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CANADA

MEDICAL & SURGICAL JOURNAL

JULY, 1884.

Original Communications.

ABSTRACT OF A CLINICAL LECTURE ON A CASE OF EXOPHTHALMIC GOITRE.*

By JAMES STEWART, M.D.,

Professor of Materia Medica and Therapeutics, McGill University; Physician to the Montreal Dispensary, and Director of the University Dispensary for Diseases of the Nervous System.

Gentlemen,—The patient whom I exhibit to-day presents a marked example of exophthalmic goitre, or what is more commonly called Graves-Basedow disease. It is an affection usually described as exhibiting three symptoms. These are exophthalmos, goitre, and increased cardiac action. As we, however, proceed in the investigation of this man's case, we will find that, in addition to the above classical symptoms, there are present others equally as prominent and equally as important.

The patient, aged 31 years, lumberman, complains of great weakness, with palpitation of the heart and shortness of breath on the slightest exertion. He first noticed these symptoms three years ago. He says that he rapidly became thin and weak, and was, in consequence, compelled to give up his work. It was some time—probably six months—before his people remarked that his eyeballs were prominent. He cannot remember when his neck commenced to enlarge. He had syphilis six years ago. In following his occupation he has been exposed to great hardships. There is nothing to be learnt from his family history.

* This lecture was one of the usual clinics on nervous cases conducted during the present summer session of McGill University. The patient was very kindly handed over to me for clinical uses and treatment by Dr. Reid.

As far as can be made out, it is not a neurotic one. He is, as you will easily observe, anæmic and emaciated. He is excitable, irritable, suspicious, and at times very despondent. He complains of severe frontal headaches at times. He is frequently troubled with sleeplessness. The prominence of the eyeballs is very marked, a rim of the sclerotic being clearly discernible all around the globes of the eyes, giving to them a peculiar lustre. The pupils are normal in size. What is now commonly known as Graefe's symptom is not present in this case—that is, the movements of the eyeballs and upper lids are not consentaneous. The lids follow the movements of the globe. It is said that Garefe's symptom is almost constantly present in this disease. It is due to the paretic condition of the involuntary muscular fibres (Müller's) in the lids. There is considerable enlargement of both lobes of the thyroid glands, but especially of the right one. This enlargement, the patient says, varies greatly from day to day and from hour to hour. The thyroid vessels are very numerous and dilated. There is marked pulsation in the gland, which is clearly perceived at a distance of several feet. A systolic blowing murmur is heard on laying the stethescope over the enlarged gland. There is marked pulsation over all the cardiac region, and on laying the hand over the same parts a marked systolic thrill is felt. The apex of the heart is displaced downwards and outwards. There is a loud blowing systolic murmur heard over all the cardiac area, with its maximum intensity at the junction of the third left costal cartilage with the sternum. The transverse cardiac dullness extends from the right edge of the sternum to half an inch outside the left nipple line, a distance of $4\frac{1}{2}$ inches. The vertical dullness commences at the upper border of the third rib. We have here positive evidence of considerable enlargement of the heart, together with, in all probability, regurgitation through the mitral orifice. This regurgitation is no doubt due to simple dilatation of the orifice, and is therefore what is known as "curable regurgitation." There are no grounds for believing that there is any structural defect in any of the orifices. His pulse is 130. Slight exertion is sufficient to send it up to 160, and sometimes even higher.

Our patient presents all the marked symptoms of the disease—the protrusion of the eyeballs, the enlargement of the thyroid, and the increased pulse rate. All cases of exophthalmic goitre do not exhibit these three symptoms. The exophthalmos or the goitre may be absent, but I believe it is generally admitted that the quickened pulse is always present—that it is, in fact, an essential factor of the disease. A fourth prominent symptom in this case is trembling of the voluntary muscles, especially when the patient makes any exertion. Sometimes it is confined to the arms alone, but more frequently it affects all the voluntary muscles. In your text-books you will find scarcely a reference to tremor as being present in this disease. It is, however, in the great majority of cases, as constant in its appearance as either the exopthalmos or goitre. Not infrequently it is so marked and troublesome a symptom as to attract the patient's attention, to the exclusion of all the other symptoms. Less frequently it may be necessary to make the patient perform some muscular movements before it can be demonstrated. This tremor, studied by the aid of a myographic drum, furnishes a tracing* which is said to be characteristic, and enables a diagnosis to be made from other forms of trembling. The number of oscillations vary from eight to nine per second; while in paralysis agitans the number is only five per second.

We know nothing about the cause of the tremblings which form so prominent a feature in many cases of this disease. Charcot was the first to direct attention to them.

Another not uncommon symptom of exophthalmic goitre is is paroxysmal diarrhœa. In this man's case it has been troublesome for the last two years. He has an excessive appetite. He complains of a frequent cough, but which is not attended by any expectoration. Repeated examinations of the urine before and after meals fails to discover the presence of either sugar or albumen. He has paroxysmal polyuria.

These are the symptoms of the case, and there is no doubt

* A tracing taken of the trembling of the hands in this case showed the vertical oscillation gradually increasing in extent, then regularly decreasing, thus presenting a fusiform aspect. It was through the kindness of Dr. Wilkins, in placing at my disposal his extensive physiological apparatus and assisting me with his advice, that I have been enabled to take a tracing of the tremor.

whatever but we have to do with a well-marked example of exophthalmic goitre, or Graves-Basedow's disease. In addition to the three so-called classical symptoms, we have tremor, paroxysmal diarrhœa, cough without expectoration, and certain psychical symptoms, all of which. especially the first named, are almost constant in their appearance in this disease. Ever since the disease was described by Graves and Basedow, there has been considerable discrepancy of opinion as to its nature. Most of the text-books of the present day in which the subject is treated contain statements which would lead you to infer that the disease is essentially one of the cervical sympathetic and its ganglia. The evidence of its being a disease of this nerve, however, is very far from conclusive. In fact, it may be said that those who have closely investigated these points are of the opinion that the disease is not one of the sympathetic nerve. Although, in a few of the recorded cases, changes have been found *post-mortem* in the cervical sympathetic and its ganglia, there has been no constant relation between the severity of the symptoms present during life and the extent of the changes after death. Again, in a number of well-marked cases, no changes have been found in the sympathetic by such competent observers as Recklinghausen, Wilks, Paul, Ranvier and Ross. From this it certainly follows that there is not pathological evidence to support the view that the disease is one of the cervical sympathetic. Neither do physiological considerations or clinical facts give support to this view of the nature of the trouble.

To explain the dilated condition of the thyroid vessels, a paresis of the vaso-motor fibres running in the cervical sympathetic has been assumed, and to account for the increased rate of the heart irritation of the accelerator fibres in the same nerves. It is thought that the one and the same lesion is capable of bringing about two directly opposite effects, viz., paralysis of one set of fibres and irritation of another set. This is, of course, highly improbable, but what is still more so is, that a certain set of fibres should remain in a state of irritation for many years without any indications of paralysis. If any further proof were needed to show the inadequacy of changes in the sympathetic

as being the cause and origin of this disease, it would be found in the absence of pupillary changes. It is not conceivable that either partial or complete destruction of the sympathetic should not be followed by changes in the size of the pupil. Now it is a well known fact that pupillary changes are not present in this disease. The evidence just given, although of a negative character, is of sufficient weight to make us at least suspect that the central nervous system is the true seat of the changes that give rise to this disease. We, however, have facts of a positive character which go a long way to prove that it is in this part of the nervous system that we must look for its origin. Filehne has produced protrusion of the eyeballs, enlargement of the thyroid gland, and increased action of the heart in rabbits by wounding the restiform bodies. I am not aware that there has been any microscopical examination of this portion of the medulla, or, in fact, of any part of the medulla, in persons dead from Graves' disease. Whether changes will be found or not, it is, of course, impossible to say. The rather frequent occurrence of glycosuria and even diabetes lend support to the view that the changes in the nervous system will be found (in part at least) in the medulla.

That the higher nerve centres are sometimes involved is evidenced by the fact that insanity is not an infrequent complication. In all cases there is considerable mental irritability and despondency, while at times the psychical symptoms are so marked as to constitute the most prominent part of the disease. What the nature of the changes is in the medulla and higher nerve centres is not known. That they are of a so-called "functional" nature in a great number of cases, is shown by the very frequent and complete recoveries.

The *prognosis* in exophthalmic goitre is much better than some of our modern text-books would lead you to think. By far the greatest number of cases recover. Relapses are, however, not uncommon, prolonging the disease to many months and sometimes years. Those cases attended by very marked psychical symptoms have a much more serious prognosis. It is especially bad when mental depression alternates with violent

mania, especially when the mania is of the noisy, destructive, and incoherent kind. Cases of this kind run nearly always a short and lethal course. The prognosis in this patient's case is favorable, despite the severity and long-continuance of the disease.

Treatment.—As you will readily understand, the remedies that have been recommended in this disease are not few in number. Iron, quinine, digitalis and belladonna have all been lauded as having a directly curative action. It is very questionable, however, whether any of them possess this power. Of the four, digitalis is the one that is most commonly prescribed. It has, strange as it may seem, little or no power in slowing the heart's action. Iron, even for the relief of the anæmia that is often present in this disease, seldom does good, but frequently injury. There is no drug in my experience whose action is so beneficial in exophthalmic goitre as ergot. We know that when given in large doses, ergot acts in the following way on the heart and circulation: 1st, it slows the action of the heart; 2nd, it contracts the arteries; and, 3rd, it increases the blood pressure. How it acts in this disease I am unable to say, but the first sign that is noticed of its beneficial effects is a slowing of the circulation. From a considerable experience of its use in this disease, I have found that after two or three weeks' use, a pulse that is constantly beating at 130 or 140 is brought down to from 110 to 120. As the drug is continued, the swelling of the thyroid gradually diminishes also, and the protrusion of the eyeballs gradually recedes. To obtain marked amelioration, it is necessary to give it for at least three months. I have reported* three cases of exophthalmic goitre treated by ergot, where the results were very satisfactory. In all a cure resulted. In a disease which tends in many cases to spontaneous cure, it is necessary to be very cautious in coming to a conclusion as to the virtue of any drug that may be used. Whether ergot has a directly curative power remains still to be proved. I think, however, that I am quite justified in saying that of all drugs we possess, it is the only one which seems to act with marked benefit

* *Canadian Practitioner*, Sept., 1881.

in the disease. In order, however, to obtain its full physiological power, it is useless to prescribe it in the doses given in the Br. Ph. At least one drachm of the fluid extract should be given three times daily. Even from considerably larger doses than this I have never seen any untoward effects. Galvanism is probably the most powerful means for good that we possess. It should be applied, according to Erb*, as follows: The anode should be placed over the spine between the shoulder blades, and the kathode worked along the whole of the cervical spine. From one to two minutes sittings of not more than six or eight Stohrer elements is recommended. Still weaker currents may be used directly applied to the posterior part of the head, so as directly to influence the medulla. Galvanization of the sympathetic (subaural galvanizatiou) may fulfill the symtomatic indication of slowing the circulation.

The other symptomatic indications that arise during the course of the disease require no special treatment. The alleged cure of some cases of this disease by the removal of the enlarged thyroid has led some recent observers to maintain that there are two forms of Graves' disease—one local, and due to the pressure exerted by the enlarged gland on the sympathetic, the other due to changes in the central nervous system, and that the former is curable by surgical means.

We will commence the treatment of this man's case by giving him 45 minims of the fluid extract of ergot three times daily. and gradually increase the dose until he takes a drachm or more three times daily. To prevent any misconception as to its action, we will give it alone. If, after a course of three months' treatment, there is no improvement, we will then employ galvanism.

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* Erb, *Handbuch der Elektrotherapie*, s. 596.

CLINICAL LECTURE ON THE ANTISEPTIC TREATMENT OF WOUNDS BY DRY AND INFREQUENT DRESSINGS.

DELIVERED AT THE MONTREAL GENERAL HOSPITAL JUNE 28TH, 1884,

BY FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S, ENG.,
Surgeon to the Hospital.

Gentlemen,—As you are aware, during the last few years the different methods of treating wounds antiseptically have attracted much attention in the surgical world. To Sir Joseph Lister is due the credit of having revolutionized wound treatment and rendered operations, once formidable and dangerous, comparatively safe. His method, surrounded by many forms and ceremonies, which his followers insist on even more than he does himself, was only slowly taken hold of by surgeons. Those chiefly who themselves saw the results of Lister's treatment in his own hospital practice at the Infirmary in Edinburgh adopted his mode of treatment. These disciples earnestly propagated his doctrines, and Germany was soon converted to Listerism by enthusiasts such as Nussbaum, Von Bruns, Hueter and others. From being hotbeds of erysipelas, pyæmia and septicæmia, German hospitals were transformed into veritable sanitoriums, and German surgeons became apostles of cleanliness. Where the mortality had been 50 to 75 per cent. after amputations, it fell to 5 to 10 per cent., so much did Listerism accomplish. The alteration in the mortality of London hospitals was, owing to careful and cleanly surgery, not so marked, and even Lister himself could hardly surpass the splendid results attained by the late Mr. Callender. It soon began to be asked, Why is Listerism so successful, and is there no way of attaining the same results by a simpler and less expensive method? Many maintained that the success of Listerism merely depended on the more rigid carrying out of the great principles of wound treatment, viz.: rest, pressure, cleanliness, and drainage; and that everything did not depend on keeping away germs and bacteria by means of the spray and elaborate dressings. The spray was first discarded, irrigation taking its place,—and the results were found to be much the same; then the

McIntosh was laid aside, and finally, instead of wet gauze, some absorbent and antiseptic material was applied to the part. Many surgeons, who at first were ardent Listerites became now merely antiseptic surgeons. The inspiration was no doubt owing to Lister and the new methods, which were soon introduced, were in reality merely modifications of his treatment, so the dry and infrequent form of dressing may be said to have been evolved from Listerism. Iodoform has played a considerable part in this, as, owing to its permanency and power as an antiseptic, it permitted long intervals to ensue before wounds became septic.

