical Cure of Hernia, with especial reference to certain methods of operating, by W. H. Bennett, F.R.C.S. (Lancet, Sept. 12th, 19th, 1891.)
- (2) A Series of Hernia Cases, by Herbert Allingham, F.R.C.S. (Lancet, Oct. 17th, 1891.)
- (3) Statistics of Eighty-five Operations for Strangulated Hernia in Hospital Practice, by F. A. Southam, M.B., F.R.C.S. (Lancet, Nov. 28th, 1891.)

Prolapse of the Rectum .- Dr. Verneuil (Bull. et Mem. de la Soc. de Chirurg. de Paris, T. xv, p. 154), after the reposition of the prolapsed bowel, with the patient in the lithotomy position, makes two incisions 4-5 cm. in length at right angles to the long axis of the anus in an outward direction. From the point where these incisions end two other incisions are made so as to meet each other at the coccyx, thus making a triangular flap with its base forwards. This triangular flap is loosened from behind forward and left temporarily attached to the tissues surrounding the anus; this flap is strongly retracted with blunt retractors and the posterior wall of the rectum loosened as high up as the point of the coccyx. Four threads are now passed transversely through the posterior rectal wall parallel with one another and not including the rectal mucous membrane. The upper one of these sutures is placed at a point in close relation with the tip of the coccyx, while the lower one is some 15 mm. These threads are now passed through distant from the anus. the skin, the upper one as high up as the sacro-coccygeal joint and the lower one on a level with the tip of the coccyx. on each side of the median line the first and second threads are tied together over rolls of iodoform gauze, and then the third and fourth tied in a similar way. The rectum is thus dragged up and fixed in a new position higher up. The triangular flap is now removed and the wound closed with sutures.

A New View of the Pathology of Fissured Anus and the Treatment Başed Thereon.—Such is the title of a paper read by Mr. Chas. B. Ball at the last meeting of the British Medical

Association (British Medical Journal, Sept. 12, 1891). The author believes that what happens is this: During the passage of a motion one of the so-called valves of the rectal follicles or sinuses is caught by some projection in the fæcal mass and its lateral attachments are torn. At each subsequent motion the sore thus made is reopened and possibly extended, and this repeated interference with the process of healing ends in the production of an ulcer, the torn valve becomes swollen and ædematous, constituting the so-called pile. Mr. Ball goes on to say that the only thing necessary to cure this painful condition of affairs is to excise the tag of torn-down valve. If this be done the case will get rapidly well without either dilatation or incision of the sphincter. He instances cases in which this treatment was perfectly successful.

Statistics of Operations for Cancer of the Rectum. (Deutsch. Zeit. f. Chir., xxii, 1891.)—These statistics are published by Dr. Arndt, and consist of cases operated on by Prof. Kocher of Berne. The cases are 35 in number, with 10 deaths (28.35 p.c.). Five of the deaths were due to causes in no way connected with the operation; deducting these the mortality would only be 14.29 per cent. He has collected 230 cases from all sources with 28 deaths (12.17 p.c.). This small degree of mortality is most encouraging. The most frequent cause of death is suppurative peritonitis from wounding of the peritoneum, though wounding of the peritoneum is not necessarily a fatal procedure, as in 69 cases of wound of that structure collected by the author only 9 died. Immediate suture or tamponading with iodoform gauze will usually render the accident of wounding the peritoneum harmless. Another source of trouble in the operation is the contamination of the field of operation by the fæces, and to avoid this some surgeons first perform a preliminary colotomy, with in reality but little benefit. Hemorrhage is another danger, but this is easily controlled when the bowel is exposed from behind, as in the operation performed by Prof. Kocher. In 36 per cent. of the cases reported the cure was permanent, for 9 out of 25 cases remained free from return of the cancer after four years. -(Quoted in La Semaine Médicale, No. 51, 1891.)

There is an interesting article by Dr. Chas. B. Kelsey in the N. Y. Med. Revord, Sept. 12, 1891, which is too long to quote. It is entitled An Analysis of 750 Cases of Rectal Disease in Private Practice, and is well worth perusal.

Surgery of the Lung .- Dr. Tuffier has published an interesting clinical lecture on Resection of the Apex of the Lung (La Semaine Médicale, Mai 16, 1891.) He performed the operation for tuberculosis limited to the apex. Previously the author had experimented on animals to ascertain the feasability of the operation. Being convinced that it could be done, he proceeded to operate on his patient, a young man aged 25, with localized tuberculous disease of the right apex. An incision was made in the second intercostal space; after incising and holding aside the great pectoral muscle, the parietal pleura was reached, and now commenced the difficult task of detaching it. The upper part was freed with ease, but below, in parts, it was torn and air was heard whistling; these flaws were stopped with iodoform gauze, and after the rest of the pleura was freed the finger was introduced and the summit of the lung explored. The finger was placed behind the apex and pushed forwards, the lung being at the same time seized with a pair of forceps specially constructed to seize friable tissue, and drawn out through a hole torn in the parietal pleura, which formed a collar round the protruded lung. There were no adhesions between the two layers of pleura, and the surface of the lung appeared healthy, but an induration the size of a large hazel-nut was felt in the portion of lung withdrawn. A silk ligature was now thrown round the protruded lung beyond the forceps, and the portion of lung removed. The pedicle was fixed to the periosteum on the inner surface of the second rib and the various structures in the wound united by sutures, closing the wound completely and applying over all iodoform dressings. The dressings were not removed tor six days, when union was found to be complete. The patient recovered rapidly, and when he was exhibited to the Surgical Society there was good resonance over the lung, and the patient was discharged cured. The portion of lung removed was examined by Prof. Cornil, and in it was found a tuberculous mass the

size of a hazel-nut, without having any cavity in it. Around the margin were disseminated tubercles. The bacilli of tubercle were easily demonstrated.

Surgical Treatment of Pulmonary Cavities .- At the recent Congress of Tuberculosis, M. Poirier (La Semaine Médicale, August, 1891) read a paper on the above subject. case recorded was the result of an accident. In a duel fought in 1679 the sword of one of the combatants passed through his antagonist's lung and opened a pulmonary cavity; the surgeon utilized the wound for the direct treatment of the cavity and the patient recovered. In conjunction with M. Jonnesco, M. Poirier has collected all the available statistics, of which the following is the summary: Of 29 cases of incision of tuberculous cavities with resection of ribs, improvement took place in 15, cure resulted in 4, and in 9 the result was negative. In 19 cases the disease was situated in the apex. These authors conclude that the best way of reaching the upper part of the lung is by making an incision with a thermo-cautery 4 cm. below the sterno-costal notch, from the middle line of the sternum outwards for 9 c.m. in a direction parallel to the first intercostal space. In this the pectoralis major, which is usually much thinned, is reached, and by enlarging one of the spaces between the fasciculi the plane of the intercostal muscles is reached; this is divided and the pleura exposed. If there are no adhesions, it is better to establish them before proceeding further; but if there is a cavity, adhesions are always present. It is easy to strike the cavity through the adhesions, though a certain thickness of pulmonary tissue has often to be traversed for the purpose. As cavities are generally situated quite in the upper part of the lung, the first intercostal space is at a distinctly lower level than the cavity; the point of the instrument is then carried from below upwards and from before backwards. When the cavity lies towards the back, the spinous process of the seventh cervical vertebra should be sought for; an incision is made outwards from this point towards the scapula, the trapezius and rhomboideus are divided, and the first intercostal space, which is narrower behind, is reached. Resection of the rib may be necessary. M. Poirier does not appear to

have operated himself on the living, his deductions having been made from operations on dead bodies.—(Quoted in Supplement of British Medical Journal, Sept. 19, 1891.)

Treatment of Fractures.—At the meeting of the London Medical Society held Oct. 19, 1891, Mr. Mansell Moullin read a paper on The Treatment of Compound Fractures in Joints by means of Corrosive Sublimate Solution. If the accident is recent and the wound clean the strength of the sclution should be 1–10,000, with a few drops of hydrochloric acid added, and two hours submersion morning and evening is sufficient. If, on the other hand, the injured part is foul and some time had elapsed, and inflammation had already set in, the bath should be continuous night and day for forty-eight hours, and the strength should be 1 in 1000 for the first two hours. Mr. Moullin had treated some thirty cases in this way with the most satisfactory results.

Dr. Stephen Smith of New York publishes a paper On the Results of Treatment of Simple Fracture of the Shaft of the Femur, in which the following conclusions (Med. News, Sept. 26th, 1891) are come to as to when a satisfactory result has been obtained in fracture of the shaft of the femur:—

- (1) That firm bony union exists.
- (2) That the long axis of the lower fragment is either directly continuous with that of the upper or the axes are on nearly parallel lines, thus preventing angular deformity.
- (3) That the anterior surface of the lower fragment maintains nearly its normal relation to the plane of the upper fragment, thus preventing undue deviation of the foot from its normal position.
- (4) That the length of the limb is either exactly equal to that of its fellow or the degree of shortening falls within the limits found to exist in 90 per cent. of healthy limbs, viz., from one-eighth of an inch to one inch.
- (5) That lameness, if present, is not due to more than one inch shortening.
- (6) That the conditions attending treatment prevent other results than those obtained.

These are really the conclusions come to by a committee of the American Surgical Association, of which Dr. Smith was chairman.

Stites Test for Carcinoma.—This test, as detailed by Prof. Chiene of Edinburgh, is reported by Dr. J. H. Brinton (Phila. Med. News, Oct. 31, 1891). Excise the mamma and wash it thoroughly in water to remove the blood, then place the extirpated mamma in a five per cent. solution of nitric acid for ten minutes, and then wash in cold water for five minutes; then place in methylated spirits for two or three minutes. By the time this has been done by an assistant the operation has been completed, and on examining the mamma it will be found that the diseased or cancerous portion has a dull white appearance like the eye of a boiled fish; the healthy structures are translucent. In this way it can be told if all the diseased structures have been removed, for if divided at any point the dull white disease can be seen on the cut edge of the removed breast. Of course one must be careful to fix, before removing the breast, its relation to surrounding parts, and this can be done by notching with a knife.

