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Dominion Medical Monthly

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VOL. II.]

TORONTO, ONT., APRIL, 1894.

[No. 4.]

ORIGINAL ARTICLES.

(No paper published or to be published elsewhere as original, will be accepted in this department.)

PSEUDO-MEMBRANOUS ANGINÆ WITH SCARLET RASHES.*

BY W. J. GREIG, B.A., M.B., L.R.C.P., TORONTO.

The subject matter of this paper may be stated concisely in two propositions :

1st. A diphtheritic angina may be accompanied or followed by a scarlet rash, which may or may not be scarlatina.

2nd. An undoubted scarlatina may be accompanied or followed by a pseudo-membranous angina, which may or may not be diphtheritic.

The object of the paper is to suggest or induce a discussion which will point out a clinical method of diagnosis, as distinct from a bacteriological, but based on it.

No recent advance in medical science has given us such exact methods of diagnosis as bacteriology, and yet to the general practitioner it is of very little value. Few physicians have a microscope ; if they had one, with the exception of those specially trained, few would be able to follow out the intricacies of staining and of tube cultures. Even if these things could be accomplished, the results in the majority of cases would be unreliable owing to defective observations. To illustrate the difficulties, take, for instance, the bacilli of diphtheria. There are the true diphtheritic bacilli and the pseudo-diphtheritic bacilli. Microscopically they are indistinguishable. Tube cultures must be made, and the resultant injected under the skin of a guinea-pig. We have then to wait until the guinea-pig lives or dies before we can make our diagnosis.

For diphtheria then, at least, away from the laboratory where these things can be done accurately and expeditiously, bacteriological methods are of little value. Clinical

methods must prevail, but clinical methods based on the deductions of bacteriological science.

But to return to our subject: 1st, A diphtheritic angina may be accompanied or followed by a scarlet rash, which may or may not be scarlatina.

In my first year in practice I was called to see a child with a pseudo-membranous sore throat, which I pronounced to be diphtheritic. On the fourth day the mother called my attention to a bright red rash which had appeared on the arms, the chest and abdomen. I was anxious for a few days lest I had a scarlet fever case to deal with as well; but the rash soon disappeared, and without any aggravation of the constitutional symptoms the case proceeded to recovery.

This case is a type of many others. The occurrence of rashes with diphtheria has been referred to by many writers. In the 1883 edition of Meig's & Pepper's work, the following paragraph occurs in the article on "Diphtheria":

"In a small proportion of cases an eruption resembling that of scarlet fever appears at irregular intervals in the course of the disease. It seems that this eruption lacks the punctated appearance of the scarlatinous rash, and the reports of it are scarcely numerous or accurate enough to enable us to say positively that intermingled cases of scarlatina have not been mistaken for diphtheria, or that the two poisons have not been acting jointly."

Later observations are, however, more accurate. Osler describes these rashes as follows: "The erythema in diphtheria may appear early before the throat symptoms are well developed, or as they are appearing, in which case it is usually slight and disappears quickly. There is also, when the disease is at its height, a later erythema, which may be very diffuse and intense, and the occurrence of which may render it very difficult to determine the true nature of the trouble."

J. Lewis Smith speaks more definitely still of these rashes. Here are his words: "The early rash in diphtheria is an erythema fugax appearing and disappearing, common to all the febrile and inflammatory affections of childhood, and which does not present any peculiar characters in diphtheria." Of the later erythema, he says that it resembles measles more than scarlet fever; is found only in very grave cases; is an evidence of septicæmia, and is therefore a very grave omen.

This, then, is as definite a statement as we are able to make at the present time in reference to these rashes. Whether they are erythematous or scarlatinal must be judged from the general symptoms. There is no one symptom which we can single out and say that it is absolutely diagnostic, not even desquamation. Some of the sequelæ might be of more use to us; but to wait for them is unsatisfactory. We do not know what the specific germ of scarlet fever is, and as we have assumed diphtheria in the beginning, bacteriology is of no avail. We must depend on general grouping of symptoms and on the possibility of contagion.

2nd. We will now pass to the second part of the paper—an undoubted scarlet fever may be accompanied or followed by a pseudo-membranous angina which may or may not be diphtheritic.

Since the discovery of the Klebs-Löffler bacillus, a great deal of attention has been given to these pseudo-membranous inflammations of the throat, and it is now known that not only diphtheria, but also scarlet fever, measles and croup may be and often are accompanied by a pseudo-membrane. The literature on this subject during the last few years is extensive. In 1889, Prof. Prudden, of the College of Physicians and Surgeons of New York city, examined microscopically the pseudo-membrane from

twenty-four supposed cases of diphtheria, and in none of them did he find the Klebs-Lœffler bacillus. They were cases of scarlet fever and measles. In 1892, Prof. Baginsky, of Berlin, had tube cultures made of all the cases admitted into the hospital during a certain period, with a diagnosis of diphtheria—one hundred and fifty-four in all. In thirty-six of these cases the Klebs-Lœffler bacillus was not found, but numerous colonies of streptococci.

In May, 1892, Monsieur Martin, of Paris, published an analysis of two hundred cases of supposed diphtheria. In seventy-two the Klebs-Lœffler bacillus was not found; and there was a history of exposure to the contagion of scarlatina or measles. In May, 1892, Dr. Booker, of Baltimore, published the history of twenty-two cases of throat trouble which occurred during a scarlet fever epidemic, some with pseudo-membrane, some without. Eleven cases were undoubted scarlet fever with pseudo-membranous angina. One case had a pseudo-membranous angina similar to that in the scarlet fever cases, but without the exanthem. Two cases had measles without pharyngeal affection, but with pseudo-membranous laryngitis. One of these cases died.

In all, microscopical examinations and tube cultures were made, but no Klebs-Lœffler bacilli were found. He remarks in closing, that the opinion has been held that when the pseudo-membrane appeared during the late stages of an exanthem, and continued after the disappearance of the rash, it, *i.e.*, the pseudo-membrane, was diphtheritic. Even where this sequence was observed in his cases, the Klebs-Lœffler bacillus was not present. The explanation he offers is the comparative freedom of Baltimore from diphtheria at that time.

In November, 1893, Williams, of Boston, in the *American Journal of Medical Science*, has an exhaustive article on this subject. He states that during twenty-four months' service at one of the city hospitals, he had seen two hundred and thirty-two cases of scarlet fever. Of these, fifty-eight had pseudo-membranous inflammation of the throat, and in a few the membrane had extended to the larynx. In a large number of the cases microscopical examinations and tube cultures had been made, but without finding the specific bacillus.

I might continue quoting authorities on this subject, but enough has been said to prove that all cases of pseudo-membranous angina are not diphtheritic. With the idea of emphasizing the change in professional opinion on this point since the discovery of the specific bacillus of diphtheria, allow me to quote an article by Sir John Rose Cormac in the 1884 edition of *Quain's Dictionary*. Writing of the diagnosis of diphtheria, he says: "Pathologically, there can be no diagnostic difficulty in these cases, if it be true, as an increasing number of physicians believe, that membranous sore throat is always diphtheritic."