In England the dry and infrequent dressing of wounds was first advocated by Mr. Sampson Gampee, of Birmingham, and his published results certainly contributed not a little to direct surgeons to this form of treatment of wounds. He it was who first introduced absorbent antiseptic pads.

I, as you know, have practised the dry dressing of wounds for some time past, and have every reason to be satisfied with it. I have employed it in various ways and used many kinds of material, but the principles have remained the same throughout, viz., antisepticism, cleanliness of instruments, hands, and wound itself, drainage, the application of some antiseptic, absorbent material, kept in place by an elastic antiseptic bandage, and, last of all, infrequent dressings. In detail, the method of dressing wounds adopted by me is as follows:—

Suppose a leg has to be amputated. The part is first washed in a solution of mercuric bichloride, 1·1000; the hands also dipped in same after being well cleansed with soap and water and a nail-brush, and the instruments placed in a 1-20 solution of carbolic acid (as the bichloride spoils them) for an hour or two before; carefully cleaned sponges kept in a 1-20 solution of acid carbolic are to be used. Thus far you see the proceedings are in strict accordance with Lister's directions. After the limb has been removed, the wound is irrigated with the bichloride solution (1-1000), the vessels tied with catgut ligatures and the ends cut short. After all bleeding has stopped a little iodoform may be dusted over the wound, and then the

edges of the wounds should be brought accurately together by means of a few deep silver wire, or silk sutures, dipped in 1·40, with intermediate sutures of carbolized catgut, a drainage tube is then inserted into the most dependent part of the wound. Now comes the special form of dressing which is called "Dry." I sometimes use a layer of washed absorbent gauze and place it directly over the wound, having previously dusted it with iodoform, and also dusted the wound itself with the same material. Now is applied a square or oblong pad, such as I show you, of some antiseptic absorbent material, covered with washed absorbent gauze. This pad varies in size and shape, according to the size of limb to be encased or wound to be covered, and may be made at the time of operation. I generally dust the pad over freely with iodoform before applying it, and now place it directly on the wound instead of first putting on a layer of gauze. It is to be applied as accurately as possible, and by means of cuts made in the sides or ends of these pads they may be fitted closely to any part. The material of the pad may be of various kinds. I first used Gamgee's pad, which is of salicylic absorbent cotton wool enclosed in washed gauze, I have used peat, asbestos and oakum, but the material I prefer to all others is finely carded jute rendered antiseptic by mercuric bichloride, naphthalin or carbolic acid. It is elastic, absorbent and antiseptic. Well, the antiseptic pad having been applied, it is kept in place by an evenly and firmly applied antiseptic gauze bandage. Here I have used the ordinary carbolized gauze furnished by the Hospital, but in private practice I generally make use of a bandage of washed cheese-cloth, or book-muslin which has been rendered antiseptic by soaking in a solution of bichloride and methylated spirits, one grain to the ounce, and then, by exposing to the air and evaporating the spirit, the bandage remains charged with bichloride. In this way a very good antiseptic dressing may be made, cheaply and quickly. The dressing is now complete, the patient is placed in bed and the limb put on a pillow or swung from a cradle. If the amputation has been near a joint, as, for instance, the knee, I generally, over the gauze bandage, apply a pasteboard splint, made pliable by dipping in

hot water, and which is kept in place by another bandage. In the last amputation of the leg you saw me perform, I made use of bone drains instead of rubber, hoping by this means to do away with the necessity of taking off the dressing to remove or shorten the tubes; but in this case the tubes collapsed, being too soft, and the effused serum, being confined to the stump, caused an elevation of temperature and interfered with primary union somewhat by distending the flaps. I removed the dressings on the third day, and replaced the bone drains by rubber ones. The temperature fell immediately, and the patient from that time did well, going out in a little over three weeks.

If there is much oozing and the dressings are stained, they had better be changed on the second day, the tubes very much shortened and the dressing reapplied as before, and, as a rule, the case will now go for a week or ten days without needing change of dressing. At the next dressing, the silver wire sutures and tubes should be removed altogether, and the wound, if everything goes well, needs only one or at most two dressings more. Of course, we must be guided as to our change of dressings by the condition of the patient. If there is elevation of temperature and the patient complains of distention and pain about the wound, it should be immediately examined. I have now treated over a hundred wounds and injuries of all kinds by this method with, as you know, most satisfactory results. The method is simple and the materials used easily obtained; it is also comparatively inexpensive. Many of you, after you receive your degrees, will practice in country or other places where it will be difficult or impossible to carry out the elaborate ritual of Listerism in all its entirety; in dry dressing, however, you have a method of wound treatment that may be employed with as much success, and the materials for which may be carried in your breast pocket.

I might now call your attention to a few cases which were under treatment in my wards during last winter, and which are examples of the good results obtained by dry and infrequent dressings. Most of you remember the case of amputation of the arm for severe injury, which was in Ward 31, and

where there was primary union, the man going out cured in ten days with two dressings; also the man Hoskins, whose thigh I amputated for tumor, and in whom, with two dressings, the wound had all healed except where the drainage tubes had been. This case was a good example of the bad effect of drainage tubes left in too long, as the sinuses caused by them after the rest of the stump had completely healed were most difficult to close. Also the man Smith, in 31 Ward, whose leg I amputated for railroad injury, and who went out in three weeks with the stump healed by first intention. These were the most favorable examples, perhaps, you will say; but still they fairly show, I think, results that may be obtained by the dry dressing. This mode of treatment is suitable to all forms of wounds and injuries. You have lately seen several cases of severely crushed hands thus treated by dry and infrequent dressings with remarkably good results, and have also seen knee-joints opened and afterwards put up in this way and do exceedingly well. Abscesses also may be easily and successfully treated in the same manner. You may, perhaps, remember a case of large gluteal abscess in Ward 31 last winter, where, after opening it at the most dependent point and evacuating several pints of pus, and inserting a drain, I treated with iodoform and dry dressing, and where the progress to recovery was uninterrupted. I might here mention to you a point with regard to the after-treatment of abscesses, and also wounds. It is this:—After evacuating an abscess or whilst dressing a wound, never inject them with an antiseptic solution unless they are in a septic condition; drain freely, if you like, but do not disturb the newly-formed tissue by forcing in a stream of water and so delay healing. Of course I do not wish to make this rule an absolute one, I do not mean to decry the external washing of wounds and irrigation, but, when everything is going on well with a wound, leave something to Nature, and remember that meddlesome surgery is bad surgery.*

As this is the last time I shall have the pleasure of meeting

*The various materials needed for the dry mode of dressing wounds may be obtained from Mr. W. A. Dyer, chemist, 16 Phillip square, Montreal.

the class during the session, I shall read to you a table which will show the operative work done during the last year, with the results obtained.

Operations performed in Dr. Shepherd's wards at the Montreal General Hospital for year ending June 1st, 1884:

Amputations:	Cured.	Died.	Total.
Thigh	2	..	2
Leg	4	..	4
Foot—Syme's	1	..	1
Chopart's	1	..	1
Lisfranc's	1	..	1
Great Toe	1	..	1
Upper Arm	2	..	2
Forearm	1	..	1
Hand	2	..	2
Fingers	2	..	2
Total	17	..	17

Of the above operations, 7 were performed for disease and 10 for injury. The following list will show the cases more in detail:—

Primary Amputations for Injury:	Cured	Died.	Total.
Leg	1	..	1
Great Toe	1	..	1
Arm	2	..	2
Hand	2	..	2
Fingers	2	..	2
Secondary for Injury:			
Leg	2	..	2
For Disease:			
Thigh	2	..	2
Leg	1	..	1
Syme's	1	..	1
Chopart's	1	..	1
Lisfranc's	1	..	1
Forearm	1	..	1
Total	17	..	17
Excisions of Joints:			
Ankle	1	..	1
Excision of Diseased Bones:			
Partial of Fibula	1	..	1
" " Tibia	1	..	1
" " Femur	1	..	1
" " Radius	2	..	2
" " Clavicle	1	..	1
Ligature of Arteries:			
External Carotid	1	..	1
Anterior Tibial	1	..	1
Ulnar	1	..	1

REMOVAL OF TUMOURS—*Cancer:*	Cured.	Died.	Total.
Lip	2	..	2
Side of face and neck	2	..	2
Tongue	1	1	2
Floor of mouth and submaxillary gland	1	..	1
Soft palate and tonsil	2	..	2
Sarcoma:			
Neck	2	..	2
Non-malignant Tumours:			
Glandular of neck	4	..	4
" " groin	2	..	2
Neuroma of arm	1	..	1
Large polypoid of nose	1	..	1
Bursal of patella	1	..	1
Reparative Operations:			
Imperforate Anus	1	..	1
Tenotomy	2	..	2
Drilling femur for ununited fracture	2	..	2
Incision and drainage of large abscesses:			
Gluteal region and thigh	2	..	2
Ischiorectal	4	..	4
Perineal	2	..	2
Parotid	3	..	3
Bursal	3	..	3
Connected with diseased spine and ilium	3	..	3
Various Operations:			
Ovariotomy	..	1	1
Colotomy	1	..	1
Incision and drainage of chest	1	..	1
Incision and drainage of knee-joint	2	..	2
Radical cure of hydrocele	1	..	1
Drainage of cystic bronchocele	1	..	1
Fissure of rectum	3	..	3
Fistula in ano	4	..	4
Removal of toe nail	2	..	2
Circumcision	1	..	1
	86	2	86

There were two deaths—one after excision of tongue, from gangrene of the lung following erysipelas, and one from shock after ovariotomy. In the two cases of excision of the tongue, the lingual arteries were ligatured previous to the excision of that organ. In one case of excision of large tumor of neck, the internal jugular vein was ligatured.

SCIATICA, WITH COMPLETE LOSS OF SENSATION, ACCOMPANIED WITH TROPHIC CHANGES, ULCERATION OF THE FOOT, &c.

By J. CAMPBELL, M.D.C.M., and L.R.C.P., Edin., of Seaforth, Ont.

(*Read before the Huron Medical Association.*)

History.—D. C., æt. 35, a native of Scotland, unmarried, a farmer, of healthy appearance, came to me on the 22nd of June, 1883, complaining of pain behind the right knee. He said it extended to the right hip and the small of the back. He said he had been sitting up for nine nights with a sick mare in the stable, and had lain down occasionally with wet feet, with nothing but a quilt over him. He often felt very cold. He drank pretty freely at times, and being a bachelor often did not get his meals in time. As he had to cook for himself the cookery also was somewhat indifferent.

Diagnosis.—We diagnosed sciatica, which we told him was evidently produced by cold, exposure and ill-treatment generally. We prescribed blistering and tonic treatment, good nourishing diet and rest by way of cure, and to prevent a return of the malady after the cure was effected—a wife. He reported improvement from the above treatment after lying in bed three weeks. The pain gradually left, but he was astonished to find that he had lost all feeling in the outer part of the thigh and leg down to the little toe. Strange to say, that in spite of all treatment, this state of things continued for eight months. We prescribed the galvanic battery, strychnine, and tonics generally. On the 10th of February last he came to me with a swollen foot with a wound on the outer side of the little toe, which he attributed to the fact that he did not know when he hurt it, not having any feeling in the part. I found that he had been treating himself very badly, frequently getting on the spree, and discontinuing the treatment both as regards the nervine tonics and the battery for weeks at a time, and not having taken my advice in the wife business, his meals also were intermittent and of an inferior character. He was, in short, a bad subject, and did not report himself sometimes for months at a time. We applied carbolic oil to the wound, told him to raise

the foot, and rest until it was healed, and afterwards to wear a loosely-fitting slipper instead of the hard cowhide shoes he was wearing. Under this treatment the swelling went away and the wound healed. He went to work and got along for a time, but again he came back with a wound on the anterior part of the foot near the union of the little toe with the foot. The foot was red and swollen, and the part had been painful before it began to suppurate. He had also felt chilly and disposed to vomit for several days before he came to me. The glands of the groin were tender and enlarged. When foot swelled, pain ceased. It had an angry erysipelatous appearance. Temperature nearly 102°, pulse 120. As it was in the winter, and I knew that the patient had frequently drank freely and also exposed himself to the cold, I did not know whether to attribute the wound and swollen foot to frostbite or to trophic changes in the part, from the low state of vitality, or from all combined. His foot had always felt cold to the touch, but he did not feel it cold when exposed to frost, because there was no sensation in the part. We put him on the same treatment as before with the addition of large doses of quinine, which was repeated until all chilliness passed away and the temperature became normal and remained so. Rest, elevation, and tonics, with carbolic oil to the wound and lotion of plumb. acet. to the swollen foot completed the cure, if we may call it a cure, where there is only partial recovery from the symptoms complained of. The patient, however, resumed work, and has been so employed ever since.

Present condition.—The sensation has partially returned, and there are no sores on the foot or leg. It is somewhat cold to the touch and slightly swollen. He has discontinued all treatment, and is working every day. He still drinks occasionally, and no doubt will continue to do so until the Scott Act passes.

Remarks.—It was a question in my mind as to the cause of the loss of sensation, whether it was centric or eccentric. I have arrived at the conclusion, taking the history, habits, course of the disease, and present condition of patient into consideration, that the paralysis of sensation was caused by inflammation

of the sheath of the nerve, which had been followed by effusion within or around the same, producing pressure on the nerve and loss of sensation as we have described. This would also account for the trophic changes in the foot as well as other symptoms which were so unique and troublesome in this case.

Correspondence.