## Correspondence.

PATAGONES, PROV. DE BUENOS AYRES, ARGENT. REPUB.,

13th June, 1891.

To the Editors of The Montreal Medical Journal.

GENTLEMEN,—As a graduate of old McGill, I feel sure you will give this communication a place in your monthly JOURNAL. I write it for the benefit of all those who may be in similar positions or have similar cases; also, to give my old school-mates and professors some idea of a graduate's work in South America. My first case is one in which I tied the common carotid for a wound in the external.

On October 9th, about 7 P.M., I was called from my dinner, and on going to the door found a policeman mounted and leading another horse by his side. He saluted, and said "that a man had been wounded and was bleeding to death, would I come at once?" Entering my office, I took my pocket surgical case, bandages, sublimate gauze, cotton-wool and tablets, which last, by the way, I brought from Montreal. We had to ride about a mile and a half, and by the time the house was reached it was On entering the house I saw, by the aid of a tallow candle, a room about 12×14, brick floor, three or four Indians, women and men, and in a corner a man lying on a camp saddle or "recado" as they are called. The room contained no furni-The man proved to be an Indian fully six feet ture whatever. tall and probably 200 lbs. weight-a fine built fellow. His head was wrapped in cotton rags, saturated with blood, and certainly not antiseptic. I was told, on inquiring, that he had been stabled by another Indian about an hour before. beside him I found him insensible, and on feeling his pulse was unable to count it. On putting my ear to his chest, I could hear the heart beating slowly and very feebly. Turning to the policeman I told him to gallop to the nearest shop and get a bottle of brandy; in the meanwhile I took off the dirty cotton rags which swathed his head and saw a wound extending from

the middle of the left cheek to a point a little below the lower lobe of the ear on the same side, evidently deep, as it lay open fully an inch in the middle, filled with clot and cobwebs. little blood was still oozing from it. Making a solution of bichlor. in an old tin (" preserved meat can"). I began to wash away the clots and debris which filled the wound. During all this time the man was sinking rapidly until just as the policeman arrived with the brandy his breathing stopped altogether. Taking a piece of cotton wool I wrapped it in a bit of gauze and told the policeman to hold it tight in the wound while I resorted to my old friend the hypodermic syringe. I injected six syringefulls of pure brandy as quickly as possible—one in the quadricens extensor of each leg, one in the biceps of each arm, and one in each great pectoral muscle. I then began artificial respiration, as taught by Dr. Roddick, and in about two minutes was pleased to see the dead alive again; in another two minutes he had recovered consciousness, greatly to the surprise of his Indian friends, who had thought him dead for the last ten minutes. I now gave him brandy and water by the mouth and again examined the wound. On removing the balance of clots I discovered that a large artery was wounded, and from its position came to the conclusion that it was the external carotid. On digital examination, my first finger went fully an inch and a half deep in the wound, just behind the jaw-bone, and about half an inch below the left ear. What was to be done? Pressure stopped the bleeding. I felt sure the carotid was cut, and also sure I could not tie it in the wound, nor yet enlarge the wound sufficiently to tie it there. Tie the common carotid! I thought of it, but was alone-in a house without as much as a bed-surrounded by ignorant people whose language at that time I scarcely knew at all. However, after considering a moment, I could think of nothing else to be done, so calling the policeman I made him hold my compress firmly in the wound, and, after getting the consent of friends, I started to tie the common carotid.

Gentlemen, I once or twice tied the common carotid for pleasure in McGill College dissecting-room. I happened to be

in the lecture-room when Dr. Fenwick tied it before the class of '90; but let me assure those who have never tied it in the living that it is "not the same "-more especially when you have your patient on a brick floor, your assistants a policeman, your light a tallow "dip" in the hands of a nervous woman, to whom you cannot speak on account of not knowing her language perfectly, with no instruments except your pocket case, and that without an aneurism needle. Well, I made my incision over the line of the artery and dissected down till I came to it, always judging its position by its pulsation; opened its sheath, and having neither blunt tenaculum nor aneurism needle, I picked it up with a pair of artery forceps (Pean's) and was pleased to find that on removing clots and compress the bleeding had stopped. Now to get a ligature around it. I bent my grooved director so as to let it pass beneath the artery, and then passed the blunt end of a large needle, threaded with a stout piece of silk, along the groove of the director. On letting go the forceps blood again came from the wound, so I felt sure I was right, and tied my silk, leaving a piece to extend out of the wound. Both wounds were then washed out and stitched up, dressed with sublimate gauze and cotton, and left alone for a week, when I removed the stitches, both healing by first intention. The thread of silk which came from the artery was pulled off on the tenth day by patient. The day following the operation had slight rise of temperature, which fell at once on giving grs. x of antipyrin. On the eleventh day went to work as ox-driver, feeling, as he said, perfectly well.

To those who have not tried tying this artery, I would like to remind them of one thing which struck me during the operation, viz., that I did not see all those structures which are mentioned as being seen in Grey's Anatomy, nor yet nearly all. Perhaps a better anatomist than myself would have done so, but the artery was tied, the man lives, and still I know not what I was cutting. Needless to say, under like circumstances, I do not want to tie another carotid. Did I do right in tying? What else might I have done?

My other case is perhaps more interesting, and to me more a

surprise than the one above mentioned, as I never expected my patient to recover, in fact told his friends so.

On Nov. 25th I was requested by the chief of police to go out to Canada Grande-i.e., the Big Canon or valley-and see a man who had shot himself. After riding about twenty miles I found my patient, a Senor Tomé, with a bullet wound of the left chest. As to the reasons for the act, they come more under the sphere of the novelist than of the doctor. He was a wellbuilt man of about 175 lbs. weight, and presented two wounds evidently produced by a bullet of large calibre, viz., 45. One, half an inch below and two inches to the right of right nipple, between 5th and 6th ribs; the other, about the same size, on the right side of the middle line, on a level with the 6th dorsal vertebra. A space about four inches in diameter around the first mentioned was burned by powder. The wounds, having been made about thirteen hours previously, were not bleeding, but from the history given by those present had bled copiously for a long while after the injury. Pulse quick, feeble and compressible. Respiration quickened, and at each a whistling sound was heard at the wound in front, accompanied by a gush of bloody, frothy serum. Patient had expectorated blood several times. I diagnosed a wound of right lung, and dressed both wounds antiseptically. Gave vin antimony in five-drop doses every hour, and urged absolute rest without speaking. The following day, dressed wounds and ordered an expectorant mixture of tartar emetic, the chest being dull on percussion around the track of bullet. This treatment I continued until suppuration began. On the seventh day patient was removed to town. After suppuration began on fifth or sixth day I changed treatment to capsules of creasote and an ordinary expectorant mixture, viz., ammon. carb., 4.00; spts. ether. nit. and spts. chloroformi, āā 8.00; tr. scillæ, 4.00; infus. senegæ, 165. M. Tablespoonful t.i.d. This, with the capsules of creasute and an occasional dose of antipyrine or quinine, or a laxative, was all the medicines given. As much as a half pint of pus would be thrown off on many days from the wounds alone, while fully as much putrid matter was expectorated. Eggs, milk, and a good allow-

ance of brandy were taken to keep up strength. On Dec. 12th I removed from wound in back three spiculæ of bone, which I think were from the body of 6th dorsal vertebra. On Dec. 15th I made a counter opening in axillary region, between 7th and 8th ribs, drawing off about a pint of pus. Soon after, wound in back healed, and on Dec. 25th bullet wound in front had closed. Patient at this time was very weak and almost a skeleton. Wound below—i.e., counter opening—still continued to run, but with quantity much diminished and patient gaining strength. Expectoration and cough were also much improved. I now began to have some hopes of a recovery which up to this time the man himself had alone thought of, every one else who saw him expecting him to die. And well they might, for at each respiration the noise of the pus drawn in and out of the wound, the putrid condition of the pus, the skeleton-like visage of the man-all went to make this belief almost a certainty. The condition of the lung itself, on auscultation and percussion, resembled that found in advanced phthisis or emphysema, large bubbling râles being heard nearly all over the lung. On January 2nd I left Patagones for a trip up river, and eventually journied through Chila. On my return about a month ago I found Tomé engaged in a small business, and had him come to my office, where I elicited the following: Counter opening soon closed after my departure, and he got up. Cough and expectoration continued, but gradually decreased. About the middle of January the wound in front, closed before, now opened and ran freely for a few days, then closed till about the last of February, when it opened again and again discharged for a few days. Cough and expectoration have continued right along, but for last fortnight only in mornings. Says he feels as strong as ever, and is fatter and stouter than before he shot himself. He continued both the creasote and cough mixture up to about a month ago, when both cough and expectoration being better, he stopped them. I examined his chest and found, as might be expected, several cavities, which on percussion gave a hyperresonant note, and in other parts of lung an abnormally dull note. Râles are heard in front, but not so marked as in the axilla and behind.

I would call them "large moist râles." Expansion is diminished on right side. All wounds perfectly healed, and in my opinion will not open again, as they are thoroughly cicatrized. I cautioned him against exposure or heavy work, and told him I wished a photograph of the wounds, which he has promised to have taken.

It would please me very much if some of my readers, older and more learned than myself, would comment on and point out what might have been done, also what is to be done should my patient contract a pleuritis, pneumonia, or the present emphysematous condition get worse?