Even in the 1889 edition of Eustace Smith's work, the writer speaks repeatedly of diphtheria as complicating scarlet fever, but suggests in no way the possibility of these complicating pseudo-membranes being non-diphtheritic.

Is there, then, any clinical method of distinguishing between the pseudo-membrane associated with scarlet fever and caused by a streptococcus, from the pseudo-membrane of true diphtheria?

The answer to this has been already stated, and it depends on the period of the disease at which the membrane makes its appearance. If the membrane appears during the early and active period of scarlet fever, the probabilities are that it is not

diphtheritic ; but if it appears during convalescence, especially if the throat symptoms have been improving up to the time of its appearance, the probabilities are that it is true diphtheria. This is the opinion of Booker, Lewis Smith, Henoch, Wurtz, and others. That it is only probable and not positive proof is shown by Booker's cases. Booker indicates that the proof is more certain if the possibility of contagion exists. Jacobi makes the statement that of all the cases of pseudo-membrane associated with scarlet fever, about sixteen per cent. of them are due to the Klebs-Löffler bacillus.

In this paper I have expressly limited the term diphtheria to the disease produced by the presence of the Klebs-Löffler bacillus in the throat, as being the meaning which is generally attached to the term at present. Allow me now to present to you the subject from another point of view.

Prof. Jacobi doubts the wisdom of limiting the term in this way. He contends that streptococci are just as dangerous to the patient as the Klebs-Löffler bacilli, producing, as they are quite capable of doing, the most intense septic poisoning. He calls attention to the severity of cases of scarlet fever which have a pseudo-membrane in the throat during the first and second day of the disease. His experience is that sepsis is very apt to occur in these cases, and that the prognosis is bad. The only practical difference between the diseases produced by the bacillus and the coccus is that the former is frequently accompanied by paralysis, and the latter never is. If, in addition to these facts, we remember that a disease produced by a streptococcus is just as contagious as one produced by a bacillus, we may be inclined to extend the term diphtheria, as Sir John Cormac did, to all pseudo-membranous inflammations of the throat, excluding, of course, those which are produced by mechanical violence.

ATLANTIC CITY AS A HEALTH RESORT.

BY J. H. BURNS, M.D., TORONTO.

Of all times of the year, the months of March and April are most advantageous for the average invalid to run away from the climate of Canada for a few weeks ; by that time winter has begun to feel irksome, and a change is indicated, not only to revive his flagging energies by complete change of air, but also to enable him to escape from the long period of housing which is necessitated by our cold, northern atmosphere. To go from town to country, or from country to town in the same climate, is really no practical change ; in order to secure that, one must go either to a southern climate, or to the nearest point on the sea coast.

To reach the south from Toronto and its vicinity necessitates a long and somewhat expensive journey, and the nearest sea point which may be regarded as inviting during these early months of the year is, no doubt, Atlantic City, which is situated on an island in latitude $39^{\circ} 22'$, being 44' south of Philadelphia. The island, which is a sand-bar thrown up by the action of the ocean, is ten miles in length, and varies in width from one-half to two miles, and has a southern exposure. It is off the coast of New Jersey, and the general direction of the coast of that State is N.N.E. by S.S.W. ; but this general line is subject to local changes : one of these changes occurs at Atlantic City, for here the direction is a little north of east and south of west. The

ocean breezes from the east, south, and south-west blow directly upon the shores of this place from the Gulf Stream, which is, of itself, considered by long residents to be one of the most potent factors in producing mildness of climate. The Stream, which runs round the southern part of Florida at the rate of five miles an hour, has a temperature of 84° , which is 4° warmer than the ocean at the Equator; it hugs closely the Atlantic coast, gradually widening its current and decreasing its velocity, until it reaches the banks of Newfoundland, when it sweeps across the Atlantic. Opposite New Jersey it is 300 miles wide with diverging currents, one of which passes within sixty miles of Atlantic City. Over this vast body of heated water all the south-east, south and south-west winds must pass. It is protected also on the shore boundary by a body of salt water, the island being six miles from the mainland, hence it is saved from the chilliness in winter, which would ensue if there were a body of fresh water near.

Much may be said of the healthfulness of the climate :

The air is dry, and the barometric and thermometric readings are very regular there being very little variation in atmospheric pressure and temperature. This is to some extent due to the absence of large bodies of fresh water.

Foggy days are rare.

In 1892, the maximum temperature in March was 55° , minimum 14° , mean 35° ; in April the maximum was 76° , minimum 28° , mean 47° .

The city is eminently a healthy one, the greatest care having been taken as regards sanitation. The water supply is derived from two sources: one is from natural springs and driven wells from the mainland eight miles from the city; the other from artesian wells from 700 to 1,600 feet deep upon the island; the quality is said to be most excellent, being free from discolouration and containing no organic matter. Surface wells are not permitted. The West system of sewerage has for a number of years been in successful operation. Most of the sewers are iron pipe of ample size, laid with a fall of 10 to 15 inches to the 100. This system extends all over the city. The sewage is pumped to a central station outside of the city, is disinfected, deodorized, and run into filtering beds. All of the hotels and boarding-houses, and most of the private residences have sewerage connection; those which have not, are provided with water-tight brick vaults—nothing else is permitted in the city. The vaults are emptied as frequently as may be necessary by odourless excavators.

In addition to this system there is good surface drainage. Iron pipes are laid at street crossings, and surface water is carried by them and a system of trunks to the thoroughfare. Garbage is gathered daily in large tight carts, and removed to a dumping-ground outside of the city; from these grounds it is transported in sealed dunigans. During the hot months, garbage is collected twice a day.

The Board of Health, which is composed of both professional and business men, is energetic, and the code which has been adopted is thorough.

Depending entirely as Atlantic City does upon its situation and sanitation for gaining public favour as a health resort, the people have spared no pains in striving to secure an energetic Health Board.

Atlantic City is easy of access. A passenger leaving by the five o'clock train from the Union Station in the afternoon, will be there by the following day at noon. He can go either by Philadelphia or New York. Until recently the majority of visitors have gone by Philadelphia, as there was no direct connection from New York; now it is about as easy to go by one way as the other.

The class of invalids mostly benefited by a sojourn at Atlantic City, are those suffering from nerv. exhaustion, atonic dyspepsia, convalescence from operations as well as from fevers, or other acute prostrating diseases; the chronic diseases peculiar to women, chronic bronchitis, chronic pleurisy, delayed resolution of pneumonic exudations, anæmia, chlorosis, struma, and chronic malaria.

As this place would have no existence except as a health resort, it is, as one may suppose, well provided with hotels and boarding-houses. There are said to be 750 hotels and boarding-houses in the town, and accommodation is within the reach of all. The wealthy millionaire or poorer professional man will find entertainment suited to his capacity, and the profession of medicine is well represented among the local practitioners.

CLINICAL NOTES.

THE PLASTER OF PARIS SPICA AS A FIRST APPLICATION IN HIP DISEASE.—NOTES OF THREE CASES.

BY. W. W. BREMNER,

Late Assistant Surgeon, New York Hospital for the Ruptured and Crippled. Orthopædic Surgeon to Toronto Infants' Home, and to the Nursing-at-Home Dispensary.