LETTERS FROM BERLIN.

(From Special Correspondents.)

The central figure of the Berlin Faculty is Virchow. With the exception of the years 1849-56, he has been here as student, prosector and professor since 1839. In 1844 he became assistant to Froriep, whom he succeeded as Prosector of Pathology in 1846, losing the position in 1849 on account of his active participation in the political disturbances of that period. He was, however (not without considerable trouble), reinstated, and shortly after, in the autumn of the same year, was called to Wurzburg as Professor of Pathology, and returned to Berlin in 1856. Under his direction, the Pathological Institute of the Charité has become the most famous school of pathology in Europe; and to name the men who have been his assistants, is to go over many of the best known teachers and investigators in Germany—Klebs, Recklinghausen, Rindfleisch, Cohnheim, Liebrich, Hoppe-Seyler, to say nothing of the younger men, Orth, Ponfick, Salkonski, and others. After 40 years of teaching, it is but natural that he should have much of the drudgery done by his able assistants, Drs. Jürgens, Grawitz and Israel, who conduct the autopsies and the courses on pathological histology. Students have, however, still the great privilege of hearing him in three different classes. For the first three or four Mondays of the semester, from 7.30 to 10 a.m., he performs an autopsy before the class, giving detailed directions as to methods and the proper modes of observation. On Wednesday and Saturday are held the famous demonstration courses on morbid anatomy, in which the material of the week—often 10 or 15 cases on each occasion—is brought before the students;

the time occupied is at least 2½ hours, the first half of which is taken up with some special subject, the pathology of which is well illustrated by the specimens at hand. The other morning I could not but feel what a privilege it was again to listen to the principles of thrombosis and embolism expounded by the great master, to whose researches we owe so much of our knowledge on these subjects. At 11 a.m. each day he gives a lecture on special pathology. Politics and anthropology absorb the greater part of his time. He is a member both of the German Parliament and of the Prussian House of Representatives; and I noticed a day or so ago, in one of the daily papers, an item stating the number of times which each member spoke—I forget in which House,—that Virchow had spoken on 38 occasions during the session. It need scarcely be stated that he is an advanced liberal. He is also a member of the City Council—not an idle one either, as the copious literature of the canalization (drainage) system of the city can testify, and I notice that he has been again urging the further extension of the sewers. His archæological and anthropological studies are at present most extensive, and it is upon these subjects now that he chiefly writes. When one turns to the index of authors in the volumes of "Transactions of the Berlin Archæological Society," the figures after his name stand thick and deep, just as they do in a similar index in medical works. He has been collaborateur with Dr. Schliemann in several of the important works issued on Trojan antiquities. His collection of skulls and skeletons of different races, one of the most important in Europe, will doubtless find an appropriate place in the new Archæological Museum erected by the Government. At present, his private rooms are a sort of Gehenna, which has laid every quarter of the globe under contribution. The very day on which I gave him four choice skulls of North American Indians, from Prof. Bell's collection, two large cases of skeletons of the natives of Madeira were brought in. There are those who grudge him the time which he thus spends on politics and his favorite studies, but surely he has earned a repose from active pathological work, and may well leave section cutting and bacteria staining to the smaller fry;

and when we consider that, in addition to the classes above mentioned, he is President of the Berlin Medical Society, and edits his *Archiv*, now a large monthly journal, it can scarcely be said that he neglects professional duties. On all questions of general, medical, and scientific interest, his utterances are not infrequent, and display a judicious conservatism—as witness his sound position regarding the Darwinian theory as opposed to the vagaries of Hæckel. It is satisfactory to note that the attack of gouty nephritis of some 18 months ago appears to have left no traces. Aged, of course, he is (now 63), but there is still a vigor and sprightliness in the wiry frame which bespeak years of continued activity.

"Wirklicher Geheimer Ober-medicinalrath" von Frerichs has renewed his youth with the recent jubilee, and has astonished his medical friends with the production of a monograph on Diabetes. From the way in which I heard it spoken of, it must have been of the nature of the surprise which the friends of the wife of the venerable patriarch had,—certainly it had long ceased to be with Frerichs after the manner of German professors, for he has published nothing since—it is hard to say when. Silence, however, has not meant idleness, as this work will bear comparison with his others; and what is extremely gratifying, is to notice in the preface the statement that he intends to devote the autumn of his life to the preparation of other monographs, for which the materials are at hand in his vast clinical experience. It will be of interest to give a few details from the work, which is based upon 400 cases, 282 males and 118 females. With reference to race, it is remarkable that 102 of the patients were Jews, which he attributes to hereditary excitability of the nervous system, the keen pursuit of business, and, above all, intermarriage. Only 60 of the patients belonged to the working classes. Hereditary influence could be traced in 39 cases, and one-seventh of the patients showed a tendency to obesity. The preliminary chapters are taken up with physiological details regarding sugar and glycogen. The remarks on glycosuria, or the temporary presence of sugar in the urine, are of interest; and he groups the cases under three divisions; 1, In conse-

quence of poisons of various kinds, particularly those which cause an accumulation of blood in the abdominal viscera. Contrary to the generally received opinion, he states that ether and chloroform do not, and mentions the case of a young man who was in the habit of taking ether in the street, and hence was nick-named "Ether-Fritz," in whom, after the inhalation of 207 grammes, no trace of sugar was found in the urine. 2, Glycosuria from disturbed digestion, particularly liable to occur in gouty persons. When in perfect health, an enormous quantity of sugar may be taken daily without a trace appearing in the urine. 3, Glycosuria from nerve disturbance, psychical or otherwise. The experience is very common to find sugar in the urine of patients with extreme mental worry from business troubles. A number of interesting observations are given of glycosuria after local neuralgias and various coarse lesions of the brain and membranes. One naturally turns to see what he has to say upon the much-debated question of sudden death in diabetes. Such cases are divided into three groups, the first of which includes patients who are suddenly, or, at the most, after transient disturbance, attacked with general weakness, cold extremities, and, with a failing pulse, somnolence, and loss of consciousness, death occurs in a few hours. The second group contains cases which differ considerably from the above, there being usually an initial stage of general weakness, gastric disturbance, vomiting, constipation or some local disease, a pharyngitis, ulcus linguæ or bronchitis, and one or several of these ushers in the severe symptoms—headache, restlessness, delirium, occasionally maniacal outbursts, dyspnœa, with or without cyanosis, and then somnolence and coma. The breath has usually a fruity odour, or reeks strongly of aceton or chloroform, occasionally so strong as to pervade the room. Such cases usually last from three to five days. In the third group are the cases in which, without a trace of dyspnœa or feeling of disturbance, with moderate tension of the radials, the patient is attacked with headache, a feeling of intoxication, sleepiness, and then the fatal coma. The breath also has a characteristic odor. This mode of death is more common than is supposed, and, next to phthisis, is the chief danger to the

diabetic. The cause of these phenomena is not yet clear, and the various views are very fully discussed. The fat emboli theory receives no support from Professor Frerichs' experience. Acetonæmia, so much discussed of late, is also disposed of, and he thinks the word should be abolished. That aceton occurs in the urine of diabetic patients is well attested; where it arises, and with what preliminary steps, are unknown. It may be given to men and animals in large doses without any serious disturbance. The recent view of Stadelmann that it is a form of acid intoxication due to the accumulation of, possibly, B-croton acid appears negatived by the absence of any reduction in the alkalinity of the blood, and by the fact that B-croton acid appears not to be poisonous. As to the cause, he thinks that in the first group the death is due to heart paralysis, but in the second and third we have to deal with a form of intoxication, as shown by the symptoms—headaches, feeling of drunkenness, the delirium, somnolence and coma, always accompanied by the characteristic changes in the urine and breath. "We have here to do with a series of decomposition processes in the blood, sometimes rapidly, sometimes slowly induced, of which we know the final products (acetessig acid and aceton), while the preliminary stages of the zymotic process in the blood are unknown, and are hard to follow on account of the easy and rapid changes of bodies of this class. We designate these zymotic (fermentative) processes as diabetic intoxication."

An analysis of 55 autopsies is given. The most important and constant change in the medulla was marked dilatation of the small vessels, often accompanied by fresh hemorrhages.

As regards treatment, Prof. Frerichs thinks we have just as many resources against diabetes as against gout, emphysema, or chr. morbus Brightii, and he has had patients who have survived 10, 12, 16 and, in one instance, 20 years. Mental quietude is all important. Bodily exercise, as recommended by Trousseau, is of great service. As regards diet, a reduction of the carbo-hydrates is advised, but he thinks it better to allow the patients a little bread, and to give, as addition to the flesh, a fish diet, and green vegetables as free as possible from starch.

The milk cure has done more harm than good. In gouty cases, the alkaline springs—Carlsbad, Neuenahr, and Vichy—are of great, occasionally permanent, benefit. The anti-zymotic remedies—carbolic acid, salicylic acid and iodoform—so much lauded by some physicians, are not often of permanent value.

Five beautifully-executed plates accompany the volume, illustrating the pathological changes.

Prof. Frerichs' clinic is still much frequented, and one can daily see several cases of great interest, and hear words of clinical wisdom from an experience of forty years.

The other great medical clinics at the Charité are Leyden's, general medicine; Westphal, psychiatric and nervous diseases; and Henoch, children's diseases. Prof. Leyden takes much more pains to instruct the students, who are called in groups of four or five to each case in the arena, but this often makes it rather tedious to the onlooker—as it seemed often most trying to the Professor. Certainly physical diagnosis does not seem to be a strong point in the class this semester, but most of them are beginners, and have come to learn. No clinic has pleased me more than Prof. Westphal's. I think most of us—all the members of our local medical society at any rate—take an interest in mental disease, and when presented for study in a systematic and scientific manner, it is particularly attractive. Here, as in most of the German Universities, diseases of the mind and diseases of the nervous system go together, as they should do, and Westphal's division of the Charité comprises both. After about an hour's lecture on some special subject, cases are brought in from the asylum wards in illustration, and the chief points in each dwelt upon, so far as they bear upon the subject discussed. I am glad to see that the attendance upon this clinic has greatly increased, and there are more strangers at it than at any other which I attend. The lectures on diseases of the spinal cord on Saturdays are also most intructive.

Through the kindness of Director Rolloff, I have been able to see something of the working of the Royal Veterinary College, which is in the immediate vicinity of the Charité, and under Government control. The professors live in a part of the insti-

tution, and do not engage in private practice, but each one devotes himself specially to the department which he teaches. As a consequence, there is much better teaching, and altogether a more scientific tone, than is the case in English or American institutions of the kind. The students, however, do not seem to be up to the average of our own, a fact explained possibly by the comparatively low state of the profession in the country districts and the wretched remuneration. Really first-class veterinary practices are infrequent; even here, in this large city, the Veterinary College must be a great opponent, as persons of all grades and their animals come to it to be doctored at Government expense. The new Pathological Institute, in connection with the School, is a beautiful building, admirably adapted for purposes of teaching and investigation.

I have been much interested in the abattoir, and, through the kindness of the Veterinary Superintendent, Dr. Hertwig, I have been able to see the admirable system of inspection of flesh, as well as secure a number of valuable specimens illustrating the commoner morbid and parasitic appearances. Trichinæ do not appear in some with anything like the frequency in America, but the habits of the people necessitate an army of inspectors throughout the country. There are 84 or 85 at the abattoir here, and of every hog, 24 small bits of the muscles are examined microscopically. Measles (cysticerci) in the hog is very common; every day carcasses are confiscated. Tubercle is also met with very frequently in the swine, much more so than with us. Measles in the calf and ox is rare. It is to be hoped that in Montreal the Council will see the necessity of appointing skilled inspectors, and that power will be granted to confiscate condemned carcasses and order destruction of the same under police supervision.

Prof. Liebrich's Pharmacological Laboratory, which is a building at one end of the Physiological Institute, illustrates the thorough way in which the Government deals with these scientific branches. From basement to roof the building is equipped with everything that an investigator of the action and character of drugs could desire. No expense has been spared; indeed in

some directions it has been lavish. Lecture-room, students' laboratory, museum, operating-room, with a fine suite of private apartments, makes up, perhaps, the most complete laboratory of the kind in Europe.

The modern "*hep, hep, hep*" shrieked in Berlin for some years past has by no means died out, and, to judge from the tone of several of the papers devoted to the Jewish question, there are not wanting some who would gladly revert to the plan adopted on the Nile some thousands of years ago for solving the Malthusian problem of Semitic increase. Doubtless there were then, as now, noisy agitators—prototypes of the Parsons Stocker—who clamored for the hard laws which ultimately prevailed, and for the taskmasters whose example so many Gentile generations have willingly followed of demanding, where they safely could, bricks without straw of their Israelitish brethren. Should another Moses arise and preach a Semitic exodus from Germany, and should prevail, they would leave the land impoverished far more than was ancient Egypt by the loss of the "jewels of gold and jewels of silver" of which the people were "spoiled." To say nothing of the material wealth—enough to buy Palestine over and over again from the Turk—there is not a profession which would not suffer the serious loss of many of its most brilliant ornaments, and in none more so than in our own. I hope to be able to get the data with reference to the exact number of professors and docents of Hebrew extraction in the German Medical Faculties. The number is very great, and of those I know, their positions have been won by hard and honorable work; but I fear that, as I hear has already been the case, the present agitation will help to make the attainment of University professorships additionally difficult. One cannot but notice here, in any assembly of doctors, the strong Semitic element; at the local societies, and at the German Congress of Physicians, it was particularly noticeable, and the same holds good in any collection of students. All honor to them!

W. O.

SURGICAL NOTES—BERGMANN'S KLINIK.