Besides these two particular cases, I have had upwards of forty knife wounds, all of which I dressed with sublimate gauze after thoroughly cleansing and stitching with catgut. In only one did I have suppuration. Of bullet wounds in private practice, I have only seen the one above reported, as the "Sauchers" prefer a knife to any firearm. During my term in the hospital in Buenos Ayres I saw a number of bullet wounds, and perhaps will some day report them, but at present must stop or I will be taking up too much space in your valuable Journal.

To my late teachers and fellow students I wish good health and good luck, while remaining, as always, their fellow-worker.

F. G. CORBIN, M.D.C.M. (McGill, '90).

## Beviews and Jotices of Books.

Massage and the Original Swedish Movements. Their Application to various Diseases of the Body. Lectures before the Training Schools for Nurses connected with the Hospital of the University of Pennsylvania, German Hospital, Woman's Hospital, Philadelphia Lying-in Charity Hospital, and the Kensington Hospital for Women of Philadelphia. By Kurre W. Ostrom, from the Royal University of Upsala, Sweden; Instructor in Massage and Swedish Movements in the Philadelphia Polyclinic and College for Graduates in Medicine. Second edition, enlarged, with eighty-seven illustrations. Published by P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia. 1891.

The first part of this work gives a short, concise and wellillustrated description of the different methods of performing massage, mentioning also its contraindications. The second part takes up the Swedish movement cure of Ling, and gives a representative set of movements to act on the different regions of the body. In a chapter on the physiology of the movement treatment he speaks of walking as an exercise which, "though better than none, is often over-estimated." This is an opinion that is gaining ground with many who give thought to the subject of exercise. Comparatively few muscles are employed in ordinary walking, where the leg swings forward pendulum like and with but little muscular effort; the muscles of the back, on the contrary, are in a constant state of tension, and it is a physiological law that there must be alternate contraction and relaxation to cause elimination of waste products. The author rightly attributes the benefit of walking almost wholly to fresh air.

The treatment of special diseases is taken up in detail, with sample prescriptions of movements, that for habitual constipation being especially good.

In a chapter on Massage Treatment in America, reference is made to the ignorance of the average "rubber," and a suggestion is made that the medical prefession take control of this form of treatment to prevent imposture by issuing diplomas to those who pass a satisfactory examination on its theory and application.

A much-needed piece of advice is given to some masseurs and masseuses in saying that "they should remember that they are only using one special remedy that nature has taught man to employ to arrest disease."

Altogether the book is well written, and gives a great deal of useful and necessary information in a very small compass. As massage and the Swedish movement treatment is sure to assume a prominent place in the treatment of chronic diseases especially, every practitioner and student should have at least the general knowledge of their application and possibilities that will be found in this book.

R. T. M.

Essentials of Physiology, Arranged in the form of Questions and Answers prepared especially for Students of Medicine. By H. A. HARE, B.Sc., M.D. Third edition, thoroughly revised and enlarged. Philadelphia: W. B. Saunders. 1891.

To review a work like this is an unpleasant task, but we shall not hesitate to declare our mind on the nature and tendency of all such books. We believe fully that they are among the greatest hindrances to the advance of medical education at the present day. Already there was one such work in existence, and that was one too many. . Till such books appeared the student must needs read at least a little physiology from some reliable textbook; but now he is encouraged to seek to meet the exigencies of the examination and, worse still, the needs of actual practice with the scanty store of ill-digested facts, without any connection or coherence, gathered in parrot fashion from some such delusive source as the above. The author as good as admits that the system of medical education by short-cuts is bad. Then why not write something to demonstrate this or to produce a better state of things? A man of science should not attempt to serve God and Mammon. Dr. Hare is a writer of enough ability to have chosen a nobler course, and we expected better things from him.

Age of the Domestic Animals. Being a complete Treatise on the Dentition of the Horse, Ox, Sheep, Hog and Dog, and on the various other means of Determining the Age of these Animals. By Rush Shippen Huidekoper, M.D. Illustrated with 200 engravings; 200 pp., 8vo. Philadelphia and London: F. A. Davis, publisher. 1891.

We thoroughly agree with Prof. Huidekoper that there is an undesirable dearth of practical books on the domestic animals, at all events good ones based on a scientific foundation. In this and in comparative pathology there is a wide field to be tilled and a great want to be met. Perhaps the want is not so keenly felt as it should be. In fact, we fear that the veterinary profession has not yet been aroused to a due sense of its great importance, and we scarcely expect this till the professions of human and that of comparative medicine come more closely together.

The present work will be very useful to both lay and professional readers, and supplies one of the many needs of the veterinary profession. The author does not pretend to much originality, a minor matter in this case; and no doubt in the next edition this will be improved and also the make-up of the book, which, though fair, is not all that can be desired, though probably all that could be provided at the price. It is a great advantage for any one, lay or professional, to find what he wants in a single book; especially is this so with busy men who have little time for research. This is a work that we can recommend to all who are practically interested in the domestic animals, whether professionally or not.

W. M.

Traite Pratique de Matiere Medicale Therapeutique et de Toxicologie. Par H. E. Desrosiers, M.D., Professeur de Therapeutique à l'Université Laval, Professeur de Matière Médicale au Collége de Pharmacie de Montréal, Médicin de l'Hôpital Notre Dame. Montréal: J. M. Valois, Libraire-Editeur. 1892.

We heartily welcome this the first work of any importance in medicine published in the French language in Canada. The reasons for its appearance are much stronger than can be ad-

vanced for a number of recent works on the same subject published in English. As many French physicians and students are not thoroughly conversant with English, it is but natural that they will gladly welcome this volume, and prefer it to works on the same subject edited in France. As the English system of weights and measures are only legal in Canada, it follows that there is always a great inconvenience experienced by both practitioners and pharmacists in converting the metric system of France into the English equivalent. The plan adopted by the author is the one commonly followed by most authors of recognized works on materia medica and therapeutics. We have first a description of the channels through and by which agents reach the blood, the changes they undergo in the organism, and the channels through which they leave it. About forty pages are devoted to the physiological classification of medicinal agents. The bulk of the work is taken up with a description of drugs considered alphabetically. We have to congratulate the learned author on the clearness, conciseness and accuracy which he displays in this really difficult field. To fairly present to his readers a just and accurate account of the state of pharmacology and therapeutics of the present day is a most difficult task for any author to accomplish. It requires great knowledge of his subject and of the wants and aims of both students and practitioners. The literature of the present time teems with articles innumerable on this subject: few are good, the vast majority are trashy beyond consideration. Unfortunately an author has to wade through all this mass, be it good or bad, and frequently great care is necessary to prevent his pages from being overloaded with worse than nonsense. The author, however, has, as far as we can judge, been very judicious in his selections. Naturally the references to French literature and authors holds a prominent place, but, unlike French authors in general, Dr. Desrosiers has not forgotten that much that is valuable and permanent in this subject has been contributed by physicians not residing in France. We conclude by congratulating both authors and publishers in having produced a work that will redound to the credit of the country.

Diphtheria: its Natural History and Prevention.

Being the Mibroy Lectures delivered before the Royal
College of Physicians of London, 1891. By R. THORNE
THORNE, M.B. London: MacMillan & Co. 1891.

Diphtheria, a disease of such general interest, has in this volume been ably treated by the author from the standpoint of its natural history and prevention. In detail, the subject has been dealt with under the following heads: The researches of original investigators; statistical enquiries-which are very extensive; the nature of the disease under consideration; the relation of scarlet fever to diphtheria and the relation of faulty sanitary circumstances to this disease; and the predisposing influence of season, sex, age, etc. Milk, as a vehicle of disease and the diffusion of diphtheria through its agency, has been carefully considered. Methods of prevention, namely, isolation in hospitals and in dwellings; school restriction and school closure; exclusion of scholars; the disinfection of dwellings, clothing, sputa, etc., are thoroughly discussed in chapter V. The results of these investigations are well summarized at the end of the work. For a complete resume of the subject of the natural history and the prevention of diphtheria this work stands alone; and those seeking information upon these points will be amply repaid by a perusal of this volume.

A Treatise on Practical Anatomy for Students of Anatomy and Surgery. By Henry C. Boenning, M.D., Lecturer on Anatomy in the Philadelphia School of Anatomy, etc. Philadelphia: F. A. Davis.

We fear the author of this work has not succeeded in presenting anything of value to the student of anatomy. The various sections are discussed under the heads of bones, joints, ligaments, etc., so that the work is rendered useless as a dissector's guide; and the individual sections are so imperfectly treated as to give them no value for reference as a text-book. The muscular system is arranged in tabular form under the stereotyped heads of origin, insertion and nerve supply. That it is of any importance to recognize their action or their relation to other

structures does not seem to have even dawned on the author's horizon. On turning to the description of the viscera, all we find about the position of the kidney is that it lies between the iliac crest and the last rib, information which the average outdoor patient could probably supply with rather more accuracy. Several pages are devoted to the histology of this organ, and this is only an example of how unevenly the work is divided. Almost all the figures are borrowed from one or other of the standard works, and are unacknowledged. The printing and binding leave nothing to be desired, and we can only regret our inability to bestow the same praise on the text.

Syllabus of the Obstetrical Lectures in the Medical Department of the University of Pennsylvania. By R. C. Norris, M.D. Second edition. Philadelphia: W. B. Saunders. 1891.

This syllabus of Professor Hirst's lectures has been prepared for the use of his class to meet the difficulty of accurate note-taking, so trying to most students. It is not a cram-book, and can only be of service to one who has carefully followed the course of lectures or is well up in the subject. It would be of service to teachers or to advanced students preparing for examination. The book is well got up, and interleaved so that it may serve as a note-book in a class.

The Johns Hopkins Hospital Reports. Report in Pathology. Amobic Dysentery. By Wm. T. Councilman, M.D., and Henri A. Lafleur, M.D. Baltimore, December, 1891.