Hip-disease is a chronic tuberculous affection of the hip-joint. The first symptoms are usually a limp, combined with a variable amount of pain, often referred to the knee. This should always direct attention to the hip, and having stripped the patient and placed him on his back on a table, a careful examination will show the real nature of the disease. For all practical purposes, there is one symptom easily found by any surgeon, which is pathognomonic, that is, limitation of motion to passive movement of the joint. In every case of real hip-disease, there is limitation of motion more or less in every direction, especially to the motion of abduction. To appreciate this limitation, it is necessary to fix the pelvis by flexing the sound limb firmly on the abdomen. The only treatment which is justifiable in the early stages, is absolute fixation of the joint by mechanical means, which permits the patient to be taken out regularly in the open air. The importance of this will be apparent when the danger of the disease to the general health is considered.

Case 1.—Boy, aged five years, first seen by me on January 8th, 1894. For eight months he had suffered with what was supposed to be some knee trouble. He had been confined to bed for nearly four months during the eight, owing to the pain. The left knee would become flexed to a right angle during the night and remain so for half a day. He had a slight degree of knock-knee. The left thigh was smaller than the right, and there was limitation of passive motion in every direction, extension to 150 degrees, flexion to 90 degrees, there was adduction about 10 degrees. No fluctuation could be detected. A plaster of Paris spica bandage, strengthened with iron strips, was applied from the toes to the axilla on the affected side, completely preventing motion at the joint. In twenty-four hours the child was running about

the room, entirely free from pain, and up to this date has suffered not the slightest pain. The bandage was renewed as soon as it became loosened at the hip-joint. A Taylor hip brace will be applied to this case later on.

Case 2.—Boy, eighteen months old. Had been suffering for about eight weeks when seen by me on January 9, 1894. Extension by weight and pulley had been applied in this case, but was found so irksome that it had been discontinued. The child, when seen, was suffering from great pain, night and day. The limitation of motion was about same as Case 1, but there was abduction instead of adduction of the leg. There was local heat and fulness behind trochanter. Treatment same as Case 1. Result.—In two hours the child ceased complaining, and has never since, night or day, complained of pain. The spica was renewed three times, and on March 6, 1894, a light Taylor brace applied. At this time the recovery of motion was perfect, and pain absent.

Case 3.—Boy, seven years old. Dispensary case; first seen on February 8, 1894. Had been suffering for eleven months. His hip had been opened three times. During the eleven months, pain had been very severe, preventing all sound sleep at nights. When seen by me, the boy was much emaciated; considerable fever present, and there was a free discharge of pus coming through a drainage tube. Extension to 135 degrees, flexion to less than 90 degrees, nearly 20 degrees of adduction. Great swelling of hip and brawny infiltration.

Treatment same as in 1 and 2. In ten days the pain entirely ceased, the discharge was greatly lessened and the swelling subsided to a large degree. The child had the first unbroken night's rest in eleven months on the tenth night. Severe diarrhoea had also been present for many months, and a very remarkable thing was that all diarrhoea ceased two or three days after the spica was applied, and the motions became solid and regular once a day. On the 15th of March, the first plaster was removed, and a Taylor brace applied. The diarrhoea commenced as badly as ever in two days and the thigh and groin swelled very much, but the pain did not return. On the 20th of March, I re-applied the plaster spica.

This case shows the evil of early incision. In fact, it is hard to see what is to be gained by incising a tubercular hip-joint, as the seat of disease is often deep in the bone and may be in the acetabulum.

These three cases illustrate the great advantage of the plaster spica as a temporary dressing in hip-disease. In each of these cases its application resulted in freedom from pain. In two of them, the children could take free exercise in the dressing. Case 3 was too weak to stand when first seen, but in a week or so began to move around, but not freely.

It allows the patient to be taken out in the open air, all the patients being taken out for two or three hours every suitable day.

It gives complete fixation of the diseased joint, although it does not give extension. It can be applied by any surgeon who has once seen it done.

In conclusion I would like to emphasize three points: 1. The ease with which an early diagnosis can generally be made. 2. The great success usually attending early and suitable treatment. 3. The great injury done by any operative treatment in the early stages.

A CASE OF TUBERCULAR PHTHISIS CURED.*

BY A. H. GARRATT, M.D., TORONTO.

J. S., a bartender, thirty years of age, consulted me, May 30th, 1892.

He suffered from dyspnoea on exertion, a slight cough with expectoration, loss of flesh, and profuse night-sweats. I found his temperature to be 102° F. On physical examination, there was evidence of consolidation at the apex of the right lung.

I prescribed iron creasote and cod liver oil, with a pill of atropia sulph. to be taken at bedtime ; but could not persuade my patient to stop working for a part of each day.

On June 9th, I advised a consultation with Dr. J. E. Graham, who gave a very grave prognosis, agreeing with me that my patient was suffering from tubercular phthisis. On June 11th, twelve days after my first examination, I asked Dr. John Caven to examine the sputum, and his report stated that the specimen contained the tubercle bacilli in large numbers.

About this time I succeeded in alarming my patient and his relatives to such an extent, that he stopped work and went to the country for six weeks.

He secured board at a farm-house on a hill not far from Toronto. There his appetite improved, and he ate freely of fat pork, eggs, and butter, and drank large quantities of milk with a little whiskey. He continued to take iron, cod liver oil, and creasote three times a day, and did not object to the taste of his medicine.

His night-sweats gradually ceased, his cough stopped, and in fourteen weeks from the time he went to the country he returned to his work feeling as well as ever.

I advised him to continue the creasote for a long time, as I feared a relapse, but he stopped all treatment about October 1st, 1892 (four months after consulting me first), since when he has taken no medicine, nor felt the need of any.

The patient, who is here for your examination, has a good family history. There is no history of tubercular disease in any of his ancestors.

* Read at Meeting of Toronto Medical Society.

EPITOME OF CANADIAN MEDICAL LITERATURE FOR THE FIRST QUARTER OF 1894.

[*Canada Lancet*.—January.]

"DIPHTHERIA, ITS CAUSE AND TREATMENT," forms the title of an article by Dr. B. Milner, Toronto. He defines the disease, shows how contagion takes place, details at length his plan of local and general treatment, with a description of the therapeutical action of the drugs used, compares intubation and tracheotomy, and closes with the citation of four interesting cases.

"CEREBELLAR HEREDO-ATAXIA," by Dr. Pierre Marie, translated by D. C. Meyers, is the second feature of the above-named issue. This paper discusses at length the nature of this disease, its family tendency, its symptoms as compared with Friedrich's disease, and an exhaustive discussion of each symptom. The subject is concluded in the February number.

"A NEW METHOD OF DIAGNOSIS OF THE ACCESSORY SINUSES OF THE NOSE" is the next article, by M. McFarlane, M.D., Toronto. He describes the process of transillumination of the antrum and other cavities by means of an electric light introduced into the mouth, thus affording a comparison of the two sides. Pus, tumours, polypoid degeneration of the mucosa cause a shading of the side they are on, while a mucous polypus, being translucent and refractive, would cause an intensity of light on that side. He further shows how to transilluminate the ethmoidal cells and the frontal sinus.

[*Canada Lancet*.—February.]