The operating theatre is large and well-ventilated. The floor (of porcelain tiles), the tables and the adjacent woodwork are scrubbed, and the rest of the room, seats, &c., swept, dusted, and sprinkled with carbolic acid every morning. Once a week every part of the woodwork and walls, as well as the floor of the part occupied by the students, is thoroughly scrubbed and disinfected. Moreover, the spray (carbolic 2 per cent.) plays in it for at least two hours every morning; and during this time such patients as can be brought in have their dressings changed here. The operating tables (for there are often three and even four in requisition) are covered with sheets of rubber one-third of an inch thick, which project beyond the edge so that the patient never comes into contact with the wood, and after each operation, this rubber cover is thoroughly washed with "sublimat" (Sol. Hydrarg. Perchlor. 1–1000). The patient is always completely stripped and covered with clean sheets, and a blanket if needed; these, whether soiled or not, are at once sent to the wash-house, so that they cannot possibly convey contagion to another case.

The disinfectant solutions used, as a rule, are 2 per cent. sol. carbolic acid and 1 per thousand sol. corrosive sublimate: these are always spoken of as "carbol" and "sublimat." In addition, 5 per cent. sol. carbolic acid is sometimes used for washing intestines during abdominal section, &c.; 1 per cent. sol. salicylic acid (I have only seen this used to wash out the bladder for cystitis or during lithotomy); 10 per cent. sol. iodoform in sulphuric ether, used to wash out the wound in resections, and also for tampons. The carbol and sublimat are used, as far as I can see, quite indifferently; but Fehleisen, the first assistant, who operates when the chief is absent, always uses the latter. Iodoform is used in powder where the wound is situated in a cavity, as in nose, mouth, vagina; and a 5 per cent ointment of the same drug is kept at hand to anoint the fingers before digital examinations. Iodoform suppositories are also in use. I have tried in vain to find out any principle by which the use of the spray is guided. As a rule, it is at hand, but often can be heard playing in the next room. Perhaps it is more regularly employed

during intra-peritoneal operations than in any others: yet twice lately it has been neglected, during an exploratory abdominal section and a herniotomy with excision of the sac. If used, it is made to play directly over the wound, saturating the heads of the operator and his assistants.

As to dressing materials, sublimate gauze and wadding or wool constitute 99 per cent. of what is used,—iodoform gauze, wool, or jute the rest. The sublimated gauze is made here; it is pure white, beautifully soft and light, and perfectly dry: the wool the same. Tampons made of iodoform gauze rolled up tightly and tied in appropriate sizes are always used to pack cavities or wounds which are not expected to unite at once; before use they are dipped in iodoform solution (10 per cent. in ether). Protective is not applied to the wound; but in most cases the outermost dressing consists of several layers of sublimated gauze, with a sheet of very thin rubber tissue between the two outermost layers. The bandages commonly used are of sublimated gauze, charged with a little starch; they are dipped in water just before use, and hold the dressings splendidly. Plaster bandages are also used very freely; and the limbs are nearly always steadied by the use of strips of felt, gutta percha, or light splints of wood or perforated zinc.

During an operation, all engaged are clad in clean white duck overcoats reaching nearly to the ankles; the sleeves are short, so that the forearm is always bare. If at all soiled, these are changed before the next operation. Every one washes his or her hands with soap and a nail-brush, and then dips them in carbol or sublimat, before and after each operation, and also rinses them with the solution frequently during its performance. The patient's body, in the neighborhood of the site of the operation, is also washed in the same way before and after each operation or dressing. The instruments lie in carbol; and during operation, if one is laid down for a moment, an assistant at once seizes it and washes it in pure water before restoring it to the tray, which is thus kept always clean. No sponges are used except to guard viscera against injury, &c.; but small pieces of dry gauze do instead, and are used very freely, the floor after a bloody operation being covered with them.

Irrigation is used to an extent that surprises one who has been trained in an economical school. In the room over the theatre are two large tanks, full of the solutions; long rubber tubes, furnished with ingenious nozzles, afford a means of applying these to any part in any amount. In addition, large cans, like enormous teapots, are at hand to flood the wound (and the table) whenever it seems desirable, which is very often.

Carbolized catgut is generally used for ligatures and sutures, but in many cases Chinese silk is used for the latter, and sometimes, as when great force is to be used, for the former. The only thing that one notices about the drainage tubes is their large size, fully twice as large as we are accustomed to in Montreal, and I am inclined to doubt the advantage of these unusual dimensions.

These are the principal points that struck me in regard to materials, &c. A word or two about instruments. Bergmann uses several which are seldom thought of at home. Three kinds of retractors are in use—sharp treble hooks, short broad-beaked blunt and broad long-hook-beaked blunt retractors. These are *always* used, the first and second assistants applying them as soon as the skin is incised, and keeping the wound well opened. In many cases the sharp hooks alone suffice, but in some, as in resection of the hip, ligature of subclavian, &c., when a very deep wound is made, the last-named are very useful. Single hooks of various sizes, both blunt and sharp, are also much used in appropriate cases. To me it seems these retractors are very useful, keeping the wound well open down to the bottom, and allowing an uninterrupted view of the knife; they also keep important or delicate structures well out of harm's way. The artery forceps used are those of Langenbeck—much like those known to us as "torsion forceps;" they are used in great numbers, as no vessels are tied till the end of the operation, except in cases of abdominal section, when great pains are taken to arrest *all* bleeding before opening the peritoneum. In resections and operations on bones, very strong knives of many different shapes are used, and recourse is very frequently had to chisel, gouge, or sharp spoon. All these instruments, as well as the

retractors, common scalpels and bistouries, and, in short, all instruments, as far as possible, are made of one piece of steel, the handles being plated with nickel; they can thus be made aseptic with the greatest ease. He also uses the chain-saw very commonly, and, as I have indicated, the sharp spoon—indeed the latter is almost constantly in his hands. In his operations on bone he always takes the greatest pains, by chiselling, gouging, and scraping with the spoon to remove every fragment that seems at all suspicious; and also, with scissors and forceps, cuts away all the thickened and infiltrated tissue always found about diseased bones and joints. The enormous wounds are tightly stuffed with iodoform tampons, and heal in a really surprising manner. During the use of saw, chisel, or spoon, a stream of sublimat is kept playing into the wound, which is thus kept clean. The needles used are always curved, usually fully so (Hagedorn's pattern), and rather smaller than those one sees, as a rule, in England; but as a needle-holder is another essential, they seem to be very convenient, and certainly can be used very rapidly. The continuous is the only variation I have seen on the ordinary interrupted suture. In removing sutures, a pair of small, sharp-pointed scissors, like eye scissors, are used. Instead of the usual dissecting forceps, hook forceps, large ophthalmic "fixation forceps," but much larger, are used. For cutting the stiff gauze bandages, a pair of large, strong elbow scissors, with a flat button on the point of the lower blade, seem very useful: they are called by the maker's name, Windler's. To remove plaster bandages, the ordinary plaster shears are used, and also a small saw, like the curved blade of a Hey's saw.

In the wards, all the utensils, and notably the flat pans, used to receive pus, dressings, &c., are of polished brass, and so are the irrigation cans, which hold about a quart. Over each bed is a hook for the irrigation can to be hung on. A small, narrow bench or stool, about 6 inches high, 12 inches long and 3 inches broad, covered with rubber, is much used to put under the hips, back, &c., during dressings, which are always done on a special table, unless the patient's state absolutely forbids it. The same precautions are taken in dressing as in operating. As to splints,

I have noticed nothing remarkable except the number and variety of resection splints, but plaster replaces them in the treatment of simple fractures.

In conclusion, let me say that the expense of carrying out this system must be enormous, as may be gathered from what I have written; but in this happy land the hospitals, &c., are all Government institutions, and have practically *carte-blanche*. And the director (in this case Ernst von Bergmann) is an absolute sovereign in his own institution. *Oh si sic omnes.*

R. J. B. H.

Reviews and Notices of Books.

The Dissector's Manual.—By W. BRUCE-CLARKE and C. B. LOCKWOOD. London: Cassell & Co. Philadelphia: Henry C. Lea.

This little book is one of the now very popular series of text-books in course of publication by the above-mentioned firms. It is less fortunate than its predecessors, inasmuch as they supplied a decided want. There was no work on surgical pathology exactly suited to the requirements of the English examining bodies, so that Mr. Pepper's book came at once into demand. The Applied Anatomy of Treves and the Histology of Klein, for the same reason, found many readers; but it will take a dissector's guide of very extraordinary merit to supersede the old favourites—Ellis, Heath, and Holden.

The authors have recommended a plan of study somewhat unusual. The student is to master the book description of the individual parts at home with his Gray or his Quain, the guide is to show him the proper mode of applying the knowledge thus gained. Hence parts, muscles, arteries, &c., are not separately described, but the leading points of each dissection and the relative position of structures are indicated. Where space is so limited the introductory chapter might well be omitted, including the glossary of anatomical terms, which is quite unnecessary. Certainly words in such common use as "demonstrate," "capsule," "dissect," "ligament," "organ," "flex," do not need special definition. The directions for the preparation of sub-

jects for dissection, though brief, we have found more useful than those contained in volumes much more pretentious. The preservative injection of arsenic and carbolic acid experience enables us to recommend. It preserves the subject without rendering the tissues hard, and does not act upon the vessels in such a manner as to prevent their receiving a full charge of the colouring material. As a rule, the descriptions of the parts which present most difficulty to the student are well done, and by means of the well chosen familiar examples used ought to be well understood. Particularly we refer to the perinæum, the parts concerned in hernia, and the pelvic fascia. The chapter on the brain is to be commended. The subject is treated briefly, but no point of real importance is omitted. An excellent diagram illustrates that part of the description in which so many writers break down, the continuation of the fibres of the medulla into the cerebrum and cerebellum.

The fact that no urgent need of such a book exists does not prevent us from according to the authors the praise they deserve for the manner in which they have compressed such a large amount of valuable anatomical information into so small a space, while at the same time their style of writing has been found most readable and attractive.

The General Practitioner's Guide to Diseases and Injuries of the Eye and Eyelids.—By Louis H. Tosswill, B.A., M.B., Cantab, M.R.C.S., Surgeon to the West of England Eye Infirmary at Exeter. London: J. & A. Churchill, 11, New Burlington Street. 1884.

This is a neat little manual treating of those diseases and injuries of the eye which are most frequently met with by the general practitioner. Such important affections as purulent ophthalmia, ulcers of the cornea, iritis, &c., which every practitioner should be prepared to treat, are described fully but concisely, so that "he who runs may read," while on the other hand, cataract, glaucoma, and the more obscure affections of the eye are merely mentioned in connection with their diagnosis, as they are usually referred to the specialist for treatment.

The chapters on foreign bodies and injuries are likewise concisely written. In fine, we know of no manual on the diseases and injuries of this important organ which is likely to give more general satisfaction to the busy practitioner.

Pathology, Diagnosis, and Treatment of Diseases of the Rectum and Anus.—By CHARLES B. KELSEY, M.D., Surgeon to St. Paul's Infirmary for Diseases of the Rectum, &c. New York: William Wood & Co., 56 & 58, Lafayette Place. 1884.

As one of the series of "Wood's Library of Standard Medical Authors," this work appeared a little over a year ago, and was then reviewed in these pages. It appears now in an entirely new dress, being much enlarged and embellished with two chromo-lithographs, besides many original illustrations. The chapter on Rectal Hernia has been also added entire.

Since the last issue the author has found reason to modify his views somewhat regarding the treatment of hemorrhoids, a subject always of considerable interest to the surgeon. He was then decidedly inclined to favor the treatment by ligature. Now he strongly advocates injection with carbolic acid of the strength of about five per cent. The great objection to this plan is the length of time required to effect a cure, often three or four months, the applications being repeated twice a week. This method may prove a great financial success to the specialist and is doubtless safe, but it does not commend itself to us at present. Smith's treatment by clamp and cautery receives favorable notice.

The chapter on cancer is full and well written. With a view to arriving at a knowledge of what experience has already taught in connection with the treatment of this disease by excision, the author has collected the reports of 140 cases, from a study of which he has arrived at the following fairly just conclusions regarding this operation:—

1. Although there have been a few cases of excision in which the cancer has not returned in a number of years, such a result is so rare as not to justify the exposure of the patient to the risk

of immediate death which attends the attempt to remove extensive disease.

2. The operation is chiefly valuable as a palliative measure, and as such compares favorably with colotomy both in prolonging life and relieving pain.

3. When the disease reaches above three inches from the anus, or involves neighbouring parts so as to render its entire removal, without injury to the peritoneum, questionable, the operation is contra-indicated.

4. The operation is not followed by any annoying after-consequences which are of sufficient gravity to contra-indicate its performance.

Some space is given in the last chapter to the important subject of rectal alimentation. Altogether the work has much to commend it, and we predict for its enterprising author a brilliant career in this limited department of surgery to which he is apparently giving special attention.

Illustrations of the Influence of the Mind upon the Body in Health and Disease: Designed to Elucidate the Action of the Imagination.—By DANIEL HACK TUKE, M.D., F.R.C.P., LL.D., &c. Second American from the Second English Edition. Philadelphia: Henry C. Lea's Son & Co.; Montreal: Dawson Brothers.

The mere fact of a work with the above philosophical title reaching a second edition is sufficient evidence that the author has done his part well. It is also a proof that in spite of the utilitarianism of the age we live in there are sufficient readers to take a lively interest in such a so-called "non-practical" subject.