The term dysentery has been applied to so many widely different affections of the intestines that a classification on an ætiological basis must be welcomed as a marked advance in our knowledge of this disease. In this article the authors make a very strong case for the amœba as the exciting cause of a class of cases occurring endemically and identical with tropical dysentery. The work is based on a study of some fifteen cases occurring in the Johns Hopkins Hospital. Amœbæ were constantly present in the stools, often in enormous numbers, and were also found in the contents of hepatic and hepato-pulmonary abscesses and sputum during life. Clinically the cases were characterised by some muscular weakness, a dry, sallow skin, anæmia, normal or slightly elevated temperature, a somewhat increased pulse rate, characteristic stools, tenesmus and usually a retracted abdomen. Pathologically the cases correspond to those described by Fagge as catarrhal dysentery, the large intestine being thickened, frequently adherent in chronic cases, and marked by gelatinous infiltration and nodular elevation of mucosa and submucosa, and later, ulcers characterised by marked undermining of their edges. Abscess of the liver was also of frequent occurrence. The absence of the amœba is also pointed out in various forms of ulcerative colitis, and diphtheritic dysentery is also looked upon as a distinct affection and not due to the amœba, although no very definite evidence of this is presented.

The intestinal lesions have been carefully studied by sections, and amœbæ found present in the gelatinous infiltrations and in the base of the ulcers, chiefly in the submucosa. The authors deny the usually received view that the disease begins in the solitary follicles, which were either normal or affected secondarily by extension of ulceration. The view adopted is that the amœbæ enter the intestine, probably by drinking water, penetrate the mucosa, and on reaching the submucosa set up necrosis and softening, accompanied by gelatinous swelling and followed by ulceration. The small intestine it not affected, as the amœbæ only thrive in alkaline media.

In the hepatic abscesses pus cells were remarkable by their scarcity, the fluid being often very viseid and containing a good deal of fatty and granular material. Another remarkable change noted was necrosis of the liver cells about the central veins, not only in the neighbourhood of the abscesses, but diffused through the liver. A suggestion is thrown out that the changes in the liver after residence in the tropics may be of this nature.

Pus-producing cocci and other forms of bacteria were present in some cases, but not in all. Certain cocci produce inflammatory infiltration of the base of the ulcers and in the tissues in which they are found. In cases in which they are absent these changes are not found, although the peculiar necrotic and gelatinous changes are present.

The conclusions of the authors are :-

- (1) Amœbic dysentery is a form which ætiologically, clinically and anatomically should be regarded as a distinct disease.
- (2) a. The amœbæ dysenteriæ has been shown to be the causative agent from its constant presence in the stools and in the anatomical lesions, and also from inoculation experiments of Kartullis (in dogs). b. Clinically the disease is characterised by the presence of amœbæ in the stools, which in addition present physical characters different from those seen in the stools of other forms of dysentery, as noted above; by a variable onset, course and duration of which the special features are periods of intermission alternating with exacerbations; and by a marked tendency to chronicity, with the production of a greater or less degree of anæmia. c. Anatomically the discase is characterised by the production of ulcers in the colon which generally differ from these found in any other form of dysentery. The ulcer is produced by infiltration of the submucous tissue and necrosis of the overlying muccus membrane, the ulcer in consequence having the undermined form. Frequently, in addition to the ulcers, there is infiltration of the submucous tissue without ulceration. In all of the lesions, unless complicated by the action of bacteria, there is absence of the products of purulent inflammation.
- (3) Abscess of the liver, with or without involvement of the lung, is a frequent complication, much more so than in any other form of dysentery. The involvement of the lung may early follow hepatic involvement, and be detected by the occurrence of amœbæ in the sputum before there is evidence of liver abscess. These abscesses differ in their anatomical features from those produced by other causes. The chief difference is found in the absence of purulent inflammation, the abscess being caused by necrosis, softening, and liquefaction of the tissue. In these liver abscesses the amœbæ are not associated with any other organisms.
- (4) The disease is widely distributed, and is found in most countries in Europe, in most parts of the United States, and in the tropics everywhere.

(5) This is the form of dysentery which has been commonly called tropical dysentery.

A bibliography and a summary of the views of various authors on dysentery is included, and the whole article forms a very complete and lucid exposition of the clinical and pathological features of the disease. The anatomical processes are illustrated by several beautiful plates.

# Annual Report of the State Board of Health of Massachusetts.

The very valuable series of publications issued by the Massachusetts State Board of Health in the interests of State Medicine is represented in the present volume by a report of more than ordinary interest. A discussion of the water supply is given great prominence. Since 1874 this important question has been presented with great thoroughness, and the yearly examinations are made to include cities and towns, as well as all possible sources of supply throughout the State. Of scarcely less interest are the official reports upon Food and Drug Inspection, Health of Towns, the Growth of Children studied by Gatten's Method of Percentile Grades, and a Summary of Weekly Mortality Reports. The thorough and systematic work represented in these publications might be advantageously prosecuted in other communities.

## Society Proceedings.

## MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 20th, 1891.

F. BULLER, M.D., PRESIDENT, IN THE CHAIR.

Fibroma of Uterus.—Dr. T. F. ROBERTSON (Brockville, Ont.) exhibited the specimen and read the following report:

The patient, Mrs. B., aged 40, complained of excessive menstrual discharge, profuse leucorrhœa, great irritability of bladder, neuralgic pains down thighs, and mental depression.

History.—Began menstruating at 15; was always painful In later life, after any undue exertion, she was liable to have flowing without reference to menstrual period. About a year ago she came under the care of Dr. McGannon (Brockville), when a diagnosis of fibromata of uterus was made. Electricity in the form of galvanism and electro-puncture was used with little or no effect. The symptoms would be relieved for a time under medicinal treatment, but she was progressively becoming emaciated and more anæmic. She was greatly depressed mentally, repeatedly expressing the wish to have something done. It was decided to remove the ovaries and tubes. From the severe symptoms while under observation it was thought considerable difficulty would be encountered. She was operated upon Nov. 14th. The ovaries and tubes were found matted together and bound down by firm adhesions, preventing their removal. Supra vaginal hysterectomy was decided upon and done according to Hegar's method, the stump being attached in the lower angle of the wound, as shown in the frontispiece to the New York Medical Record for Oct. 10th. The patient has gone on without any untoward symptoms.

Was the operation justifiable? I cannot do better than quote from a paper read by Dr. Price of Philadelphia before the section of Gynæcology and Obstetrics of the American Medical Association, held in Washington in May last, in which he says: "Another point here to be insisted upon is that the size of the tumour

sometimes-nay often-has comparatively little to do with the urgency of the conditions necessitating operation. A moderately large symmetrical tumour may cause little trouble, because in its growth it has risen uniformly in the pelvis, and its presence is not more irritating than the fœtal head. Given, however, a pelvis-bound fibroid, interfering with all the pelvic organs, together with the pelvic circulation, the situation becomes the most urgent possible. The urgency is still further increased if the tumour be not regular, but nodular, containing cysts or excrescences of various degrees of hardness and size. are the tumours that are anomalous, and can as little be determined without actual exploration as the jungles of Central Africa. They defy exact definition, and the surgeon can promise nothing as to their removal until they are seen and felt. In such cases the removal of the appendages is often impossible, and often more dangerous than the removal of the entire uterus with its appendages."

Enchondroma of the Ilium.—Dr. Shepherd brought before the Society the young man whom he had shown at a previous meeting (Oct. 23rd), and who was the subject of a very large enchondroma of the ilium, and which had in the meantime been removed. The operation was found to be much less difficult than had been anticipated. An incision 18 inches long was made over the tumour, which was found to be attached chiefly by a pedicle to the crest of the ilium, and was removed by chiseling. There was a good deal of shock after the operation and a considerable amount of oozing, which necessitated the removal of the dressings and the plugging of the wound, but since then the patient has made a rapid recovery.

DR. LAFLEUR exhibited the tumour and stated that it consisted of pure hyaline cartilage. When fresh it was seen to consist of a structureless basis in which were imbedded cells, arranged in pairs and surrounded by a capsule. In some sections strands of fibrous tissue could be seen running through the matrix. In places the tumour had undergone cystic degeneration, and towards the pedicle there was calcification, but no true osseous tissue could be discovered.

The President asked if a tumour of that size and in that position had ever been removed before.

DR. SHEPHERD, in answer, said that an almost identical case was figured in Bryant's Surgery.

Friedreich's Disease. - DR. JAS. STEWART presented a wellmarked case of Friedreich's disease or family ataxia. The patient, a young man aged 21, a native of Portage-du-Fort, Que., is one of a family of six, consisting of three sisters, all of whom are similarly affected, and two brothers, who are perfectly well. His mother is alive and well. His father, who died at the age of 50, had some difficulty in walking, but it is very doubtful if he suffered from this disease. The symptoms first appeared at the age of six, and have recently become more marked. There is ataxia not only of the lower but of the upper extremities; the muscles of the tongue are also affected, the speech being syllabic; knee-jerks are absent. He has talipes equino-varus and curvature of the spine. There is an absence of nystagmus and other eye symptoms, bladder and sensory symptoms which serves to distinguish this disease from Tabes. The disease is due to a lessened or shortened indurance of certain tracks of the spinal cord. The postero-internal columns become degenerated early and very markedly.

Speaking of the occurrence of the disease, Dr. Stewart said that this case (including the three sisters) is the one hundred and eightieth that has been reported, by far the larger number being from America. It is also a noticeable fact that a great proportion of the cases reported in America are females.