The February number has for its opening communication one entitled "FLAT-FOOT, ITS DIAGNOSIS AND TREATMENT," by Dr. W. W. Bremner, Toronto. The differential diagnosis, symptoms and treat-

ment are specially spoken of. As to treatment, bandaging the foot well, and the use of a light steel foot-plate are sufficient in the milder cases; where considerable deformity exists, however, the patient should be etherized, the foot forced into a position of extreme equino-varus, breaking adhesions; the foot maintained in this over-corrected position by means of plaster of Paris for two or three weeks, when the plates may be applied. Massage and certain exercises are recommended then to overcome the stiffness.

"THE FAILURES AND SUCCESSES OF BROMOFORM IN WHOOPING-COUGH," a paper by Dr. J. T. Duncan, Toronto, appears in order. The paper first reports cases where the disease appeared to be uninfluenced by the drug, and in two cases where in large doses as a result of mal-prescribing, it proved toxic, but not fatally so. In the majority of the cases in which it had been tried, it proved a good success. This prescription is appended:

℞ Bromoform fl. ʒi.
Alcohol
Tr. card. co āā fl. ʒii.
Glycerine fl. ʒxii.

The dose of the drug is roughly ℥j for year of the child's age.

[*Canada Lancet*.—March.]

"THE PATHOLOGY OF DIPHTHERIA, STATUS PRÆSENS."—T. E. Slatterthwaite, M.D., New York. This paper opens by a reference to the etiology, pathology and clinical history of this disease. The membrane, it is shown, is not necessarily a characteristic of diphtheria. The cause of the true variety is now generally conceded to be Loeffler's bacillus. Many cases admitted to hospitals under the name of diphtheria are really not so. In these cases, other kinds of bacilli and cocci were found. Loeffler's bacillus does not confine itself to the throat alone, but may be found in various tissues and

organs throughout the body. The writer proceeds to outline the method of securing *anti-toxine*, a toxalbumin from the bacteria, which has been used a few times in the treatment of diphtheria with apparent success.

Dr. Meyers, of Toronto, gives a translation of a paper by Rauzier, of Montpellier, on "NEURASTHENIA." This is a disease of this *fin de siècle*, occurring mostly in adults, as a result of excessive study, professional or political overpressure, the multiplicity of distractions of high life, trauma, general diseases, such as tuberculosis, disorders of the stomach or genito-urinary organs, etc. The article is not complete in this issue.

Dr. J. T. Fotheringham, Toronto, gives a graphic description of "THE RITE OF CIRCUMCISION, AS PRACTISED BY THE HEBREWS OF TO-DAY." The operator was a dirty German Jew, a butcher. Amid prayers in a guttural voice, he undid the diaper, and disclosed the child's penis in a state of erection, induced, doubtless, before he was brought in, as a safeguard against too close a shearing off of the prepuce. The foreskin was removed by a sweep of the knife, the mucous membrane torn and pushed back, and the bleeding stump promptly taken into the mouth and sucked vigorously, the blood being expectorated into a saucerful of ashes. Its cries were stopped by sweet stuff. A strip of linen, soaked in whiskey, constituted the dressing. Wound healed in three days.

[*Canadian Practitioner*.—January.]

PUERPERAL SEPTICÆMIA.—Dr. Wright, physician to the Burnside Lying-in Hospital, Toronto, reports a fatal case of puerperal septicæmia. Patient was a prostitute, aged seventeen, with a gonorrhœal history. Perineum lacerated during delivery, afterwards stitched.

Signs of septicæmia showed themselves on the third day. Uterine douching, elimination and stimulation were employed. Local cellular inflammations occurred in the arms and one leg. Temperature ranged from 101° to 105.6°, and respirations were very rapid. The baby became infected, and was affected in same way generally and locally, and died.

Post mortem of mother: Cloudy swelling of heart, with ante and post mortem clots in it; spleen weighed fourteen ounces, pale and diffuent; liver markedly enlarged with cloudy swelling and interstitial inflammation; cloudy swelling also of kidneys; peritoneum normal; veins running from the perineal laceration were filled with puriform clot and inflamed, and streptococci were abundant.

Dr. Wright's theory of causation is, that the foul vaginal discharge infected the lacerated perineum, and that the child was probably poisoned in its passage through. The anti-partum douche is recommended by the Doctor in hospital patients.

Dr. Primrose gives the history of "EXCISION OF THE ELBOW JOINT FOR TUBERCULAR DISEASE." Scott's dressing was tried first with little avail. On opening the joint the only articular point diseased was the cartilage over the capitellum. After scraping and douching with 1-1000 perchloride, suturing, drainage, and dressing, the forearm was placed midway between pronation and supination, and the elbow flexed at a suitable angle. Good recovery.

Dr. Primrose favours a splint of absorbent wool in large quantities with firm bandaging.

"ACUTE MANIA FOLLOWING THE OPERATION OF TRACHELORRHAPHY," is by Dr. K. N. Fenwick, Kingston, Ont. He reports three cases where mania followed repair of the lacerated cervix. Recovery

followed in a short time in all the cases. In reporting the literature of the subject, he points out that this cerebral condition has been frequently found to follow oophorectomy, hysterectomy and other gynecological laparotomies. These phenomena go to prove the effect of the mental on the physical condition.

Dr. W. N. Barnhart, of East Toronto, follows in a report of a case of "INTES-TINAL TUBERCULOSIS," dwelling on the pathology of the case more particularly. He demonstrated, microscopically, the presence of the bacilli tuberculi in great numbers in the infiltrated margin of the ulcer.

[*Canadian Practitioner*—February].

Dr. J. E. Graham, Toronto, opens with a paper on "PURULENT PLEURISIES." He pointed out that these varied, as to origin, as to nature of contents, and as to duration. Then there was a classification depending on the bacteria present—Netter's classification—those due to the presence of streptococci; those caused by the pneumococcus; those due to the staphylococcus, and those due to the tubercle bacillus. The clinical history of these different forms was exemplified by cases reported.

"CLIMATES FAVOURABLE FOR CONSUMPTIVES," by Dr. P. H. Bryce, Secretary to the Provincial Board of Health, comes next in this number. The points emphasized in this paper were: dryness of climate, which depends on dry soil; moderate temperature, and rarefaction of the air. Aiken, S.C., and portions of the eastern slopes of the Rockies were recommended. Equability of climate was important, where daily fluctuations were not great, although the seasonal fluctuations might be. He classified climates: Sedative, inland, dry and moderately stimulating, and highly stimulating.

[*Canadian Practitioner*—March].

Paper I. is by Dr. G. A. Peters, Toronto. Subject: "THE INDICATIONS FOR OPERATION IN SPINAL LESIONS." Three classes of spinal cases may be operated on: (1) Those in which the symptoms come on suddenly, and are the result of violence to the column, causing fracture, dislocation or hæmorrhage; (2) those in which symptoms develop slowly, due to compression or irritation, caused by, say, callous, or the caseous products of Potts' disease, or by gumma; (3) those where symptoms come on slowly, caused by neoplasms, benign or malignant.

"COCAINE IN SURGERY," by Dr. L. M. Sweetnam, is the second article in this issue. The writer refers to the history of the drug; the dangers connected with its use, and antidotes; the way to keep it pure; the strength of solution to use; the method of administering it, and the cases in which it may be used. He also refers to its special use in the treatment of the eye, ear, nose and throat.