It is, however, not strictly correct to style the work as being ulterior to the every day uses of the physician in his battle with disease and death. We feel assured that he who rises from a careful perusal of it, especially that part dealing with the application of the influence of the mind on the body to medical practice (psycho-therapeutics) will be the better enabled to deal

with many of those obscure bodily and mental troubles which are so common. In estimating the often contradictory effects of drugs upon the human system, the influence that the mind takes in determining this action is very seldom inquired into. In some measure the utterly contradictory reports that are constantly being published and with which the medical journals of the day are full, are explained only in this way. Dr. Wilks in his lectures on the Diseases of the Nervous System, says that the physician "soon finds that in treating his patient, the practice of medicine is not only one of physic but of psychology, and that the effects of his drugs *depends as much upon the constitution of the patient's mind as his body.* I know several persons, amongst others, two notable examples in our profession who say they cannot take physic; they mean that two or three grains of rhubarb will violently purge them, that a few drops of opium upset their livers and stomach for several days, that three grains of iodide of potassium will cause coryza and headache, and so on through the whole list of drugs. These very unpleasant people and unsatisfactory patients are counterbalanced by our old and steadfast adherents, who ask for a prescription with confidence, and declare that whatever you give them does them good."

The following case shows how the strange manifestations of hypnotism may be utilized in treating insanity:—Dr. Huggard, the medical superintendent of the Sussex House Asylum, had a patient, a lady of 45, labouring under melancholia with cataleptic symptoms, who refused food with great obstinacy. "Impressed with Dr. Hack Tuke's paper on 'hypnotism,' and Tamburini and Sepilli's experiments on the same subject," Dr. Huggard had recourse to this agent. The dangling of a bunch of keys for a few minutes before the patient's eyes brought on the hypnotic sleep. While in this state any idea suggested was believed, and commands were obeyed. She was ordered to eat and she ate. She was ordered to drink and she drank. She was ordered to go through various quick movements, and she did so. She was told she was the happiest mortal in the world, and was desired to laugh; her face lighted up, an unaccustomed

smile came upon her lips, the croaking noise of unwonted and almost forgotten laughter was heard, which soon, however, with practice, softened into more natural sounds. Hypnotism was employed off and on for a week, and was then discontinued, lest a habit should be formed, but during the employment of this means marked improvement was observed which had continued, and now the lady was convalescent. In this case a new device was adopted to compel the ingestion of food. But more than this, an opportunity was afforded of reaching and exciting to action long disused nervous channels. Dr. Tuke gives a great array of cases where the influence of mental anguish has caused the hair to become gray. In some instances where this change was noticed it was found that there was "an accumulation of air globules in the fibrous substance of the hair."

The influence of the mind on sensation, on the voluntary and involuntary muscles, and upon the organic functions, is dealt with very fully and very learnedly.

The Field of Disease: A Book of Preventive Medicine.—By BENJAMIN WARD RICHARDSON, F.R.C.P., Honorary Physician to the Royal Literary Fund. Philadelphia: Henry C. Lea's Son & Co.

This book, bearing a somewhat singular title, is one intended by the author to educate laymen in correct principles of medicine and their application to the prevention of disease. It was written, he states, "for those members of the intelligent reading public who, without desiring to trench on the province of the physician and surgeon, or to dabble in the science and art of medical treatment of disease, wish to know the leading facts about the diseases of the human family, their causes and prevention." The publishers, however, claim for it that, though intended primarily for the public, still "it contains much with which every physician should be familiar, while there is no work in the language in which the information here presented can be sought, systematically arranged, and intelligibly presented. From an examination of its chapters we are quite ready to agree with the latter statement, and consequently introduce

it with pleasure to our readers. The first part "Diseases" contains outlines of the various classes of diseases: this is not specially instructive to medical men, being rather elementary in in character. The second, on "acquired diseases," is divided into those from inorganic and organic poisons, those from physical agencies, mechanical and general, and the third, those from mental agencies, moral, emotional, and habitual. In many parts these chapters are highly interesting. The third section is "a practical summary of the origins, causes, and preventions of disease," and really contains the gist of what is known on the general subject of the etiology of disease and the most approved ideas concerning the combating of these by various hygienic means. It will be found a very useful book for reference upon many of those points which so frequently arise.

A Study of the Bladder during Parturition.—By J. HALLIDAY CROOM, M.D., F.R.C.P.E. Edinburgh: David Douglas. 1884.

The author is one of the physicians to the Edinburgh Royal Maternity Hospital, and the observations on which the work is based were made at that institution. They were communicated first in the form of papers to the Edinburgh Obstetrical Society and are now presented to the profession in collective form in this little monograph.

The object of the inquiry is to ascertain the extent and manner in which the bladder and its contents are influenced by parturient efforts. This was done by introducing within the bladder a No. 8 rubber catheter to which a piece of rubber tubing was attached, thus connecting the bladder of the patient with an apparatus containing a column of mercury with a graduated scale. All necessary details being arranged the effect of the pains was observed on the mercury and the pressure force of the pains on the bladder thus calculated. Our space will not permit of a detailed description of the author's methods and apparatus, but we give the most important of his conclusions:—

1st. That pressure is brought to bear on the bladder during labour.

2nd. That during the interval of pain bladder-pressure amounts practically to *nil.*

3rd. That in ordinary labour the maximum pressure is about 3.2 lbs. on the square inch.

4th. This pressure is obtained during the second stage of labour, but accidental high readings may be got during the first stage, if by accident any voluntary effort is interposed.

5th. That in ordinary labours the minimum pressure amounts to ·1 lb. on the square inch, and that this is found during the first stage of labour.

The work is illustrated by a number of wood-cut diagrams and a series of eight tables. The second part of the work consists of an interesting paper on the bladder during the early "puerperium," as our Scottish friends have it. This little monograph must be regarded as an important contribution to the subject. We commend it to our readers. It is dedicated to Professor A. R. Simpson.

A Manual of Obstetrics.—By A. F. A. KING, M.D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the Columbian University, Washington, D.C., &c. With 59 illustrations. Second edition. Philadelphia: Henry C. Lea's Son & Co.

We have already had occasion to direct attention to this book in its first edition which appeared but a short time ago. A few additions of a useful character have been made. It is one of the best of the modern handy manuals on this branch of medicine. It has been well received and become popular both in the United States and in this country, and we believe its popularity to be well deserved. It will be found especially suitable for students, and for the guidance of young practitioners.

Books and Pamphlets Received.

SEXUAL NEURASTHENIA: WITH A CHAPTER ON DIET FOR THE NERVOUS. By Geo. M. Beard, A.M., M.D. Edited by A. D. Rockwell, A.M., MD. New York: G. B. Treat.

AUSCULTATION, PERCUSSION AND URINALYSIS. Edited by C. Henri Leonard, A.M., M.D. Illustrated. Issued by the Illustrated Medical Journal Co., Detroit, Mich.

A NEW METHOD OF TREATING CHRONIC GLAUCOMA, BASED ON RECENT RESEARCHES INTO ITS PATHOLOGY. By Geo. Lindsay Johnson, M.B. Illustrated. London: H. K. Lewis.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 25th, 1884.

DR. HENRY HOWARD IN THE CHAIR.

PATHOLOGICAL SPECIMENS.

DR. R. L. MACDONNELL exhibited a *radius* found in the McGill dissecting-room, shewing an old Colles' fracture; also a *skull*, the parietal bones of which were very thin over the grooves for the middle meningeal artery. This was pointed out to be of medico-legal interest, inasmuch as a moderate blow on the side of the head might produce death by fracture of the bone and perforation of the vessel.

DR. HENRY HOWARD said that the late Dr. Macdonnell saved a cab-driver from the gallows by showing in court that the skull of the person whom he had struck on the head for refusing to pay him was abnormally thin in this region, death being caused as above.

Syphilitic Teeth.—Dr. MacDonnell showed a plaster cast of teeth from a boy who has been under his care for about two years suffering from well marked symptoms of congenital syphilis.

DR. SUTHERLAND exhibited the following:—

1. *Monstrosity.*—Drawing of a two-headed fœtus and skeleton of the same from Dr. Mullins of Hamilton. The child (male) had two heads, four arms, and two legs. The skeleton shewed two separate vertebral columns converging at the sacrum, and two thoracic cavities, one abdominal.

2. *Hemorrhage into the Cerebellum.*—The right lobe of the cerebellum was torn up by the force of the blood. This specimen was removed from a boy aged 13 years, who, while apparently in good health, was suddenly seized with a convulsive fit, dying almost immediately.

3. *Brain of a Monkey*—Showing the cerebellum fully covered by the cerebrum.

Dr. Sutherland also showed the *Skull and Brain of an Idiot*, the main features of which were as follows:—Of the skull: The

capacity of the cranium comes under the group of microcephalic skulls. The bones of the face are large in comparison with those of the cranium, and slant forward. The horizontal circumference taken in a plane passing anteriorly through the ophryon and posteriorly through the occipital point, $17\frac{1}{2}$ inches; arch of the vault from the ophryon to the occipital point, 10 inches; transverse circumference from one auricular point to the other, 10 inches; width between the malar bones, 3 inches. Orbits are comparatively large, $2 \times 1\frac{1}{2}$ inches. Superciliary ridges prominent. Nasal septum between them is narrow. The ophryo-alveolo-auricular angle gives a prognathic index. Temporal fossæ are deep, and ridges well marked. Basi-occipital process ascends very obliquely to articulate with the basi-sphenoid. Foramina at the base are comparatively large; the grooves for sinuses comparatively small. The brain has a low, contracted appearance, short, greatest transverse diameter being at the middle of the mass, and having a ratio to the length of 1 to $1\frac{1}{2}$. Far from being concealed, the cerebellum projects behind the cerebrum to the extent of one inch, and forms a fourth part of the whole mass. In the base view the relative preponderance of the cerebellum is again the most striking feature—

Antero-posterior diameter of the cerebrum			5 inches
Hemispheric arch			6 "
Anterior curve (fiss. of front. lobe to fiss. Rol.)			3 "
Middle "	(fiss. Rol. to par. occip. fiss.)	right side,	1 "
		left "	$1\frac{1}{4}$ "
Posterior "	(par. occip. to fiss. of occip. lobe)	right "	$1\frac{1}{2}$ "
		left "	1 "

The frontal region is short and pointed; the orbital surface but slightly marked. Temporal convolutions are large, and are continued backwards into the occipital lobes, which are exceedingly small and cannot be definitely divided into their ordinary number of convolutions. The central lobe is exceedingly small. The parts which can be detected as actual convolutions are: Frontal parietal lobules—temporal, marginal, calloso-marginal, cuneate and præcuneate lobes. Less easily the orbital, occipital and central lobes—triradiate sulcus, corpora-striata and optic thalami. On the right side the fissure of Sylvius is continuous with the post-central and interparietal sulci. On both sides the calcarine

fissure is represented by two parallel sulci separated by a ridge of convolutional substance better marked on the right side. Further development of the convolutions above and below would have concealed this ridge and left a single fissure. Cerebellum more highly developed than the cerebrum.

DR. HENRY HOWARD made the following remarks on the brain demonstrated by Dr. Sutherland:—With your permission, Sir, I will read a copy of a letter I wrote to Dr. Richard MacDonnell bearing date September 16, 1883:

"I have a perfect recollection of the man that you spoke to me of. He was admitted into the asylum as a dangerous imbecile, a man with homicidal tendencies. When I first saw him I was struck with the peculiar shape of the head. It was conical. The apex of the cone appeared to be at the union of the sagittal and lambdoidal sutures. The os frontis ran back as if it formed a part of the point of the cone. The base of the cone was out of all proportion with the face, being nearly twice as large. The head and face formed two lines, and their bases united. The man's eyes were small and gray; he was what you might call pig-eyed. His walk was that of a man with locomotor ataxia. When he came towards you, you felt as if he would run over you.

"*Physiological symptoms.*—He was generally very good-natured, but terribly impulsive; the slightest thing would rouse him into a fury, when he would froth from the mouth and not be able to utter a word. At the best of times he spoke with hesitation, not impediment of speech.

"I know nothing of what disease he died of. It must have been a sudden death, as I never saw him in the Infirmary, and I see all the patients every week. I have no history of the man before he was admitted into the asylum. In your examination of the brain I would expect you to find the following conditions: Convolutions, particularly in the lateral and anterior portions of the hemispheres, flattened with irregular and shallow fissures; the cells in their cortical substance (that is, of these convolutions) few and small,—in fact, teratological defect in the whole of the motor and inhibitory nerve centres. And why would I expect you to find this abnormal state? Because the man was a very low order of imbecile, but little intelligence, and no power of controlling his impulses. I would expect to find some abnormal state of the Island of Reil, or the convolutions covering it, because of the hesitation in his speech. I would not expect to find much abnormality in the convolutions or gray substance in

the posterior lobes of the hemispheres or sensory nerve centres, because I never found any symptoms of either anæsthesia or analgesia. There was such a want of equilibrium in the man's movements, and he was such a victim of impulse, I would expect to find a very abnormal state of the mesencephalon, particularly about the basal ganglia, such as the corpus striatum and optic thalamus. I would expect the cerebellum to be large, and not covered by the posterior lobes of the hemispheres. There may be other abnormalities in the mesencephalon, but those I have mentioned I would expect to find.

"Yours always, H. HOWARD."