DR. MILLS cited a comparative case. A bitch had ataxic symptoms of the hind legs, hyperæsthesia, and some weakness of the urinary apparatus. Whether these symptoms were from loss of power or true ataxia it was difficult to determine. She died, and at the autopsy the brain and spinal cord were found a good deal injected, but no appearances to account for the symptoms. Ataxia is not very common in dogs, but fairly common in the horse. Dr. Mills also related some comparative cases of tumours. The first, a black and tan terrier, had a large tumour in the mammary gland which proved to be an adenoma, a form

very common in dogs, and which usually kills them. The second case was a black and tan bitch, aged 14 years. A tumour had been removed from her neck some time ago. Three weeks ago Dr. Mills saw her again; this time he found a large, rapidly-growing tumour low down in the mammary region and weighing one-sixth of the weight of the dog. She failed rapidly and died before an operation could be performed.

Total Extirpation of a Pregnant Uterus for Cancer of the Cervix.—Dr. Wm. Gardner exhibited the uterus and ovaries of a pregnant woman, aged 26, and gave the following history of the case:—

L. C. came to the out-patient clinic of the Montreal General Hospital complaining of repeated hemorrhages during the previous ten days. She had borne an illegitimate child several years previous. She had been married a few months, and was now pregnant four months. On examination, there were all the physical signs of pregnancy and unmistakeable cancer of the vaginal portion of the cervix, extending to the adjacent roof of the vagina and infiltrating the supra-vaginal portion. The patient was admitted to the gynæcological ward and examined by Drs. Alloway, J. Chalmers Cameron, and Armstrong, who each agreed in the diagnosis and in the propriety of a radical operation. The condition and prospects being explained to the patient, she consented to the operation. The procedure was as follows: The abdominal wall and vagina were thoroughly washed with soap and warm water, then with peroxide of hydrogen, and finally with 1-1000 sublimate solution. The abdomen was then opened, the uterus turned out, and the broad ligaments tied off outside the ovaries with strong catgut, as low as possible; an Esmarch was firmly applied around the cervix as low as possible, the uterus incised, the fœtus extracted, and then the uterus amputated. The cervical canal was then cauterized with Paquelin's cautery. The extirpation of the cervix was effected by tying and cutting the broad ligaments as low as possible; Eastman's grooved staff was then introduced within the vagina and made to project the floor of Douglas' pouch. An incision with a scalpel easily opened the vaginal roof. The subsequent steps of the operation were

the tying and separation of the vaginal attachments of the uterus by means of a curved needle held in the jaws of a needle-holder guided by the left index finger, passed through the opening leading to the vagina. The separation of the bladder was easy. Catgut was used for all but the last ligatures, which were strong braided silk. The catgut ligatures were cut short, but those of silk were left long and turned into the vagina. The vaginal vault was loosely closed by three catgut sutures. The operation was completed by washing out the abdominal cavity, the insertion of a drainage-tube and the closure of the abdominal wound as in ordinary ovariotomy, and finally by tamponing the vagina loosely with iodoform gauze. The drainage tube was removed in twenty-four hours. Recovery was smooth and rapid, the patient leaving the hospital in less than four weeks. The operation was done in the Trendelenburg position, which greatly facilitated the numerous manipulations.

DR. ALLOWAY was associated with Dr. Gardner at the operation, and considered that the most difficult part in the technique was the last, that of the removal of the cervix. Great care had to be taken to escape the bladder while at the same time get as much diseased tissue as possible inside the ligatures. He felt that a more rapid and safe procedure would be to attack the cervix through the vagina.

DR. SHEPHERD asked if a microscopic examination of the growth had been made before the operation.

The President asked if it was not strange that a woman in this condition should become pregnant.

DR. GARDNER, in reply, said that no microscopical examination had been made. But it would not have altered his decision even if such an examination had been doubtful, for the clinical features were so well marked. In answer to Dr. Buller, he said that the disease had probably grown very rapidly since impregnation owing to hyperæmia.

A Warty Growth of the Anus.—Dr. James Bell exhibited a photograph of a warty growth surrounding the anus of a young man of 20. It had first appeared five months ago as one small wart. It had increased rapidly, and was limited to the edge of

the anus, there being no extension into the rectum. In character it is identical with the growths of venereal warts found on the corona in the male and the labia in the female. Such a condition, in a male and apart from extension from the genital organs, was, in Dr. Bell's experience, unique, and, as far as he could find out, there was no special reason for its appearance. It was removed by the cautery.

A Case of Umbilical Facal Fistula in an Infant; Cured by Operation. - Dr. Shepherd read the notes of this case. A male infant, aged three months, had a projection about an inch long at the umbilicus which was red and moist, looking very much like everted mucous membrane. In the centre of tois projection there was an opening from which liquid fæces escaped, and into which a probe could be easily introduced. The abdomen was opened and the fistula was found to be due to a diverticulum from the ileum (Meckel's diverticulum), which had remained patent in the umbilical cord and had been cut through when the ligature came away a few days after birth. The projecting portion of the bowel was removed and the opening in the intestine closed by a double row of continuous sutures,-the deep row passed through the muscular and mucous coats, and the superficial row through the peritoneal coat only, after the manner of a Lembert suture. The infant made a complete recovery, and when last heard of was well and strong.

Salpingitis and Pyosalpinx.—Dr. Armstrong then read a paper on this subject. (See page 493.)

Discussion.—DR. W. GARDNER agreed with all that the reader of the paper had said. The danger of delay in such cases is obvious. He had seen the last case mentioned in consultation, and as her symptoms had improved he advised delay. Those who see many of these cases come across some which have all the symptoms and physical signs of the disease which recover and remain well for years, while others with exactly the same symptoms do badly. It is a very difficult question to know exactly what to do; and for this reason he sounded a note of warning against the too frequent resort to surgical treatment.

DR. ALLOWAY spoke of the extreme difficulty of diagnosing

salpingitis beforehand, of determining whether the patient has pus-tubes or not. He had operated on cases where the whole pelvis was one matted mass, with hæmatoma or abscess of the ovaries but tubes healthy. In the case of a healthy woman, whose history Dr. Armstrong gives, who, after making a good recovery from confinement, takes suddenly ill and dies from the rupture of a pus-tube, the question arises—When did that pus originate? Is it not possible that it may have originated after impregnation, when the slightest tendency to inflammation might lead to abscess.

DR. SHEPHERD asked if all these cases originated in gonorrhoea. He was rather startled by Dr. Armstrong's advice to "extirpate the viper when young," for the mortality would be greater if the operation was performed by men not accustomed to it.

DR. ARMSTRONG, in reply, said that the diagnosis was anything but easy. He makes a complete examination, under ether if necessary, and by taking all the subjective and objective symptoms that may arise into consideration, a fairly accurate diagnosis may be arrived at. If the condition cannot be determined, an exploratory incision becomes necessary. The question of when does the pus arise? is a very difficult one to answer. The disease may extend over long periods of time under varying conditions. Whenever there is distinct evidence of pus, the sooner it is removed the better.

Stated Meeting, December 4th, 1891.

F. BULLER, M.D., PRESIDENT, IN THE CHAIL.

New Members.—Drs. T. F. Robertson of Brockville and J. V. Anglin were elected members.

Mitral Stenosis.—Dr. Lafteur exhibited the organs from a case of mitral stenosis, which illustrated, in addition to the cardiac lesion, the various secondary changes. The heart was dilated, the cavities being full of soft clots. It was also hypertrophied, the dilatation exceeding the hypertrophy, especially

on the left side. The hypertrophy was most noticeable on the walls of the left auricle, the average thickness being four millimetres or three times the normal thickness. Marked changes were seen in the mitral valve, the orifice being reduced to a button-hole opening, which barely admitted the tip of the little finger instead of at least two fingers. On the aortic semilunar valves there was an acute endocarditis engrafted on the old disease; the same was seen, but in a lesser degree, on the pulmonary semilunar valves. The mitral and tricuspid valves showed no signs of recent endocarditis. Right lung contained several typical hemorrhagic infarctions, the rest having a mottled appearance of a brownish-red tint, and is an example of brown induration due to the stagnation of the blood in the lungs. In the pulmonary artery there was found an adherent thrombus filling the branches going to the lower lobe. The left lung showed brown induration and typical pressure atrophy; at the root there was distinct evidence of an old infarction, which was decolourized. Histologically there is a large increase of the interlobular connective tissue; it is a typical catarrhal compression of the alveolar cells best known as chronic desquamative pneumonia. The liver showed the changes due to stagnation, the characteristic nutmeg variety. The spleen was not large and dark, as would be expected, probably on account of it being bound down by adhesions.

DR. JAS. STEWART related the clinical history of the case. The origin of the endocarditis was doubtful. The girl never had suffered from rheumatism, but had had a violent attack of chorea at the age of seven, there being no articular pains as far as she could remember. The physical signs were characteristic of the disease; a rough præsystolic murmur heard solely in the mitral area, and not propagated in any direction. Before death the physical signs of pulmonary consolidation were very evident.

Chronic Alcoholic Poisoning.—DR. JAS. STEWART brought before the Society a man suffering from a train of very marked mental symptoms, together with certain sensory, motor and reflex symptoms. There had been mental depression for several months with perverted sensations, especially of the extremities. Very

fine tremors of the hand and to a slight extent of the tongue; also an irregularity of the furrows of the brow. There is absolute loss of knee-jerk, and at the time of his entrance to hospital he had been quite ataxic. His history is one of the neuroses and insanity. Ten years ago he was confined in the Longue Pointe Asylum for three or four months on account of insanity in the form of acute mania, with hallucinations of hearing, of being pursued by his friends, and on more than one occasion made an attempt to injure the attendants. He recovered from this and remained well until last spring, when, after a severe bout of drinking, he again became insane, this time in the form of melancholia unattended with delusion, but accompanied by the other symptoms mentioned.