Dr. Wm. Oldright's paper on "TWO OBSCURE CASES IN ABDOMINAL SURGERY," follows. Case I. was an encysted peritonitis of large size in the median line. The patient's uterus was diagnosed infantile, and it was thought the tumour might have been formed by retained menses. Patient made a good recovery.

Case II. was a laparotomy to find what was causing an acute pyæmia. No pus could be found, but a number of gallstones were, and removed. A post mortem disclosed three hepatic abscesses out of reach of the surgeon. An ulcerated condition of the cystic duct was surmised to have been the primary focus. Floating kidney was also present, a condition that was thought to be (ante mortem) present.

"A CONFUSED CASE OF ETHICS," is a subject dealt with by Dr. E. H. Stafford.

Following comes "ACUTE INFLAMMATION OF THE MIDDLE-EAR FOLLOWING INFLUENZA," by Dr. Butler, London. The symptoms he refers to are pain, elevation of temperature, tinnitus, and disturbed hearing. The tympanic membrane is red at first, but gray and sodden afterwards, and bulges outward if there is much fluid in the cavity. Perforation may have taken place. Treatment: Put patient in bed, open bowels, use aconite, if there is much fever locally; leeches, or cupping, or scarification in front of the tragus. For pain, hot bran or salt may be used. Gentle inflation of the middle ear is recommended. Phenacetine may be given; alkaline sprays are always useful; if rupture of the drumhead is imminent it is better to open with a knife.

[*The Montreal Medical Journal*.—January.]

The first article in this number of the *Journal* is entitled "THIRTY-EIGHT YEARS OF MCGILL," being the annual University Lecture of McGill University, Montreal, for the session of 1893-94; by Sir Wm. Dawson. In this address Sir William tells of how he first became connected with McGill, and traces the history of the University since that time, showing the immense strides it has made in every way. He speaks of its financial history, of its benefactors, of its affiliations, of its establishment of the woman's department, of its share in the meetings of the American Association for the advancement of science of '57 and '82, and of the British Association in '84; and of the munificent donations which have been given for its support, of its widespread influence, and also of many things which it still stands in need of.

"AN IMPROVED STRETCHER FOR HOSPITAL, AMBULANCE AND MILITARY USE," is a descriptive article of interest by Dr. Worthington, of Sherbrooke. It is an apparatus consisting of eight pieces of

pine, six of them thirty inches in length, four in breadth, and one-quarter of an inch thick. The other two are three inches in breadth, three-quarters thick, and the length of the patient's bed inside measurement. The short pieces are passed under the patient at regular intervals, the long pieces being then inserted under the ends of the short ones. These are the important points of this simple and efficient stretcher. It may be used in fractures, for lifting the patient to the bed-pan, to change the bed, or for transferring the patient from one room to another.

"Report of the Special Committee, appointed by the Medico-Chirurgical Society, of Montreal, to consider the present system of conducting inquests," comes next in order, and makes the following recommendations:

1. That salaried medical examiners be appointed to investigate all deaths occurring under circumstances calling for medico-legal investigation under any act, and that these officers be given authority to make such medical examination of the body as may be necessary to determine whether death was due to violence or not;

2. That in every case the medical examiners report the result of their examination to the coroner or other judicial officer charged with investigating the legal side of such cases, who, in case of violent death, shall make such investigations and take such measures as are necessary for the proper administration of the law.

[*The Montreal Medical Journal*.—February.]

In the February *Journal*, "THE THERAPEUTIC USES OF EXERCISE" is discussed by R. T. McKenzie, Montreal. He quotes Sir Andrew Clarke's statement: "As a physician advances in age, he generally places less confidence in the ordinary medicinal treatment." Exercise is one of

the substitutes. It is both preventive and curative in its action. The paper gives three effects of exercise which commend it therapeutically:

1. Relief of congestions by equalization of the circulation.
2. Sedative to the nervous system, probably through its action on the circulation.
3. It strengthens and enlarges muscles, bones and ligaments.

It has been used successfully in idiocy, organic heart disease, infantile paralysis, sprains, constipation, dyspepsia, obesity, tuberculosis, chorea and lateral curvature of the spine.

"SALINE ENEMATA IN HÆMORRHAGE" is the subject next written on, by Dr. J. A. Hutchinson, Cote St. Antoine, P.Q. It was used in a case of hæmorrhage following abortion, accompanied by marked collapse.

Sod. chlor. grs. xcii.
Liquor soda ℥xx.
Aqua O ii.

was used, half of this amount being injected and retained—improvement and recovery followed. The advantages over transfusion are: it can be done at once, is less dangerous, and requires less skill, and the instruments for using are at hand, usually.

The next feature in the issue is a continuation of "ONE HUNDRED CASES IN THE CORONER'S COURT OF MONTREAL, 1893," by Wyatt Johnston, M.D. This portion of the article gives short reports of post mortems on deaths from injuries of various kinds. Although in many of such cases the manner of death is evident, yet an official medical examination cannot be safely neglected in any case. The article is continued.

"THE CURATIVE EFFECT OF EXPLORATORY LAPAROTOMY," by Francis J. Shepherd, Montréal, is the opening article in March issue of this journal. Reference is made to Tai's experience with such

cases, also to a case reported by Pierre Delbet and Prof. Von Mosevig, and to Dr. Wm. White's article on the subject in the *Annals of Surgery*. Dr. Shepherd then gives a history of a patient, a nurse, on whom he made an abdominal incision. The tumour was of the nature of a fibrous thickening on a portion of the right lobe. Diagnosis not positive. Left alone. Patient made a good recovery, and tumour disappeared. Pot. iodide was given, which may have had something to do with its disappearance. Theories are advanced in the paper as to reason such treatment gives relief.

No. II. is the report of a case of "CHRONIC INTERMITTENT LEUCÆMIA (?) IN A CHILD," under the care of F. G. Finley, in Montreal General Hospital, post mortem by J. G. Adami, and reported by Dr. Mackenzie, house physician.

The girl, a deaf mute, had a history of swelling and suppuration under left ear three days after birth. Good deal of colic in infancy. Hæmatemesis, three cupfuls (first) in an attack of measles at four; another hæmatemesis, one teacupful, at seven; double rupture at eight; fair health for last five years up to December last; then large hæmatemesis; great splenic enlargement; much anæmia; hæmoglobin reduced to 38 per cent.; red corpuscles to 2,240,000; white increased to 1,200. Saline enemata were given, but after two more hæmorrhages, patient suffering greatly from epigastric pain, died. Some post mortem points: Spleen, weight, 410 grms.; marked interstitial fibrosis; pulp, relatively scanty and pale; malpighian bodies not prominent; liver small, cirrhotic generally, with patches, peri and interlobular, markedly so; capillaries enlarged and containing many leucocytes; stomach contained 8 oz. blood, clotted, otherwise normal; jejunum and ileum had very extensive hæmorrhagic patches in mucous mem-

brane, but no rupture of any vessel; no enlargement of lymph glands; marrow of sternum red, but not increased in extent.