From the demonstration given you by Dr. Sutherland, you will perceive that, guided by experimental and clinical physiology, I made a good diagnosis of the teratological state of this man's brain, so far as the examination has gone, the doctor not having cut into the brain or made a histo-pathological examination of it. I admit that, in diagnosing flat convolutions and shallow sulci, I was as much guided in forming my opinion from the shape of the cranium as I was from the man's peculiar hesitation of speech and counduct. Judging by the frontal and lateral convolutions of the anterior hemisphere, we may easily conclude that there was teratological defect in the Island of Reil. Neuropathologists tell us that in the normal brain there are forty-four convolutions, and that sixteen of these are situated in the frontal lobes. In this brain there are only thirty convolutions, and eight of these in the frontal lobes. Mind, at least as we know it, being a phenomenon or force of matter, the psychosis must be what the physiology of the matter, of which it is the phenomena or force, makes it. This you have well exemplified in the imbecile's brain before you—the whole mass of the man's brain resembling more the brain of an ourang-outang than that of an ordinary man. It is a hard matter to give a definition of sanity, insanity, and imbecility that would be acceptable to all, particularly to judges that have to adjudicate in criminal cases. The reason in obvious. Some consider the mind to be soul or entity, causa vera; others, like myself, look upon mind, as far as we know it, as a phenomenon or force of matter. What is sanity? I answer, it is an equilibrium of mental forces or phenomena, due

to the physiology of physical organisms; and sanity or intelligence differs in degree, depending upon the physiological state of physical organisms. What is insanity? A physical disease, to be diagnosed by the person's psychosis and conduct, due to a loss of equilibrium of mental phenomena or forces, the result of pathological defect of physical organisms; and insanity differs in degree, depending upon the greater or lesser degree of the pathological defect of physical organisms. What is imbecility? It is a want or absence of equilibrium of mental phenomena or forces, due to teratological defect of physical organisms. Imbecility differs in degree, depending upon the greater or lesser degree of teratological defect in physical organisms. It is from the imbecile class that we get another class of society, viz., the criminal class, therefore the necessity of having the imbecile class cared for, but separated from society.

You perceive, gentlemen, that physical science naturally leads me to be a physiological psychologist, and I maintain that for physical effect there must be physical cause; therefore, that for all psychical phenomena or force there must be physiological cause. In the brain before you, taken from an imbecile, this truth is fully established. You may ask me, If mind is a phenomenon or force of matter, how is it that mind acts upon matter? I am sure that all nature's forces, which are phenomena of matter, whether organic or inorganic, not only act upon other forces, but react upon the cause. For example, you see it every day. Fire is a phenomenon of matter which acts on the very matter of which it is the force or motive. Atmospheric electricity or lightning is a phenomenon dependent upon the physiological state of the atmosphere. So does mind act upon the very organs of which it is the phenomenon, as well as it acts upon other organs. It is the antagonism of forces, when equal, that creates an equilibrium in nature, and not only in nature, but in our organisms. Therefore, as I have said, sanity is due to an equilibrium of mental forces, and insanity and imbecility to a loss of equilibrium of physical and mental forces. You will understand, then, that when I, or any other physiological psychologist, speak of the locality of the organ of intelligence being situated in the anterior

hemisphere of the brain, the motor organs in the lateral hemispheres, and the organ of consciousness in the posterior lobes, it is not meant by such statements to imply anything more than nerve centres with particular functions. It is not meant that such centres are independent of one another, or independent of other nerve forces. These terms are used for want of a better that would imply as much. The whole nervous system constitutes mind matter, as well as the brain and spinal cord. All centripetal nerve forces, or forces running towards the centre by means of the afferent or sensory nerves, find their centres in the posterior lobes of the cerebrum; therefore this centre is called the organ of consciousness. But should there arise any abnormal state of these afferent nerves by which the centripetal current would be cut off, there would be, so far, a loss of consciousness, although the nerve centre might remain normal. Again, if there was an abnormal state of any of the efferent or motor nerves by which the centrifugal current would be arrested, loss of motion in the peripheral nerve would take place, although the motor nerve centre was in a normal state. So is it with all other nerve centres—the eye, the ear, &c. All nerve centres are dependent upon each other for the perfect working of organic forces, and when all are normal, there is an equilibrium of organic forces, and there is an intellectual man. But when any of these forces are abnormal, then there is loss of equilibrium of forces, and a consequent loss of intellect to a greater or lesser degree, depending upon the abnormality of the affected organ. This is physiological psychology, or cause for effect, which is vastly different from the psychology of the past, which was based upon the supposition that mind was entity, or causa vera, and not what physical science or experimental philosophy has proved it to be, as far as we have any conception of it, a phenomenon or force of matter.

Our penal code is based upon the dogmatic *à priori* or speculative philosophy, which assumed that mind was entity. Hence the uselessness and absurdity of a physiological psychologist pleading before a judge of a criminal court. The ontological psychologist and the physiological, or experimental psychologist,

look upon crime from two different standpoints; therefore they never can come to the same conclusion as to cause and effect.

Since I wrote the foregoing I received the April number of the CANADA MEDICAL & SURGICAL JOURNAL, and in it perused with great pleasure, and, I hope, profit, a letter from Strasburg, over the signature "T. W. M.," in which the following occurs: "Professor Solly, before, perhaps, the most crowded house of the whole semester, detailed results of his latest experiments on the cerebrum. Solly opposes the theories of Hitzig and Ferrier with the deepest conviction that they are baseless. His results are very striking, and I doubt if it is possible for anyone to see Solly operate, remove a very considerable part of the fore-brain, and then note the results in the dogs, and still believe in the Hitzig-Ferrier localization theories."

You see in my remarks I have been anticipating "T. W. M." who, it appears to me, with Solly, misunderstands these physiological psychologists, Hitzig and Ferrier, and no matter what may be the result in dogs that have had a part of the fore-brain removed, it would be far from settling so important a question. "There may be localization, and this Solly admits, but not as we have heard of it as yet." Most undoubtedly there is localization, but not in the manner that Solly is looking for it; when he takes a wider view of the physical phenomena of force he will find it. Again, "T. W. M." says, "many suppose the localization hypothesis derives powerful support from clinics and pathology, from symptoms and morbid anatomy." Most undoubtedly they are many who believe it, and with good reason: see the brain before us this evening; morbid anatomy confirms the truth of the opinions formed from symptoms and clinical observations. No doubt but that there has been some wild writing upon the localization hypothesis, and that great misunderstanding has arisen from our terminology, nevertheless there must be physical cause for physical effect, and the effect must depend upon the physiology of matter, and our duty is, where we see effect, to search for, and, if possible, find out cause.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Bandy-Legged Irish Children.—The writer believes that an adequate explanation for the affliction may be found in the habits of the Irish people. It is well known that all over the south and west of Ireland thousands of the peasantry live in mud cabins, which are for the most part several feet below the level of the surrounding soil, many of them destitute of windows, doors, and chimneys, the places of which are supplied by simple holes. The cabins are warmed by a peat-fire in the centre of the burrow under the hole in the roof. The fuel is got from the adjacent bog, and its smoke would speedily blear and blind the eyes of any stranger who might venture to go inside. Such holes are continually damp, and are hot-beds (or rather *cold* beds) of rheumatism, rickets, osteomalacia, and various other diseases. There are generally half a dozen or more miserable children, huddled together for mutual warmth in the cold months, along with the parents, in addition to whom there is generally at least one full-grown pig, with perhaps a litter of young ones. The food of the family consists chiefly or entirely of potatoes, and it is seldom, indeed, that any of the members see bread or meat, although occasionally a little fish, in the shape of eels from the adjacent "bogholes," may find its way to their mouths.

According to Marshall ("Human and Comparative Physiology"), "potatoes are a weak food, one pound being only equivalent to about six ounces of bread, or four ounces and a half of lentils; they are not much more nutritious than the succulent vegetables." It follows that, in order to support the body at all, enormous quantities must be eaten. The stomach expands to accommodate the huge bulk of this inefficient food, the body becomes paunchy, and the limbs of children, enfeebled by rachitis, occasioned partly by the miserable food and partly by the unwholesome surroundings, bend under the weight of the trunk, and the deformity already described is the result.—*Dr. George Hay, in Popular Science Monthly for July.*

A Case of Gluteal Aneurism.—A paper on this subject, of which the following is an abstract, was recently read before the Clinical Society of London by Mr. G. R. Turner :—

Samuel P., aged 51, coachman, was admitted into the Seamen's Hospital, Greenwich, on September 17th, 1883. He had been previously under the care of Mr. Roper, of Lewisham, from whom the following history was obtained :—On September 5th the patient was thrown out of a pony carriage, and when seen by Mr. Roper, was found to have a scalp wound, exposing bone on the right side of the head, and a contusion of the back, right hip, and buttock. He did well till September 14th, when, without leave, he got up. On getting back into bed he felt something snap in the right buttock. Immediate swelling came on, and when Mr. Roper saw him, this swelling had most distinct pulsation. Ice was applied locally, and in two days the pulsation ceased and the tumour became hard and painful. On his admission into the Seamen's Hospital, the integuments over the swelling were inflamed, and there were marks of fading bruising extending over the buttock up to the scapula. No pulsation or thrill in the tumour, which measured some eight inches by six. The man had been a hard drinker, probably had had syphilis, and both radial and temporal vessels were atheromatous. There was some slight fever on his admission. This subsided after a few days' rest, and the condition of the integuments became less inflamed. The tumour, however, became larger, and fluctuation marked. At one place the skin, on September 30th, was prominent and thinned, the superficial inflammation returned, and the temperature rose again. On October 9th, it was evident a portion of the skin had lost its vitality, and that the tumour was on the point of bursting. Exploratory puncture with a fine trochar showed that the superficial part of the swelling was solid, and gave rise to a flow of bright arterial blood from the deeper part with no relief to the tension. On October 10th the patient was put under ether, the sac of the aneurism laid open from end to end, and more than 42 ozs. of disintegrating blood clot turned out. An oval aper-

ture about the size of a split pea was found in the gluteal artery just as it left the pelvis. A carbolised silk ligature was placed on either side of this, and tied. The vessels were diseased. During the operation the rectal lever was used, and but very little blood, except that in the sac of the aneurism, was lost. Previous examination by the rectum showed the swelling was extra-pelvic. The gluteus medius, minimus, and the external rotators of the thigh were exposed at the bottom of the sac. The gluteus maximus was completely destroyed. The wound was plugged with a carbolized sponge, and dressed with carbolic gauze. The man did well for eight days, when tetanus attacked him, and he died exhausted on the eleventh day. By that time the wound was granulating healthily; all the sloughs had separated, and all ligatures had come away. No injury to the gluteal nerve could be detected. At the operation the vessel was completely isolated, and seen perfectly before ligature. No *post-mortem* examination could be obtained. The diagnosis in this case presented no difficulty, although, but for the history, the swelling at one time might have been mistaken for an abscess. It bore no resemblance to tumour of bone. At first it seemed possible that a natural cure would result, and it was not until the tumour was on the point of bursting that operation was undertaken. As the danger of secondary hæmorrhage is so very great, laying open the sac was delayed as long as possible. The rectal lever proved most efficient and should be superior to an abdominal tourniquet in such cases.—*Medical Times.*

Transmission of Tuberculosis.—The presence of bacilli of tuberculosis in the blood, in chronic tuberculosis, has a bearing upon hereditary transmission of tuberculosis, and also upon its spread by vaccination. For if a bacillus can reach the innermost tissues of the economy, why may it not travel also from the blood of the mother to that of the embryo? Why, too, may it not be transferred with the vaccine lymph. The possibility of either event dare not be denied, if Koch's views be acknowledged. At the same time, even admitting such possibility, it is plain that the chances of such an accident are so

few, that we need not be influenced in our practice as to vaccination; while natural difficulties in the way of transmission from the blood of the mother to that of the embryo account for the frequency with which the children of tubercular parents escape the malady. In like manner, it is a legitimate result of these facts, that it is not venereal disease alone which may be communicated from the male to the female in coitus. The man with tuberculosis of the seminal vesicles and urethra may inoculate the woman with whom he has intercourse, and thus produce a tuberculosis of the uterus and Fallopian tubes. Weichselbaum tells us of a case of tuberculosis of the seminal vesicles and urethra, in which the number of bacilli was enormous. A seminal fluid in such cases would naturally be loaded with bacilli, which, carried up into the cavity of the uterus, might plant themselves in such favorable nidus as happens to be present. It is fortunate, in view of these facts, that tuberculosis of the genital apparatus of the male is as rare as it is, else we would find such mode of transmission more frequent. In the meantime it behooves practical physicians to bear these views in mind and apply to them the test of experience and observation.—*Med. News.*

Use of Forceps in Breech Presentations.—Dr Truzzi is strongly in favor of the use of forceps in breech presentations. He says that, in cases of impaction of the breech in the upper or middle parts of the pelvic cavity, the prompt extraction of the fetus being indicated, and while one of the hips is not yet rotated under the arch of the pubes, it is better to have recourse to the application of the forceps to the fetal pelvis than trust to traction on the groins, which is insufficient if practiced with the fingers, and dangerous with the blunt hook or fillet. The proposal of Olivier to apply the forceps on the thighs rather than to the pelvis of the fetus, though seductive theoretically, does not work practically. It is difficult to limit the pressure of the forceps to the thighs alone; and if this be not done the abdomen would be pressed on, and possibly even the liver injured. The concave extremities of the forceps pressing on the convex surface of the thighs, slip downwards

and forwards, and after a few pulls the original good hold is lost. Much easier and safer is the plan of applying the forceps to the side of the fœtal pelvis. The iliac bones at this period are so elastic, and, compared with the bones of the head, are so protected by the soft parts, that even if the force of compression be somewhat abused, it is difficult to injure the fœtal pelvis. To obtain a firm hold, the extremities of the blades must be passed beyond the crests of the ilia, and when the handles are approximated they bury themselves slightly in the walls of the abdomen, and, on traction being applied, bear on the crests of the ilia, and at the same time impart to the hips of the fœtus a convexity to which the concavity of the blades of the forceps exactly adapts itself. The liver runs no risk since, large as it is in the fœtus, it never descends to the level of the crest of the ilium; besides, its lowest part is the thin edge of the right lobe, which may be displaced inwards, but not lacerated or contused by pressure of the forceps. The same may be said of the intestine, which from its motility avoids even the consequences of considerable pressure if this be made in a methodical and and skilfnl manner. A folded cloth may be placed, as suggested by Tarnier, between the handles of the forceps, to prevent too much compression. The forceps takes a better hold, and the author has never seen it slip in sacro-anterior positions. He recommends, in some cases of sacro-posterior positions, that the position should be altered by a forcible rotation of the sacrum forwards before using traction. It is better, he says, to keep up a certain amount of compression in the intervals of traction; if this be not done, the iliac wings, by their great elasticity, tend to resume their normal place, and the forceps may be displaced.—*Lon. Med. Record.*