Referring to the effects of alcohol on the nervous system, Dr. Stewart said that it attacks the two extremes, the cerebral cortex and peripheral nerves, but does not affect the cord to any great extent. The tremor of the hands was due to the motor cortex being depressed, the cells are thus unable to send out lasting impulses. As to the mental symptoms, there may be either mania or melancholia, delusions being frequent with both. Such cases usually recover. The train of mental, sensory, motor and reflex symptoms, as illustrated by this patient, never occur together except in alcoholism.

A Case of Extensive Tuberculosis amenable to Surgical Treatment.—Dr. Bell showed the patient, a little boy of five years of age, who had been found a waif on the wharf two years ago. He was taken to the Montreal General Hospital, when it was discovered that he was suffering from advanced disease of the left hip-joint, with sinuses covering the thigh almost down to the knee. At the time it was thought that nothing could be done for the child, but with care he gradually gained strength, when Dr. Bell decided to operate. He removed the head, neck and great trochanter of the femur, and scraped away the floor of the acetabulum. The wound suppurated for months, but ultimately healed, when tuberculosis appeared in one of the testicles; this was allowed to go on to suppuration, when it was removed. The child had hardly recovered from this operation

when the other testicle became involved and was removed. From that time the child has been free from any manifestation of the disease and has rapidly gained strength. He is now able to run about, wearing a thick-soled boot on the affected limb.

Atrophy of the Stomach.—Dr. Shepherd exhibited two remarkable specimens found in the dissecting-room. They were both found in adult women who had been inmates of the Longue Pointe Asylum. In the first specimen the stomach was found to be greatly atrophied, being smaller than the intestines, and throughout the length of both stomach and intestine there were seen at intervals constricting bands which greatly narrowed the lumen of the canal. The second specimen showed great atrophy of the stomach, but no constrictions.

Dr. Shepherd considered the specimens unique. He had never seen or heard of anything like them. He could give no history of the patients, and could offer no explanation as to their cause.

Diverticulum from the Bladder.—Dr. Shepherd exhibited another dissecting-room specimen, which was a bladder, from the posterior wall of which protruded a remarkable diverticulum. It consisted of a protrusion of the mucous membrane of the bladder through the muscular coat. He could give no history of the case.

Dr. McConnell thought that if the stomach was not used for some time, as is often the case with the insane, the organ would atrophy.

DR. James Stewart stated that there were several cases on record where the stomach never fulfilled its functions, and that digestion took place in the duodenum, some of the cases having lived to a fairly old age.

DR. MILLS did not look upon the cases as unique. He knew of a condition, not unlike the specimens, found in a case of human hibernation (which he hoped to report in detail at a later date). From the appearance of the first specimen it looked as if a portion of the stomach had done its work and become slightly distended, while a portion devoid of function formed the constricting bands. It did not explain the condition to say that it is atrophy from lack of use.

DR. LAFLEUR regretted that the decomposed condition of the specimen precluded microscopical examination, and drew attention to the fact that the constricted portions were very much thicker than the other parts.

Vulvo-Vaginal Cyst.-Dr. ALLOWAY related the case of a young lady who had consulted him four and a half months ago for an enlargement of the left labium majus. This, he thought. was a vulvo-vaginal cyst, though it presented characters unlike those usually found, and did not appear to be just in the proper position. It was oblong in shape, running up the side of the labium to the level of the opening of the meatus, and was soft and fluctuating. At the operation he found no definite cyst-wall, but a ielly-like mass which was not mucus but very like myxoma. This he carefully scraped away, and the edges of the wound being brought together healed by primary union. A few days ago she returned, stating that the growth had recurred. Thinking that it might be a return of the myxoma, Dr. Alloway advised removal, to which the patient consented. A tumour was found, but in a different position to the former one, it being in a line with the posterior vulvar opening. This was removed by careful dissection and was found to be a true retention cyst of Bartholini's gland. On attempting to pass a bristle through the duct it was found to be occluded by the cicatrix of the previous operation.

Hæmatoma of the Fallopian Tubes.—Dr. Alloway exhibited the specimen, removed from a patient who had been complaining of extreme pelvic pain, menorrhagia and sterility since the time of her marriage six and a half years ago. Commenting on the case, Dr. Alloway said that until quite recently this condition was supposed to occur only in tubal pregnancy, but now it is known that it may be produced by any inflammatory condition or excessive congestion.

Hæmatoma of the Ovaries.—Dr. Alloway exhibited two specimens of this condition. The first had been removed from a woman suffering from pelvic pain and menorrhagia. A prominent symptom was nervous tremor, which he attributed to loss of blood and general debility. The appendages were found fixed

in a mass which was removed. The ovaries were perfectly riddled with blood cysts. The second specimen was from a woman suffering from menorrhagia and constant pain, and in whom he had diagnosed a myomatous uterus. There was also subinvolution of the tubes.

In all these cases he had used catgut instead of silk for ligatures, and had found no evidence of want of strength.

Total Extirpation of the Uterus for a Myoma .- DR. WM. GARDNER exhibited the specimen of a large myoma on the posterior wall of the uterus from a woman, aged 50, who had been suffering from profuse hemorrhages, having bled almost continuously during the summer. He had diagnosed the tumour several years ago, and its growth had been slow. There was nothing peculiar about the case, but he wished to speak of the method of operation. He had removed every part of the uterus through the abdominal incision by the method explained in detail at the last meeting of the Society. He had used catgut for ligatures, and considered that it had great advantages in pelvic surgery. Silk ligatures may become infected from contact with the drainage tube, and act as a constant source of irritation until they come away, while catgut holds just as well, and if it should be infected by contact with the drainage-tube it is a small matter as it is so quickly absorbed. He thought that the severe pain so often complained of after the removal of the appendages was due, to a certain extent, to the persistent constriction of the pedicle by the silk ligature.

DR. ALLOWAY assisted Dr. Gardner, and thought this method would be the one of the future. The operation would be very difficult if the abdominal walls were large and thick. Another disadvantage was the enormous amount of physical endurance required on the part of the operators, for the operation was undoubtedly the most difficult in pelvic surgery, but it offered the great advantage of leaving no sloughing tissue behind.

DR. McConnell did not agree with Dr. Gardner's explanation of pain after removal of the appendages. He did not think that the constriction of the ligature could last long enough to produce the pain.

Tumour from Oviduct of a Hen—Dr. Mills exhibited the specimen of a caseating tumour about the size of a large turkey's egg which he had removed from the oviduct of a hen. The hen had been out of sorts for several weeks and the tumour was discovered, the whole process lasting about eight weeks. This apparently rapid growth corresponds with the brief period of growth and development and the short period of usefulness of a hen's life.

A Case of Meningitis following Middle Ear Disease.—Dr. Springle read the history of this case, as follows:

The patient, a female of 35 years, gave a history of suppurating disease of the right ear for some years past. More or less acute pains on that side of the head were supposed to be of a neuralgic nature. These were always relieved when a discharge took place from the ear. One day in June last the patient began to suffer from pain over the right side of the head, which subsided towards evening, and the patient enjoyed a good night's At three o'clock in the afternoon of the following day she was seized with violent pain in the above situation; this was followed by violent general convulsions, and when the patient was first seen the case presented the characteristics of a most violent case of acute meningitis. The condition lasted for twelve hours from the time of onset, and the patient died. At the autonsv. the dura was found to be adherent intimately to the calvarium. A condition of acute meningitis obtained. A perforation measuring 10 mm. in its horizontal diameter and 15 mm. in its vertical diameter, and its cavity occupied by a slough, was found in the posterior surface of the petrous bone, 15 mm. from the internal auditory meatus and encroaching on the groove for the lateral sinus. The dura was lifted up from the bone here but no thrombosis of the sinus existed. A probe passed from the perforation through to the external auditory meatus. A further examination of the body was not permitted by circumstances., This is to be regretted, as a soft blowing systolic murmur was to be heard during life over the mitral and aortic areas of the This condition was observed in a similar case before this Society, some two years ago, in which some suspicions of ulcerative endocarditis were entertained.

The PRESIDENT said that whenever fatal symptoms have ensued so rapidly on chronic ear disease, death has uniformly resulted from diffuse meningitis. He had never seen the more chronic form. It is quite consistent to assume that there may have been a previous localized meningitis from which the patient recovered. We never know how far a lesion extending from the ear to the cranial cavity has gone or will go. Such a rapid case as this one is rather rarely met with.

### CANADIAN MEDICAL ASSOCIATION.

The following discussion on some points in the President's address took place at the recent meeting of this Association:—

Dr. Bray (Chatham) dwelt on the duty of every medical man in the Dominion supporting the Association, and thought this end might be best attained by adopting the President's suggestions. The meetings might be held biennially, and a strong appeal made to the different provincial associations to co-operate. Another point which might be discussed appropriately now was the advisability of altering the medical acts of the different provinces with a view to securing a uniform standard of medical education throughout the Dominion. This difference at present prevents any medical reciprocity between the medical colleges.

DR. MOORE (Brockville) commented in favourable terms on the fifth year lately added to the medical curriculum in the Ontario schools, showing that in this matter we were only following the lead of the mother country, whose distinguished representative (Mr. Bryant) he was delighted to see on the platform. But what we want is more clinical work, not an increase of the didactic lecture burden.

Hon. Dr. Sullivan (Kingston) hoped the meeting would not decide hastily to postpone the meeting for three years, as in that time all interest might be dead. Fixing on Ottawa would cap the climax, because it has none of the advantages a city like this has as a permanent place of meeting. He thought the depression was only a temporary one, and that the old way was still the best. All the support of these meetings comes from west

of Montreal, and the meeting at Quebec even had been a failure. Why our French-Canadian confrères had not taken kindly to this Association was a mystery; certainly it could not be due to lack of abllity, but still the fact remained that they had not. The formation of active provincial societies, like that of Ontario, was the only way to remedy this apathy. He felt convinced that if the meeting did not take place for three years, and then meet in Ottawa, it would only be to hold a post-mortem on the defunct Association. Referring to the Ontario Medical Act, the old one had worked well, but it was found that the supply was getting in excess of the demand, and therefore to prevent overcrowding in the profession they had added another year to the medical course. And now they were talking of exacting a preliminary examination equivalent to the B.A. degree. The United States is following us in this matter.