The differential diagnosis of this interesting case is discussed in the closing paragraphs.

"INFECTIOUS PNEUMONIA," by Dr. G. G. Campbell, gives the history of three cases of pneumonia in one family—a mother, and following her, two boys, they evidently having taken it from her, as they occupied the same room, one child sleeping with the mother. It is generally admitted that pneumonia is due to a specific micro-organism, but cases which can be definitely shown to depend upon others directly, are not numerous.

The next report is "SCIATICA AS A COMPLICATION OF CARCINOMA," by R. C. Kirkpatrick, Montreal. Two of the carcinomata were in the breast, and the third in the right pleura. So pressure was not the cause of the accompanying sciatica all had. It was possibly, the writer says, due to secondary deposits within the nerve itself, causing neuritis; or due to the cancerous poison in the blood.

"ANEURISM OF THE ASCENDING AORTA, WITH EROSION OF THE RIBS," is the title of a communication by E. F. Williams, M.D. History of rheumatism and malaria; family history good. November, 1892, sudden pain manifested itself in the right mammary region. January 1, 1893, a tumor showed itself there, gradually increasing in size, becoming covered with red and œdematous skin. Tracheal tugging present; heart sounds normal; pulse 72°, of low tension; eyes normal; temperature 101° to 104°. November 10, patient died in syncope. Post mortem: Clot extended from aortic ring into vessels of neck, and into orifice of aneurism; sac full of soft clot; arteries atheromatous. Three inches from aortic ring in the anterior wall of aorta was a cir-

cular, thick-edged orifice, $4\frac{1}{2}$ inches in circumference, communicating with a large aneurismal sac. The sac was attached to the ribs, which were eroded.

Dr. Wyatt Johnston gives "STATISTICS OF THE CORONER'S COURT FOR THE DISTRICT OF MONTREAL."

[*Maritime Medical News*.—March.]

The first item in the *Maritime Medical News* for March, is a biographic sketch of the life of John Hunter. From a cabinet-maker he became an anatomist and surgeon of the first rank. His best works are his treatises on the blood, inflammation, gun-shot wounds, venereal diseases; and his lectures on the principles of surgery, the first philosophic work of the kind published in Britain. He had the curiosity which stimulated him to enquiry, the energy to follow up what his curiosity prompted, and a determination to overcome every difficulty.

"STRANGULATED INGUINAL HERNIA, THREE DAYS OLD, IN A WOMAN SEVENTY SEVEN YEARS OLD—OPERATION AND RECOVERY," heads the next article, by Murdoch Chisholm. The patient presented the usual symptoms. The sac which had large vessels passing over it transversely, and sacular indentations made it difficult to recognize. A hypodermic was used to settle the matter. On opening sac a large fold of omentum presented, and underneath two folds of small bowel covered with a distinct fibrous envelope. Bowel was returned, omentum ligated, stitched to ring, and congested portion excised; sac ligated and cut off; wound interruptedly stitched and drained and dressed. Recovery good.

The three numbers of the *Canada Medical Record*, of Montreal, contain a description of the "FELL METHOD,—FORCED RESPIRATION," by Geo. E. Fell, of Buffalo.

Dominion Medical Monthly.

All literary communications, exchanges, and books for review, should be addressed to the DOMINION MEDICAL MONTHLY, 50 College Street, Toronto.

Address all business communications to the Publishers, THE MEDICAL PUBLISHING CO., OF TORONTO, Box 418, Toronto, Canada.

TORONTO, APRIL, 1894.

TYPHOID FEVER IN PARIS CAUSED BY POLLUTED WATER.

Quite an outbreak of typhoid fever began in Paris about the 18th of last February. The causation of the epidemic, which naturally excited widespread interest in that city, was discussed at a meeting of the Paris Academy of Medicine, on the 20th ult. M. Dujardin-Beaumez, who introduced the question, was unable to present a complete report, but stated that the investigation had been very materially aided by the statistics compiled by the Prefecture of the Seine and the Prefecture of police. He also mentioned that the new law of compulsory notification of contagious diseases had proved very useful, as the physicians had reported all the cases occurring in their practice. He gave some valuable statistical tables showing the number of cases and the mortality rate per 1,000 inhabitants, in each ward of the city. The mortality was relatively low, fifteen per cent. Speaking of the topography of Paris considered in its relations with the distribution of spring water, he stated that Paris was supplied with spring water from three different sources—the Dhuy,

the Vanne, and the Avre. He showed that the wards of the city supplied with Dhuy water and that from the Avre were almost free from the disease, while on the contrary those supplied from the Vanne were particularly affected.

During the discussion which followed, M. Vallin stated that the Parisian military garrisons supplied with Vanne spring water were attacked, while those supplied with Dhuy water or even with river water from the Marne and Seine were exempt from typhoid fever. This, in his opinion, was a peculiar fact. Of all the city garrisons only two had escaped, one of which received spring water from the Dhuy and the other from the Avre.

From this and other observations the Parisian Board of Health is disposed to believe that the Vanne water is the cause of the trouble. Besides, at the same time that the outbreak occurred at Paris a similar one was noted at Sens, a town which is also supplied with water from the Vanne. The epidemic at Sens was severe, there being twenty-eight cases and five deaths. It was also stated by M. Bucquoy that about two months ago there had been an outbreak of typhoid at Rigny-le-Feron, which had probably caused a contamination of one of the sources of the Vanne. When all the evidence is in, it is quite likely that the etiology of the Paris epidemic will prove to be that one to which physicians in this country attach most importance, viz., the use of impure and contaminated water. We do not deny the existence, and, in certain localities, the active operation of other morbid factors in the production of typhoid fever. As Dr. de Pietra Santa holds in his recent report on typhoid fever in Paris, 1884-93. "Overcrowding, filth and uncleanness in every form, special professions, such as those of nurses and laundresses, auto-infection or the ruling medical constitution prevailing at a certain time, may

concur in producing it." But the use of unboiled water contaminated with human excrement is probably the most frequent of all causes. While, therefore, great credit may be given to perfected systems of sewer building, to the improvement of old and unhealthy quarters of cities, the sanitary inspection of lodgings and dwellings, and the use of disinfecting machines in destroying the germs of typhoid fever, it must be candidly admitted that an overwhelming mass of evidence points to the fact that this essentially human and endemic disease is principally introduced into the alimentary canal by the liquids which people consume. If, therefore, typhoid fever is to be reduced in a municipality, in addition to protecting the source of supply from contamination, the M. H. O. should examine the supply regularly and if biological examination shows an excess of bacteria the inhabitants should be notified to have the potable water boiled before using it.

EPIDEMIC BOVINE TUBERCULOSIS.

Statistics go to prove that one-seventh of the whole human race is annually sacrificed by tuberculosis, and that no epidemic, in ancient or modern times, has caused the death of even one-tenth of the number of human beings. With such facts before us, it behooves us to ascertain whether there may be any special means of propagating this disease. Of late years attention has been drawn to the prevalence of bovine tuberculosis, and statements have been made by Johne, Ernst, Brush and others as to the communicability of the disease from animals to man; Professor Walley going as far as to say "that he had not the slightest doubt that it was communicable from animals to man and from man back again to animals in every possible shape and form."