Duration of Menstrual Hemorrhage.—In a paper on "The Duration of the Menstrual Hemorrhage in Relation to the Development of the Fœtus at Term, and to Multiple Pregnancy," the author seeks to establish his conclusions on the basis of much statistical material collected in the clinics of Modena, Milan, and Turin. He was led to this

research by the idea that by the amenorrhea of pregnancy a so much greater quantity of maternal nourishment was retained for the benefit of the fœtus, as the sanguineous loss was greater in menstruation. Not being able to determine exactly the quantity lost at each period, he took its duration as a guide, which, considering the number of his observations, may be regarded as more or less equivalent. As to a longer duration of the menstrual hemorrhage, a corresponding ovarian activity can be supposed; so also the hypothesis may be justified of a more easy rupture of more ovisacs, and a greater probability of multiple pregnancy. From the analysis of very numerous observations, Professor Cuzzi thinks himself justified in formulating the following conclusions: (1) The weight and length of the fœtus at term are in direct relation with the number of days menstruation occupied. The longer the usual period of menstruation, the heavier and larger the fœtus. (2) There is a direct relation between multiple pregnancy and the duration of the menstrual period. That is, multiple pregnancy is most frequent in women in whom the period is long and the loss free.—*Lon. Med. Record.*

Recent Views on the Origin and Nature of Pneumonia.—Perhaps the most important subject considered at the recent Congress of German physicians, sitting in Berlin, was pneumonia. The original paper was read by Jürgensen, of Tübingen, and the *confrére* to whom had been referred the consideration of the pneumonicoccus was Fraenkel, of Berlin. The discussion was participated in by Gerhardt, of Würzburg, Fraentzel, of Berlin, Ruehle, of Bonn, Nothnagel, of Vienna, Rosenstein, of Leyden, Baeumler, of Freiburg, and Edlefsen, of Kiel. At the same time, the results can scarcely be considered commensurate with the importance of the subject. Within a few years past the views so long current as regards croupous pneumonia, that its cause is cold, its nature inflammatory, its initial symptom a chill, and its treatment antiphlogistic, have gradually given place in the minds of many to the idea that in croupous pneumonia we have an infec-

tious disease. The natural difficulties in the way of substantiating such views have been diminished by the evidence which experimental pathology has furnished in the results of inoculation with the recently discovered micrococcus of pneumonia. Closer examination has shown, too, that only four per cent. of the cases originate in exposure to cold, the remainder being doubtful or quite independent of it. Again, as to age, it was for a long time supposed that it attacked by preference the young and strong, but while statistics show that three-fifths of all cases occur from the first to the fourteenth year, the number of cases after forty-five is double that between fourteen and forty-four; and Jürgensen agrees with Flint in noting that it is the weak rather than the strong who are attacked by preferenee.

Jürgensen has also observed at Tübingen, at least, an interesting meteorological influence upon the occurrence of pneumonia, having noted that when the rainfall exceeded the mean, the cases were fewer, while an increase followed a fall below the mean—a relation to ground moisture similar to that so long observed in the case of typhoid fever. Edlefsen had observed the same relation at Kiel. A further analogy to typhoid is observed in the effect of hygienic surroundings and peculiarities of its habitat upon the development of pneumonia, and Jürgensen called attention to the discovery by Emmerich, of the pneumonicoccus in the steerage of vessels. The question as to the contagiousness of pneumonia cannot, at present, be answered, it being very difficult to say of so widespread a disease, whether a case of apparent transmission is actually such. since it may depend upon certain coincident hygienic influences. As to whether the poison of pneumonia is single or multiple, further information on this may be expected when the study of the microparasite is completed, but from a clinical study we dare only infer its unity, the striking variations in type and localization with which we are all familiar being in no way peculiar to it, but characteristic of all infectious diseases. The poison circulating in the blood has a special preference for the lungs and pleura, but it may manifest itself also in other situations, as is shown in cases in which the disease is ushered in by other

symptoms, which give place at a later stage to those of pneumonia. Thus, Nauwerk found in the kidneys of thirteen cases dying of pneumonia, Friedländer's cocci, also incomplete zoöglea masses, in the veins; and Jürgensen discovered, in a case of pneumonia with cerebral symptoms, numerous cocci in the brain. Another peculiarity of the pneumonia poison is that its action is not gradual, as in typhus, but spasmodic, a special expression of this character being evinced in the temperature, which, in addition to the normal daily variations, exhibits numerous small variations throughout the day. It is natural to expect that treatment should be modified to adapt it to such a view of pathogenesis. Hygiene, of course, acquires great importance, but, as yet, Jürgensen admits that treatment must, for the most part, be symptomatic. Iodine has been strongly recommended as an abortive measure, but he has had no experience with it. Especially is the heart to be watched, and an intermediate degree of antiphlogosis is recommended.

In the discussion which followed, Gerhardt accepted the views of Jürgensen as to the unity of pneumonia, and ascribed the so-called complications to a single poison operating diversely, as, for example, does the poison of scarlet fever. As to treatment, he, also, as well as Rühle, recommended the expectant and symptomatic method, with constant regard to the heart. In severe cases he used quinine, and in high fever the cold bath, with simultaneous stimulation of the heart.

Fräntzel referred to the jaundice of pneumonia, a symptom imperfectly understood, which is sometimes accompanied by gastric symptoms, and at others not. He believed that the doubt regarding this symptom, especially in cases unaccompanied by gastric symptoms, was removed by the new views, since in these instances, at least, it might be regarded as hæmatogenous.

Rühle thought the infectious nature of pneumonia scarcely established because we dare not exclude altogether cold as an etiological factor. Rosenstein believed that pneumonia might be infectious, but not necessarily so; that it may be secondary to contracted kidney or to brain disease; and that treatment must vary according as the case is infectious or not. Jürgen-

sen, however, thought these secondary pneumonias are not croupous.

Nothnagel cautioned against the too free use of alcohol, which he used only as a stimulant to the heart when it required it.

It is evident from the above that as yet little has been added to our knowledge of a proper treatment of croupous pneumonia, based upon the new views as to its pathology; while we are not certain that harm may not result from the unsettling of well-established principles of treatment. It is well known that, of late, the expectant plan of treatment of pneumonia has become quite general in some sections of this country. It is also well known that the mortality has increased during this period, rather than diminished. It is the belief, too, of men of large experience that some of the fatal cases would have terminated otherwise, if active antiphlogistic measures had been used; and we are ourselves inclined to believe that the expectant plan has been too generally followed, and that better results would have obtained if bloodletting were more common in this affection. It may be true, as Rosenstein suggested, that certain cases of pneumonia may be infectious, and others true inflammations, and that the treatment should differ accordingly. We do not, however, believe that the recognition of these differences of origin and nature is sufficiently easy to justify so complete an ignoring of antiphlogistic treatment. At any rate, the expectant and restorative plan is so invariably unsuccessful in grave cases that the antiphlogistic can scarcely be more so, and we recommend a more general return to it.—*Medical News*, May 24th.

Instrument for Temporarily Closing Either Ureter.—Silverman (*Berlin Klin. Wochenschr.*) figures and describes a new instrument by which either ureter can be closed long enough to allow of unmixed urine from either kidney to be collected for examination.

The instrument consists of a metallic double catheter, with quick curve, and a window 3½ cm. x 5 mm., near its point. The window can be closed by a shutter moved by a stilet. Within

the catheter there is contained a firm elastic catheter, which terminates in a small expansible gutta percha balloon or tampon. When collapsed, this tampon is contained within the point of the catheter.

The instrument is passed into the bladder till its beak impinges upon the posterior wall in the middle line, guided by a finger in the vagina or rectum (in men). The window is then opened, and the tampon made to expand by pouring mercury into it through the elastic catheter. By the introduction of 20 c,cm. of mercury, which weighs about 270 grms., the tampon can be filled up to the size of a goose's egg, and, guided by the finger to either side of the middle line, will by its weight effectually prevent any outflow of urine from the ureter upon that side. The bladder can be emptied and washed out through the other channel of the metallic canula, and urine from the free ureter allowed to collect for from fifteen to twenty minutes, in which time quite enough for satisfactory examination can be obtained.

Silverman had used it twenty-two times in women, and five times in men, and did not find its use attended with discomfort to the patient or followed by any evil effects.—*Centralbt. F. Chir., Glasgow Medical Journal.*

Tuberculosis of the Testis.—A laborer, aged 38, had hydrocele, cause not determined; he denied syphilis. Volkmann's operation was successfully performed; five weeks later the patient returned with a history of rigors, insomnia and loss of flesh. The testicle was then removed, and was found to show central tuberculosis, the hard tubercular mass not having yet had time to break down. A second patient, aged 31, had suffered from acute traumatic orchitis and epididymitis. Six weeks after the injury, the testicle was painful, swollen and hard; the swelling extending some distance up the cord. Chilliness and sweating were also complained of. The testicle, when removed, exhibited incipient breaking down of the tuberculous deposit centrally; while the tunica vaginalis, instead of being close and firm, closely resembled the synovial membrane

in cases of tuberculosis of the joints. In a third case, there had been chills, emaciation, loss of appetite, and swelling and pain of the testicle; the organ was found to consist almost entirely of broken-down tissue, and the tunica vaginalis had become obliterated. Dr. Gerster, who exhibited the specimens before the New York Pathological Society, remarked that in such cases the diagnosis could now be made much earlier than was formerly done, thus leading to proper treatment by extirpation; whereas it used to be the practice to let the condition remain until a fistulous opening formed in the scrotum, producing the so-called hernia testis. In the patients above mentioned, no physical signs of tuberculosis were detected in any other parts of the body; the general symptoms—rigors, sweats, &c.,—disappear on the removal of the diseased testicles.—*New York Medical Journal*, February 23rd.

The Anti-Vivisection Agitation from a Layman's Point of View.—George Augustus Sala, in his "Notes of the Week," in a late number of *The Illustrated London News*, writes:—

"The Committee of the Anti-Vivisection Society have sent me a circular referring to a meeting of the members and supporters of the Society to be held on Friday, May 9th.

"I have nothing to say myself against vivisection (when placed under proper legal restrictions), for the simple reason that for fifty years I have been in constant contact with the doctors, and have known some of the most eminent surgeons of the last and the present generations.

"I was, in early childhood, that which I once heard my mother's maid, in conversation with a friend, describe me as being 'a miserable little hobject;' and the doctors were continually doing things to me. I am, in many respects, a miserable object now, and require to be periodically patched up by the faculty. And I will say naught against vivisection, because I never yet met with a cruel doctor; and because I firmly believe medical men to be among the most humane, the most generous, the most unselfish of mankind; and I indignantly denounce the

imputation that there are any members of a noble, a high-minded, and a beneficent profession, who, actuated by no more exalted motives than their 'greed after the hidden things of the life of the flesh,' confessedly and without compunction torture dumb animals. The medical man practises vivisection (with the smallest possible infliction of pain on the animal vivisected), not because he is selfishly greedy after 'the hidden things of the life of the flesh,' but because he wants to find out what is the matter with *you*, verbose Sir or sentimental Madam; because he is striving his utmost to devise means for saving *you* from misery and anguish; for mitigating the agony of the ills that rack the joints, or fire the veins, or that 'in the deeper vitals rage.' He is no worshipper of knowledge as of an idol. He tries during his whole laborious life to learn more and more, in order that he may console and relieve and preserve suffering humanity."

Ring-Pessary Removed after Fourteen Years' Impaction.—Dr. Herbert Renshaw reports the case of a lady complaining of severe pains in the back and legs and unpleasant vaginal discharge. She was also obliged to pass her motions in the upright position, owing to the intense pain caused by any attempt to relieve the bowels in a sitting posture. On examination a smooth, raised fleshy ridge was found, running from before backward, on each side of the vagina, terminating before and behind in a rough semicircular ridge. Fourteen years previously the patient suffered from a troublesome bearing down. She consulted a "wise woman," who introduced a ring and asserted that it would never require to be removed. For many years she received great benefit from this support. The ring was removed by shelling it out from the fleshy overgrowth by picking through with the finger-nail. Half an hour after the operation all her pains disappeared. *British Medical Journal.*

CANADA

Medical and Surgical Journal.

MONTREAL, JULY, 1884.

THE ACTION OF ANTIPYRIN.

Antipyrin, an alkaloid, which is made synthetically from the Chinolin series, has recently been tried in twenty-seven cases of febrile disorders by Guttmann, of Berlin. In quantities of from one dram to one dram and a half, which are best given in two or three doses at intervals of an hour, antipyrin is a powerful and very certain antipyretic. The effects last usually five hours, and frequently much longer. The temperature slowly and gradually falls one hour after the administration of the first dose, and continues falling after the hourly doses. The fall from a dram and half, in three hourly doses, varies from $2\frac{1}{2}^{\circ}$ to $3\frac{1}{2}^{\circ}$ (Fah.) The duration of the fall varies from six to eighteen hours, that is before the temperature has reached the degree it had before the administration of the drug. The temperature only remains at its lowest point from one to two hours. The rest of the time is occupied in the gradual descent and subsequent ascent of the temperature. Simultaneous with the fall in the temperature, there is a decrease in the pulse rate, and generally profuse sweating. No untoward effects follow its administration with the exception that occasionally it does produce vomiting. It differs from Kairin in the following particulars:—

1. The fall of temperature is much slower from antipyrin.

2. The subsequent rise in the temperature is also slower, and on this account the ascent is never attended with rigors as it frequently is when Kairin has been given.