Dr. Harrison (Selkirk, O.), speaking as a delegate from the Ontario Medical Association, did not think that because the Toronto meeting was a success it followed that Ottawa was the best place. Montreal might do, but not Ottawa. The success of any meeting depended on the facilities any place offered, and not on the geographical position of the place itself. He felt that it would be a great mistake to decide on such a change this year; perhaps next year we would be in a position to decide.

SIR JAMES GRANT (Ottawa) approved of the action of the Ontario Medical Council in adding a fifth year to the course, as tending to elevate the standard and prevent overcrowding. He thought it a pity that we should have to discuss the chances of life of the Dominion Association in its twenty-fourth year. It does us all good to meet our fellows, yet the attendance at these meetings is not worthy the Association. Why should we not have medical federation on this continent and medical reciprocity in the widest sense of the term. As Canadians we should have no cause to be ashamed of our products, for one of our men (Drawosler) is now at the head of the best scientific medical institution in the United States, and our students always take a good place across the border. In such a scientific federation we could take our proper place.

MR. THOS. BRYANT (President Royal College of Surgeons, London, Eng.) was greeted with prolonged applause on rising to speak. He said he was afraid that much he might say would sound flat and commonplace. He was charmed to find that the additional fifth year was up for discussion, and he could not help thinking, as he listened to-day, that he was sitting at his own Board-meeting some years ago when the same subject was before. He had heard the very same arguments pro and con over again, but they had got the fifth year and it was a success, and he was glad this country was following. Their experience might benefit us now, and he would therefore give it. The first defect they set out to remedy was the want of a good preliminary education, and an able committee are at present at work on that subject, and will doubtless soon devise some method of raising the standard. In this country you have a sufficient number of universities to justify you in demanding some literary degree. Every man wishing to study medicine should be at least an educated man to begin with; and if to this you add the technical knowledge of his profession, you have a true scientific man. We have therefore a right to look for literary excellence in the answers to examination questions; but how seldom do we find it. In this respect you even have the advantage of us, for a university course here costs less than it does with us. The examination questions, too, often do not indicate the standard of education, because although they may be quite difficult enough, yet the student may be only required to attain 50 or 30 per cent. This should not be. The true work of the of the total marks medical course should begin with anatomy and physiology, to which the first two years would be devoted. Chemistry and physics should be in the preliminary course, and taught in all higher schools. Next comes in our fifth year question, and let us fully understand what we mean by a year. Here, I understand, it only means six months! This should not be so, and is a great blot on the medical course you give. Let a medical year consist of nine months, and let us have five such years. After passing his primary subjects (anatomy and physiology) a student is ready for clinical work, which is the summit of knowledge.

Now, two years is all too short to devote to this, and hence we have added a fifth year to this kind of experience, which is of such value that we most heartily recommend it to you. Regarding the question of allowing the student to put in the extra year in some hospital, or with a private practitioner, it would be necessary to get a certificate which the licensing board could accept. We do not accept the certificate of every or any licensed practitioner, but name those whom we will accept, and to get on this list the practitioner must show that he is in a position to really teach the student something, who in turn would pay the practitioner a regular fee for such instruction. This system has worked well with us, and we heartily recommend it. The multiplicity of diploma-granting bodies here is an anomaly which you cannot too soon do away with. We found it so, and we have changed, and now we no longer divide surgical from medical knowledge in our licenses any more than we ever did in our teaching. You, too, should combine, and get one licensing board for the whole Dominion. Take picked men from each medical school, and form a conjoined Board of Examiners. As an examiner in London I have had many opportunities of testing your students, and can testify to their excellence; but you would be better still if you only gave the examiners one term, thus excluding men with "hobbies," and removing any inducement the student might have to cram up for some special examiner instead of laying up a store of good and useful general knowledge. Regarding the question of your Society, let every local society be branches of the central one, bound to send delegates to the central meeting, there to elect a president and select the proper place or places for meetings; and by all means choose a clinical centre as a place of meeting. (Applause.)

DR. BROSSEAU (Montreal) said the French-Canadian doctors were anxious to take part in the meetings, and could easily do so on the plan suggested by Mr. Bryant.

### Sclections.

Autumnal Typhoid.—There is much reason to fear that the autumnal increase in the prevalence of typhoid fever, which long experience has taught us annually to expect, is this year of more than average severity. There are few things about the infectious fevers more striking than their seasonal prevalence. We know that some—such as typhoid fever and diphtheria are due to infection by specific microbes, and we surmise the same to be true of all. We know also that the insanitary conditions which favour the spread of the infective principle of typhoid fever are always present, in March and April, as widely as in October and November, yet the number of cases in the former months is scanty, in the latter large. The fact is so well known that it is hardly necessary to prove it; but if further proof is wanted, it may be found in the Statistical Report of the Metropolitan Asylums Board published this week. The admissions of patients suffering from typhoid fever have been recorded month by month since 1872: the numbers, it is found, have fallen to the minimum three times each in March and April, five times in May, seven times in June, and once in July; they have risen to the maximum once in September, eleven times in October, six times in November, and once in December.\* In tropical

Deaths from Typhoid Fever 1891. 28 Principal English Towns. Dublin. Week ending August 22 " " 15 ... " " " " " čE 29 4234353957 44 66 September 5 ..... .. " " 16 " 46 " 26 ..... 22 ٤. October " 44 " " " u " u 66 ٠, " Ç " 22 November 7 ..... u 14 ..... 59

<sup>\*</sup>The figures for this year are not yet available, but some indication of the severity and prolonged character of the present prevalence may be gathered from the following table of deaths:—

and subtropical regions the hot months are the typhoid season. A great deal has been done by improved sanitary administration to check the spread of typhoid fever, but clearly we have not vet touched the causes that lead to this seasonal prevalence. which, in spite of the diminution in the number of cases, still shows itself so clearly in the statistical returns. In what direction are we to seek our clue? In the first place, it must be remembered that the period between infection and the development of the first symptoms cannot be set down at less than a fortnight on an average, and that the onset of the disease is so insidious that the sufferer seldom seeks advice until the disease has been on him for several days, perhaps a week-that is to say, about three weeks after the entrance of the infective principle into the system. We are therefore safe in concluding that the majority of patients are infected in September, and generally in the last weeks of September, that is, at the end of the summer, if we count the summer to be in Europe, as we very fairly may, July, August and September.

Eberth was the first (in 1880) to place the theory of a typhoid bacillus on a sound basis, and his researches have been confirmed in every particular and extended by Koch, Meyer, Gaffky and The bacillus is a short rod-shaped organism, which is others. found in the diseased organs arranged in radiating or retiform It will grow on nutrient gelatine at ordinary temperatures, forming in twenty-four hours a delicate whitish cloud, which under a low power of the microscope is seen to be made up of a number of minute round colonies. Under a power sufficiently high to show the contour of the individual bacilli, it can be seen that they are endowed with spontaneous movement, which enables them to travel across the field of the microscope. These artificial cultivations reach their maximum development in about four days, but continue to live for at least three or four weeks The bacilli also grow very luxuriantly on potatoes, and also in many vegetable infusions (carrots, marrows, etc.).

An important point in the life-history of the typhoid bacillus is that when grown on potato in a warm, moist atmosphere, it readily forms spores on the third or fourth day. At 86°F. the

formation of spores is rapid, at 68°F. slow. A warm week in a wet summer would provide, therefore, the very conditions which the bacillus requires for the formation of spores in large numbers outside the human body. Judging by analogy, these spores, once formed, would be able to resist conditions of cold and drought which would be fatal to the bacilli which gave them origin, and would remain ready to give rise to the disease when introduced into the human body with water or food. Gaffky, who has made a special study of these bacilli for the German Board of Health, believes that the spores may remain quiescent for long periods, and " may sprout and form bacilli in favourable circumstances, even outside the animal economy, may increase enormously in numbers, and in the warmer part of the year may form spores afresh." Mr. W. H. Power, in the course of investigations for the Local Government Board, has brought out the fact that in certain epidemics traced to the milk supply, persons who drank milk which had been kept overnight suffered earlier and in larger numbers than those who drank fresh milk-an observation which probably finds its explanation in the fact that the spores had time to germinate and reproduce the bacilli in large numbers before the milk was drunk.

It is well known that there are three stages in typhoid feverthe stage of ascent of the temperature, the period of stationary temperature, and the period of decline. The first period, which lasts four or five days, presents the most characteristic type of temperature, the evening rise of 2°F. and the morning descent of 1°F. It is interesting to know that it is during this period that the bacilli are present in the largest numbers in the tissues. During the stationary period, which varies greatly in duration, according to the severity of the case -the period of high temperature with only slight morning remissions—we have probably to do with a double infection—the true typhoid infection and septic infection of the intestinal ulcers. The proverbial uncertainty of typhoid fever, the liability at any time during the stationary period, even in relatively mild cases, to the appearance, almost without warning, of most serious symptoms is probably to be traced to this secondary infection, which may lead to rapid

extension of ulceration with all its attendant dangers. The importance of taking the disease in time is universally recognised; the worst cases are seen in persons who have tried to resist the malaise of the initial stage, and have continued about their work or made long fatiguing journeys during that stage. The exhaustion thus produced increases not only the severity of the true primary typhoid infection, but also that of the secondary ulcerative affection. Hence also the prospect of recovery is, cœteris paribus, better in young robust adults, especially of the male sex, than in extreme youth or advanced age.—Brit. Med. Jour., Nov. 21, 1891.