A special report on the diseases of cattle, issued by the United States Department of Agriculture, states that "the germs enter the body (1) by inhalation into the lungs, (2) by the digestive tract (by milk and fodder), (3) during coition, when the sexual organs are tuberculous, (4) from a tuberculous mother to her fœtus. Inhalation is by far the most common mode of infection."

Bacilli can only get into the lungs when inhaled. It is well known that the bacilli withstand drying for months before they lose their power of infection. If dried and pulverized, they are carried by currents of air to great distances.

Milk is found to be largely infected by the tubercle bacillus, and deaths have been recorded of persons drinking of it. Stabled animals are more liable than others.

In view of these facts, we learn with regret of the epidemic of tuberculosis at the Ontario Dairy Farm at Guelph. We feel that the responsible head of the Department has much to answer for in permitting the introduction of diseased cattle in the first place, and for neglecting to properly isolate them in the second. We hope that measures will be promptly taken to stamp out the disease, and that the stables will be thoroughly disinfected, bearing in mind the longevity of the germs. Public health, as well as commercial interests, demands radical measures.

EXPERT MEDICAL TESTIMONY.

Expert testimony on all subjects is constantly increasing in frequency and importance in our courts. It is only natural and right that such experience and knowledge may be sought and obtained as will enable the court to arrive at a just conclusion. The expert witness, however, is not in the same position as other witnesses, nor has he the same

function to fill. Witnesses at the trial testify to facts which they have seen, or directly observed, in other words, to matters within their own positive knowledge.

The expert witness is brought into court to give his experience and knowledge upon certain matters concerning the trial. It may be a case of railway engineering. A driving wheel flies to pieces, and the expert is put on the stand to state what conditions would cause such a driving wheel to break, such as passing over some uneven portion of track, too great a velocity of train motion, or the fact that the wheel had been turned down until it had become too thin. These points require the application of special education and training to their elucidation. The expert can determine by the speed of the train, the revolutions the driving wheel was making, and so conclude whether such motion would cause it to fly to pieces. It will readily be seen that expert testimony must always be largely one of opinion. The expert may be able to state that the speed was sufficient to burst such a wheel, but he cannot absolutely state that it did burst the wheel, as the wheel, in addition to the excessive strain from over speed, may have passed over some uneven joint in the track.

One of the great difficulties the expert witness has to deal with, is the way in which questions are put by the lawyers. These questions are often badly put, to say the least; and how could it be otherwise when you consider the fact he has no real knowledge of the subject upon which he is examining the expert. Another difficulty is that the lawyer may ask only general hypothetical questions, and require definite answers, as "yes" or "no." Now, at a glance one can see how absurd and unjust this may be. It may have the effect of defeating justice instead of promoting it. The medical expert would only care to answer in such a way, if he had the full right to explain fully.

This right is often denied him by the dishonesty of the cross-examiner.

Many of the points that may arise during the course of the examination are such that no positive answer can be given to them. The court has no right to expect anything further than an opinion from the expert upon them. They are neither facts of observation nor of demonstration. As an expert he can only give an opinion, and his opinion should be taken by the court, as a full and perfect answer. In many cases coming under the expert witness, the court should not expect more than an opinion on what cannot be a matter of demonstration. Problems in psychology are not like those of mathematics.

Some person is arrested for having committed a crime. The plea of insanity is raised in defence. Several experts are summoned to examine the prisoner. These experts should be permitted to put in their opinions to the court in writing. Their work is the work of opinion, and not of demonstration. If these experts are examined in the box, the examination should be conducted in such a way as to clear up such opinion. The question of the insanity of any person may be a very difficult one to prove, and yet several competent experts be of the opinion that the person is insane. But we all know that insanity in the minds of lawyers is not the same thing as insanity in the mind of the experienced doctor. What could any of our ablest lawyers or judges make of a typical case of *Jolie raisonnants*, or affective insanity, where no delusions can be discovered? If in such a case the court is not satisfied with expert opinion, but demands absolute proof, great injustice may be done, indeed great injustice has often been done.

The medical expert should therefore be regarded in a different light to that of the other witnesses. He should be looked upon as advisory to the court. The ut-

most freedom should be accorded him to express to the court his opinions, and his reasons for these opinions. In all cases where deemed necessary, he might be personally examined, not upon his opinions, but upon his reasons for his opinions. The formation of an expert opinion from certain facts or reasons, is purely the work of special education, which the court cannot possess. The medical expert should be granted the privilege of saying "from these facts I have come to the conclusion that the prisoner is, or is not, insane," etc. To give a demonstration of this conclusion would be to implant his mind and knowledge into the court, an utter impossibility. This could only be done by educating the judge, the lawyers, and the jury in a good medical college for four years, and then giving them several years of experience.

TRAUMATIC NEUROSES.

It is now a recognized fact in medical pathology that many diseases of the nervous system, both functional and organic, owe their origin to traumatism. It is also a fact worthy of attention that sometimes the injury is very slight compared with the severe after effects.

The battle has waged long and keenly on that group of symptoms following injury to the spinal cord, as the result of railway collisions, etc. It might seem an easy matter to work out this question so that we could say this case is due to trauma and that one is not. This, however, is what we cannot do. There are cases of spinal trouble with exactly the same symptoms without a history of injury and with such a history.

The terms railway spine, spinal concussion, and Erichsen's disease, are all more or less objectionable. There is, as yet, no distinctive set of symptoms following such injuries to the spine. Many

symptoms have been grouped together, but they are not constant in their occurrence, nor in their arrangement. Further, these symptoms appear without trauma.

It is really a difficult matter to explain why a similar symptom group should be called in one case spinal neurasthenia, and in another spinal concussion. Myelitis, lateral sclerosis, or other spinal diseases, caused by injury, would yield the same symptoms as when not so caused. The element of trauma therefore is much more an etiologic, than a pathological or symptomatological factor.

To speak of railway spine means that the patient has some form of spinal trouble, the nature of which is revealed by a careful study of the symptoms; and that the chain of symptoms and pathological processes giving rise to them were caused by injury, and not by exposure or some such cause. The injury may give rise to functional disturbances of, or organic changes in the cord, or merely to injury of structures around the cord.

VACCINATION.—John H. Rauch (*Jour. Am. Med. Assn.*, March 17), states that from 1881-1883, in Illinois, the recoveries among vaccinated persons were ninety-four per cent. and the deaths six per cent. That in the same period, fifty-one per cent. of the unvaccinated recovered, and forty-nine per cent. died. The duration, severity and fatality of the disease bore a direct relationship to the history of the vaccination of the patient. He shows that in the United States, Great Britain and Europe, where children have been properly vaccinated, the death rate is very low; but that if they have not been vaccinated, nearly three-fourths perish. He mentions 155 cases that had been vaccinated, who took small-pox without a single death. While individual rights must be respected, no one has the right to neglect so important a duty, and thereby endanger the lives of others.