In many respects its anti-pyretic action more nearly resembles

quinine than it does antipyrin. It is, however, a more certain antipyretic than quinine. The dose is, at least, double that of quinine. It is best administered in capsules, on account of its disagreeable bitter taste.

TREATMENT OF CARBUNCLE.

This affection, fortunately rare with us in Canada, is exceedingly common in the large cities of Great Britain. We remember seeing one in the London Hospital recently which must have measured seven or eight inches in diameter. This was being treated simply by poultices, without incision. Mr. Hutchinson has long been opposed to the treatment of carbuncle by incision, believing that the duration of the disease is not shortened by that procedure, while the patient is subjected to some shock and often serious hemorrhage. We notice that Dr. Ashurst, of Philadelphia, also objects to incision in the treatment of carbuncle, preferring what he terms *pressure treatment.* He gives the credit for originating this method to Mr. O'Farrall, an Irish surgeon, who applied compression by means of a plaster made to cover the whole mass of carbuncle, and when suppuration began he cut a central opening for the escape of pus. Dr. Ashurst uses strips of plaster, bringing them gradually more and more inward from the margin, until a space in the centre is alone left uncovered through which the slough may find exit.

We have experience only with the treatment by incision, and with which, by the way, we have had every reason to be satisfied, although we can readily understand that in the earlier stage of the disease compression might prove of immense service. At any rate we purpose giving it a trial when occasion offers, and would ask our readers to do likewise, hoping that they will favor these pages with the results of their experience.

VOLUNTEER MEDICAL OFFICERS.

"Volunteer medical officers have now a recognized position in their regiments and definite duties and drills to superintend and men to command, and it is to be hoped that they will now accept their position with favour, and drill their men in ambu-

lance and stretcher work, thus taking their place among their working brother officers, instead of being, as is the case in many regiments, merely ornamental appendages. In several metropolitan and provincial Volunteer regiments, the bearers are intelligent, well instructed, and well drilled, and considering their few opportunities for practical work they are wonderfully efficient, and in all cases are zealous in their duties. We look upon this military ambulance work as a great advance, and we trust that the medical officers of our Volunteer army will not neglect their opportunity."—*Med. Times* (Lond.)

We are glad to see that this important department of the military service is beginning to receive here also some of the attention which it so much deserves. The 6th Fusiliers (Surgeon Jas. Bell) have recently added an ambulance corps and a full complement of regulation stretchers to their otherwise very efficient regiment. The members of the ambulance staff have been already fairly drilled under the immediate supervision of the Surgeon in charge. On two recent occasions they were called upon to do service for men who fell out from heat-stroke. Their promptitude and efficiency has been well spoken of. It would be well that this matter should be taken up by the medical officers of all our Canadian Volunteer regiments.

The utter want of adaptation of clothing to climate, as regards the uniform of our citizen-soldiers, was well shown on one of the occasions above alluded to. On the day of inspection the weather happened to be unusually warm, with that closeness of the air which often precedes a thunderstorm. The men marched in full uniform only from their armory to the parade-ground—about 20 minutes. In as many more minutes, ten men were carried off on stretchers, suffering from faintness, weakness, and dizziness; as many more felt ill, but managed to keep in the ranks. Of what value would men so equipped be for a march of any distance on a summer's day? The defects in dress and accoutrements are pretty well understood. Who will move for reform?

AN OPPORTUNITY FOR AMERICAN PATHOLOGISTS.—Under this heading the *N. Y. Medical Record* calls upon its countrymen to wake up and make haste to hunt the wary bacillus of yellow fever, or else the ubiquitous Koch will be before them. It says—

"At the banquet in Berlin, tendered to Dr. Koch on the return of the cholera commission, that eminent and successful investigator was called upon for a speech. In his response allusion was modestly made to the results of the commission's work, and the suggestion was put forth that, by a similar course of investigation, the germs of yellow fever and other infectious diseases might be found. It would be naturally inferred from the tenor of the remarks that Dr. Koch and his assistants held themselves ready to visit some part of the new world and hunt down, for example, the hypothetical parasite of yellow fever. If this duty should be assigned them, they would, no doubt, be cordially welcomed and efficiently assisted. But it would be a little odd, with our National Board of Health, and our numerous State and municipal sanitary organizations, to see a few foreigners in our midst looking for, and perhaps discovering, the germs that have so far eluded us. Yellow fever is the bane of American seaports in the summer. It interferes with our commerce, and at intervals spreads death and disaster among the people. As a country we are especially interested in finding the specific organism of this disease, if such exists. Are there no investigators among us competent, and no State or other organization willing to undertake a thorough study of the disease, using the methods adopted abroad? Or must we wait for Dr. Koch to come, capture the bacillus in a few months, and then return to be fêted and decorated with more medals at Berlin? We write this while aware that reports (whose authenticity is, however, questionable) are published to the effect that the organism of yellow fever has already been discovered.

CHOLERA.—The plague *has* spread eastward as has happened so often before. The outbreak at Toulon would seem to have been severe, and some hundreds of deaths have occurred. We also hear of its appearance in some German and Italian towns.

Will it visit America? It is reported that Koch has expressed himself strongly of opinion that it will. Let the mere mention of such a possibility cause every Board of Health, every sanitary authority, to awake to a sense of the responsibility of their positions; let action take the place of talk, and let every community prepare to set its house in order. It is useless to adduce arguments in favor of the value of cleanliness, municipal, civic, personal, and private. The difficulty is to get people to realize its necessity, and take the necessary action to ensure its accomplishment. At this time every medical man should be found lending his assistance in the direction of enforcing sanitary regulations, *coute qui coute.*

SURGERY EXTRAORDINARY.—If we are to believe the reporter of one of the New York papers, the House Surgeon of St. Vincent's Hospital in that city must be a man who likes his joke. He makes the reporter tell his readers with all gravity the following Munchausen-like story. A man had both legs crushed to pulp by an enormous weight falling upon them. The surgeon above mentioned took him in hand, removed an immense number of fragments of the comminuted bones, leaving the periosteum. All the arteries of the limbs were crushed to "tatters" from the ankle to near the knee. "I therefore," he says, "entirely removed the injured portions of these arteries and inserted very slender tubes of decalcified bone about as large as a pipe stem into the several ends and then bound them fast with catgut." The following is to be the *modus operandi* of the cure—"The ends of the arteries gradually grow over the tubes towards each other until they meet, and by that time the tubes, being of decalcified bone, and the catgut threads will have been completely absorbed!" *Credat Judœus.*

CANADA MEDICAL ASSOCIATION.—The annual meeting of the Canada Medical Association will take place at Montreal on the 25th, 26th and 27th August. The Local Reception Committee have held several meetings, and are making all necessary preliminary arrangements. It is hoped that, owing to the British Association immediately following, a larger attendance than

ever before will be obtained. Mr. Lawson Tait and other distinguished guests are expected to give addresses. We hope to publish in our next the titles of papers to be read. The usual reductions will be made by railway and steamboat companies. Any information relative to the meeting will be furnished on application to the Acting Secretary, Dr. James Bell, Beaver Hall Terrace, Montreal.

PHARMACEUTICAL ASSOCIATION, PROVINCE OF QUEBEC.—The annual meeting of the Pharmaceutical Association of the Province of Quebec was held at Quebec on the 10th June. There was a large attendance of members from all parts of the Province. The following gentlemen were elected as members of Council for the ensuing year: Messrs. H. R. Gray, A. Manson, H. F. Jackson, Edmond Giroux, sen., H. S. Evans, J. D. L. Ambrosse, P. Mathie, and F. C. Sanders. These, with the following, who remain in office in accordance with the provisions of the Quebec Pharmacy Act, constitute the Council for the ensuing year: Messrs. J. A. Harte, S. Lachance, John Kerry, and C. J. Covernton. A supplementary examination was held at Quebec on the 9th and 10th of June, when the following were successful:—*Major*—Henry Vernier, Quebec; Jules Hirtz, Montreal. *Minor*—A. E. Giguere, T. Coderre, and George Treggett. *Preliminary*—M. Bouchard and Robert Webb.

Medical Items.

—We learn that Dr. John Campbell of Seaforth, Ont., has been nominated by the Huron Medical Association to contest the Malahide and Tecumseh division at the coming election for the Medical Council. The well known abilities and sterling character of Dr. Campbell would make him a most desirable member of the Council.

—It is proposed to establish in Philadelphia a chair to be known as the S. D. Gross Professorship of Pathological Anatomy. Circulars have been issued to members of the profession and others interested, asking that subscriptions for this object be sent to Dr. R. J. Dunglison, of Philadelphia. We hope that

many in Canada will aid in the permanent commemoration of the name of one who long held the highest place amongst the surgeons of cis-Atlantic cities.

—We notice by the late papers that our friend, Mr. Chiene, the able and popular Professor of Surgery in Edinburgh University, is at present interesting himself in the very philanthropic work of erecting a Sanatorium at Market Gate, Fifeshire, to which over-worked students may resort for rest and change. From our hearts we wish him every success in this, as in all his laudable ventures.

—A singular accident is reported to have happened in connection with the insulated electric rail on the Portrush Electric Tramway. A ploughman returning from work on Thursday stood upon the rail to mount his horse, and, on applying his hands to the back of the animal, the brute fell dead, while the man was uninjured although the current of electricity must have passed through his body to the horse.

Local Treatment of Erysipelas.—An epidemic of fifty cases of erysipelas gave Polyanyi an opportunity of making comparative observations of different methods of treatment. The best results were given by applications of freshly-prepared sulphurous acid solution, made carefully every two hours over every part of the affected surface. J. Andeer prefers a fifty to eighty per cent. ointment of resorcin.—*Wiener Med. Presse.*

A Heart Murmur heard in Utero.—Dr. E. C. Cordell read a paper before the Medical and Chirurg. Faculty of Maryland (*Med. Record*, May 3), upon the absence of one of the segments of the mitral valve of a child who had died cyanotic one hour after birth. Some hours before delivery a systolic murmur had been recognized, which was supposed to be located at the mitral orifice. The autopsy revealed the lesion mentioned above. The condition appeared to be due to defect in development, and not to pathological causes; there was not any other abnormality.

What is in a Name.—A doctor with an Arabo-Hindustani name settled in one of the suburbs of Paris. In a short time he had a large run of wealthy patients. The police sent an

officer to inquire about the diploma of the mysterious practitioner. The doctor received the officer very politely, and smilingly showed him his full certificates and diploma from the University of Paris. "But," he said to the officer, "you will oblige me if you do not speak about this affair, for I would lose all my patients in a short time if they should know that I am a regular Parisian physician."

TOBACCO AS AN ANTIZYMOTIC.—There is a popular notion that the use of tobacco is in some degree a protective against the infectious diseases. In the *Montpellier Médical*, quoted in the *Bulletin Général de Therapeutique*, Dr. Pecholier supports this belief, saying that he considers tobacco an energetic parasiticide capable of acting upon microxymes and microbia, and that, while he thinks its abuse liable to produce well-marked effects on man, he is nevertheless convinced that it is capable of rendering important service in protecting him against epidemic and contagious diseases. He lays particular stress on the immunity against phthisis acquired by workers in tobacco.

A WINK AS GOOD AS A NOD.—Dr. de la Pommerais was executed in June, 1864, for a murder of the Palmer type. On the night before his execution he was visited by Surgeon Velpeau, who, after a few preliminary remarks, informed him that he came in the interest of science, and he hoped for Dr. de la Pommerais's co-operation. "You know," he said, "that one of the most interesting questions of physiology is as to whether any ray of memory, reflection or real sensibility survives in the brain of a man after the fall of the head." At this point the condemned man looked somewhat startled; but professional instincts at once resumed their sway, and the two physicians calmly discussed and arranged the details of an experiment for the next morning. "When the knife falls," said Velpeau, "I shall be standing at your side, and your head will at once pass from the executioner's hands into mine. I will then cry distinctly into your ear, 'Count de la Pommerais, can you at this moment thrice lower the lid of your right eye, while the left remains open?" The next day, when the great surgeon reached the condemned cell, he found

the condemned man practicing the sign agreed upon. A few minutes later the guillotine had done its work, the head was in Velpeau's hands and the question put. Familiar as he was with the most shocking and gastly scenes, he was almost frozen with terror as he saw the right lid fall, while the other eye looked fixedly at him. "Again!" he cried frantically. The lids moved, but they did not part. It was all over.—*Med. Review.*

—MELLIN'S FOOD FOR INFANTS AND INVALIDS.—A recent analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts of England, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrine, maltose, etc., soluble in cold water. As Mr. Wigner points out, it is not a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself, but actually assists in the digestion of milk and other foods with which it is mixed. It must of necessity be of great value in the case of feeble infants who cannot digest ordinary starchy foods. Mr. Wigner's analysis has evidently been performed with great care, and is of much interest."—*British Medical Journal*, May 3, 1884.

—The following editorial notice we clip from the English *Medical Press and Circular* of April 2nd, 1884:—"The undoubted advantages of malted preparations as articles of food have been so universally demonstrated that each candidate for professional favour, if carefully compounded, is welcomed as a useful addition to the physician's resources. In this connection a Canadian chemist, Mr. Hazen Morse, has produced a compound of pepsine and dry extract of malt, which combines the needed qualities of efficiency as a digestive agent and nutritive value as a food, and which, taken in doses of ten grains before meals, acts as a most beneficial and certain promoter of rapid digestion, and so ensures complete assimilation. In those forms of diarrhœa due to undigested food in the intestinal canal, from which young children are specially prone to suffer, this preparation acts almost as a specific; and regarded as a useful therapeutical aid to health, we can confidently recommend it for general use."