Rupture of an Aortic Valve through Physical Exertion.—Tretzel (Berlin. klin. Woch., Oct. 26th, 1891) publishes a case of rupture of an aortic valve caused by violent exertion. A healthy, muscular man, while pushing a heavy wagon, was suddenly seized with pain in his chest, soon after which there came on a peculiar purring noise, clearly of cardiac origin and audible several feet of, no other discomfort being experienced except some tightness of the chest. The purring noise corresponded with a thrill felt when a hand was applied to the chest-wall. Auscultation showed the bruit to be synchronous with the cardiac diastole, and loudest over the middle and to the right side of the sternum. Treatment was ordered in the form of digitalis and physical rest. Instead of resting, however, the man continued at his arduous occupation. About two years afterwards he again sought advice, when Tretzel found him breathing with difficulty, cyanosed, and with cedema of the feet. Rest in bed, calomel and digitalis alleviated his symptoms, and enabled him in a measure to resume his occupation. About a month later, however, he suddenly fell down dead. At the necropsy the heart, especially the left ventricle, was found enormously enlarged. The right aortic valve was partially torn from its point of attachment, its free detached edge being slightly thickened. Corresponding with its former seat of insertion was a wide linear tendinous-looking scar, slightly raised above the surrounding intima. The other valves were healthy and competent. The muscular wall of the heart was pale and friable, having evidently undergone degeneration.—Supplement to the British Medical Journal, Nov. 21, 1891.

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### THE INFLUENZA EPIDEMIC.

At the present time influenza is prevalent over the greater part of the American continent, and in many cities the death-rate has increased greatly in consequence. On the continent of Europe it is also rife, but not universal. Berlin, Hamburg and St. Petersburg, from reports, have suffered very severely. In Great Britain certain sections of the country have suffered severely, while in others but few cases have been reported. In the South of Scotland the disease has been very general and severe, while in London but comparatively few cases have been reported. This unequal distribution has also been noticed on this side of the Atlantic and on the continent of Europe. The disease appeared some weeks ago in this country and is slowly extending.

In the above respects the present epidemic presents a marked contrast to that which we had to deal with two years ago. The latter was characterized by the great rapidity of its propagation and its universality. Within three weeks the entire continents of Europe and America were passed over by the all-pervading poison; and it is safe we think to say that more than half of the population suffered from its action. In the present epidemic the extension was much slower, and not nearly the same proportion of people have been affected.

Although a great deal has been written on the subject we can hardly say that we have made any advance in understanding the nature of the disease or its treatment. A great deal, however, has been ascertained about the symptomatology and after

effects. The complicated train of nervous symptoms attending, but especially following, influenza are generally recognized. There is no doubt that both central and peripheral nervous affections are more common after it than after any or all the acute infectious diseases

In the Medical Society of London a discussion was held on influenza, being introduced by papers read by Dr. Althaus and Dr. Savage. The result of this discussion is very disappointing, its most marked feature being the advancing of crude hypotheses. Dr. Savage's paper, however, was a good contribution to the study of the nervous disorders attending and following influenza. According to his experience true insanity rarely follows influenza, unless there was marked neurotic family history, especially of the insane neuroses. He had met with all forms of insanity after influenza, but especially with melancholia. A very interesting experience reported by Dr. Savage is that general paralysis of the insane may follow influenza.

The cardiac disturbances of influenza are very interesting and important. They may take the form of bradycardia, more frequently tachycardia is met with. Cardialgia is considered by Dr. Samson to be not an infrequent complication. He looks upon it as being due to a peripheral neuritis.

As to the treatment of influenza there is very little to be said, for our knowledge on this matter has not assumed any definite shape. Antipyrine, phenacetine, quinine and the salicylates are the drugs usually prescribed. Antipyrine and its allies have a marked effect in quickly relieving the distressing pains attending the neurotic forms of influenza.

Dr. Crerar, a Scotch practitioner, claims to have had great success in the treatment of influenza by the administration of large and frequently-repeated doses of bicarbonate of potassium. It is highly improbable that there is any real foundation for such claims. When we think of how little we can do in any of the infectious diseases with which we are well acquainted, it is unreasonable to expect that we can do much in a disease of which we know but little.

The ever-pressing question to the physician at the present

time is, What is the latest and best cure for influenza? Unfortunately, the reports in the lay and even medical press tend to perpetuate the popular fallacy that there is a cure for every disease if it could only be discovered. The advertisements of certain druggists that they possess specific agents in this disease is only a form of cheap quackery, but it nevertheless serves their ignoble aims. As many of these alleged specifics are agents like antipyrine, which is clearly injurious when given for days together, it is the duty of every medical practitioner to discourage patients from making use of them. As grave complications and sudden cardiac failure results at times from the direct action of the morbific poison on the heart, the continuous use of any drug like antipyrine is certainly injurious.

### THE UNTOWARD EFFECTS OF SULPHONAL.

The injudiciousness of claiming for recently introduced drugs freedom from untoward effects after a few trials is well exemplified in the case of sulphonal. This drug, which has now been in use for a period of three years, possesses an undoubted hypnotic action, and has been extensively employed. When given in single and moderate doses it is, as far as we know at present, not followed by any disturbance. When given, however, in large doses, or in moderate quantities for some time, some very unpleasant and possibly fatal effects may follow. Recently, Jolles of Vienna has reported two cases where it is probable the continuous use of sulphonal was the direct cause of death. In both cases the drug had been administered to procure sleep in insanity. The urine had a reddish-brown colour, due to the presence of hemato-porphyrine. The fatal result was considered to be due to the destruction of the blood.

In the administration of sulphonal it is all important to administer the salt fully dissolved, otherwise if given continuously it may accumulate in the intestines in sufficient quantity to bring about symptoms of marked intoxication. This danger is intensified by the obstinate constipation which frequently attends the repetition of the agent. Sulphonal is best administered in three

or four ounces of hot beef tea, care being taken that it is thoroughly dissolved. Renal inadequacy is a contra-indication to the employment of repeated doses, as elimination is prevented and the danger of intoxication being in consequence increased. In addition to the blood changes referred to and constipation, sulphonal induces ataxia with manifest weakness of the muscles of the extremities. Lowered temperature and slowness of breathing have also been observed. Visual and auditory hallucinations are uncommon effects. With care we believe it is possible to avoid all these disagreeable effects, or at any rate such as are of gravity, by attention to the following directions:—

- (1) The maximum doses should not exceed twenty grains.
- (2) It should be thoroughly dissolved.
- (3) The drug should not be given continuously for more than a few days, and then only when purgatives are employed to counteract its astringent action.
- (4) It should not be given continuously in cases of renal inadequacy.

## Obituary.

—The death of Mr. John Wood of London is announced. For many years Mr. Wood held the chair of Surgery in King's College.

—Through the death of Dr. J. D. Gillespie, Edinburgh looses one of its most noted and respected medical men. A pupil of Syme, when this great surgeon was at the zenith of his fame, Gillespie laid the foundations of a surgical experience which he extended greatly by his fifteen years of work as an active surgeon in the Royal Infirmary.

## Medical Items.

- —Through the will of the late Mrs. Phillips, the Montreal General Hospital is to receive the sum of sixty thousand dollars.
- —Lord Mount-Stephen has presented the sum of \$5,000 to the authorities of Aberdeen University for the purpose of promoting the contemplated extension of the buildings.
- —Dr. Paul F. Mundé has resigned the editorship of the American Journal of Obstetrics and Diseases of Women and Children, which he has held for eighteen years. He is to be succeeded by Dr. Brooks H. Wells.
- —Dr. Canniff of Toronto has in the press a work entitled "History of the Medical Profession in Upper Canada." Dr. Canniff is entitled to the gratitude of the profession in rescuing from oblivion the many interesting details connected with the early medical history of the Province of Ontario.
- —The College of Physicians of Philadelphia announces that the next award of the Alvarenga prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1892. Essays intended for competition may be upon any subject in Medicine, and must be received by the secretary of the College on or before May 1, 1892. It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College.

QUACKERY IN ITALY.—The periodical reports forwarded by the prefects of the various provinces af Italy to the Minister of the Interior show that, in the first half of 1891, 709 instances of the illegal practice of the healing art in one or other of its branches were brought to the knowledge of the authorities. In only 157 of these was a judicial decision pronounced; in 102 of them the defendants were found guilty and punished, and in 55 they were acquitted. During the same period only four cases of the wrongful use of academical titles were reported throughout the whole of Italy.

#### AMCEBA'S LOVER.

A neat bacillus, with rounded ends, Was seen, by means of a powerful lens, Moving with undulatory grace, Through a fashionable lymphatic space.

His graceful appearance would take with some As he picked his teeth with a flagellum, Tho' he flirted in a way to shock us With every common gonococcus.

His manuels were good—every one knew it— For he'd been through a fine culture-field, But his tailor's efforts were all in vain To collect a bill for this germ's membrane.

His mind was filled one might say wholly With thoughts of sweet Amoba Coli. Her mobile form 'twas his conjecture Languished within the sigmoid flexure.

So hurrying through an abscess rancid To an artery of rapid transit, He took, in a depot of congestion, A blood disc bound for the large intestine.

In a parlour car he chanced to see A plasmodium malariæ. A pretty picture she seemed to make As she fed her spores on ague-cake-

And then he thought of the biss in store Of Amœba and a baby spore!
And how they'd dwell in a saccule neat In a calm and scybalous retreat.

But just as he reached Amœba's door He heard a protoplasmic roar; And there, repulsive in his might, Was a hungry, savage phagocyte.

His mouth was large and his words profane So our hero drew his good ptomaine. "Swish! Snap!" went a pseudopodic jaw, And "gulp" went a phagocytic maw.

While his mistress saw a vacancy Where her loved baccillus used to be, Then Amœba with a doleful shiver Went far away to the dismal liver.