EXTRACT OF BONE MARROW IN THE TREATMENT OF ANÆMIA.—Dr. J. Dixon Mann, of Manchester, England, relates his experience of the use of an extract of red marrow of bone, in the *London Lancet*, of March 10th. He has tried it in four cases. One of these was that of a boy, a subject of hæmophilia, who had become anæmic through loss of blood. Two were young women with ordinary anæmia. A fourth was a man who had lost much blood from hæmatemesis. In all these a more or less marked increase was noticed in a few weeks in the number of red corpuscles in the blood.

The extract is obtained from macerating the heads of the long bones of young animals, e.g., calves, in glycerine for several days; the mixture being shaken from time to time. Finally the mixture is filtered, and a teaspoonful or two is taken every day, either by itself or spread on bread.

COUGHING-TAXIS IN THE REDUCTION OF HERNIA.—Mr. George Wherry, Lecturer on Surgery, Cambridge, reports in the *London Lancet*, of January 27th, that he has for several years employed this taxis in strangulated hernia, while the patient, at his direction, kept up a repeated coughing. He claims to have succeeded well in this way, and mentions one instance of success in a case where others had failed to reduce the hernia even under chloroform.

[We have tried his method in a single case, and although the rupture was got back after a few minutes' manipulation, the coughing did not seem to assist materially in the process. The bowel had not been long strangulated, and would probably have gone back with ordinary taxis. It may, however, enable the surgeon to dispense with the exhibition of an anæsthetic, and if so would be a useful addition to our methods of relief in such

cases. It is difficult to see to see how the cough aids in reduction, unless it be by loosening up an impacted condition at the neck of the sac.—A.B.A.]

GUAIACOL IN TONSILLITIS.—Dr. James Harvey Raymond, of Chicago, reports as follows (*Medical Record*, 24th March), that he has employed guaiacol topically in tonsillitis with great benefit. He recommends that it be used in full strength. It is painted on the tonsil by means of a cotton swab. It causes sometimes a good deal of smarting, but the relief obtained far more than compensates for this. Care should be taken not to let it run into the larynx. In many cases a few applications, sometimes only two, were sufficient to abort the attack. The temperature falls shortly after the application. In one case it fell from 103.5° Fahrenheit to normal in four hours. When the guaiacol is applied in a weaker form, say fifty per cent., it does not act so promptly nor effectively. Cocaine rather aggravates the smarting caused by the guaiacol. The throat is kept moist by means of troches of althea, guaiac. or gargles.

DETENTION WARDS FOR SUSPECTED INSANITY.—George J. Preston, of Baltimore (*Maryland Medical Journal*, March 17), contends that cases of suspected insanity ought to be placed in a detention ward. The station house is not a proper place to detain those who are mildly insane, or cranks. The arrest often makes the insane vanity much worse. There are many persons who act in an irrational manner, and who are not known to be really insane. Such persons often disturb church meetings, preach on the streets in such a way as to disturb the highway, or make complaints to the officers of the law of wrongs or persecutions. Sometimes a citizen may make the complaint that he thinks such person is not sane. In all these cases the detention ward is of

eminent service, as it keeps the suspected person under experienced observation for a time, and enables a diagnosis to be made. Grave crimes might in this way be often prevented.

PSYCHICAL EPILEPSY.—Dr. S. J. Fort, of Ellicott city (*Medical and Surgical Reporter* for March), ably argues that there is sometimes a psychic storm that takes the place of either petit mal or haut mal. He points out that during these psychic storms, the person may act with as much fury and prove as dangerous as the real epileptic, who has a seizure followed by past epileptic mania or furor. He cites two very interesting cases in his own practice. One of these, the condition of mental storm was extremely well marked. After each explosion there was a period bordering upon imbecility. During her outbursts she would act in a most violent manner, and attack her attendant. The discharge of nervous energy seemed to reduce her to a condition of sullen imbecility. When health improved again, and the mental balance was considerably restored, she would have another attack, and at once relapse into the condition of depression and feeble-mindedness.

HOW OUGHT WE TO TREAT GONORRHOEAL EPIDIDYMITIS.—Dr. Henri Picard (*La France Medicale*, 9th March), answers this question by stating that there is, or has been, constipation for a few days. This requires a purgative to free the digestive canal, and will relieve the compression on the rectum, the prostate and the urethra. The drastics, and especially aloes, should not be ordered, but the salines or castor oil. If the constipation continues, use large enemata.

Rest, in the horizontal position, is the next point to attend to. Along with this a good support must be fitted to the testicle. This affords a great deal of relief;

and permits the patient to turn in bed without pain, and, in sub-acute cases, to move around the room. Horand's supporter is the best. This support is made of a large piece of lozenge-shaped linen, split at the lateral angles, and lined with a thick layer of cotton wool, placed on vulcanized linen. By means of the angles this support can be fastened to the body, so as to hold the scrotum and testicles, and afford gentle pressure.

Demulcent drinks are of much value. They soothe the inflamed urethra, and render the urine less irritating. Linseed tea, infusion of violets, orange water etc., are very good forms of drink, and should be taken in large quantities.

A bath once or twice a day, or every other day, of the temperature of 95° F. is useful. These baths require to be prolonged. There is not much benefit from them unless kept up for some time. They calm the system, relieve the pain and favour sleep.

For the pain and tenderness the best remedy is salicylate of soda in doses of three to four grms. daily. Antipyrine has been used with advantage; and the anemone pulsatilla has been found very beneficial in allaying pain and swelling.

When there is much swelling, redness of the skin, and the scrotum and testicles are very painful and tender, half a dozen leeches should be applied along the cord. If the condition of the tissues is serious, even a dozen may be used.

Later on iodide of potash ought to be employed to remove the induration and enlargement that has been left by the disease. Mercurial strapping, or ointment, may also be employed for these conditions. In spite of all efforts it is sometimes impossible to restore the testicle and epididymis to their normal size. The vas deferens is sometimes obliterated and the seminal fluid cannot make its way from the corresponding testicle.

ERGOT IN NEURALGIA.—W. H. Thomson, of New York (*Medical Record*, March 17), states that he has had very good results from the use of ergot in the treatment of migraine. He gives full doses every two hours till the patient is relieved. These results induced him to try it in other forms of periodic neuralgia. He generally gives along with it an equal quantity of elixir cinchona. Of this mixture, two teaspoonfuls are given every two hours. The cinchona prevents the nausea often caused by the ergot. In trigeminal, intercostal and sciatic neuralgias, this treatment has been of great value. When quinine is given with ergot, much less will produce cinchonism than when given alone. In some severe cases, begin by giving drachm doses of fluid extract every hour, with 10 grs. of quinine with the first two doses. In migraine, a dose of ergot often aborts the attack. The patient lies down. If in an hour the pain is not gone repeat the dose.

THE FORM OF PERITONITIS.—Dr. Roswell Park, of Buffalo (*Medical Age*, Jan. 25th, 1894), goes very fully into the classification of peritonitis. The first method of classification he discusses is the clinical, and divides the disease as follows :

1. The Idiopathic. This form of peritonitis has been long accepted by standard authors ; but the writer does not think that any such form exists. In his opinion there is no such a condition as idiopathic peritonitis. There is some disturbing condition, such as rheumatism, malaria, etc.

2. The Consecutive Form. This is the form where inflammation extends to the peritoneum from some other organ or tissue. This happens more frequently from the hollow than the solid viscera.

3. The Perforative Form. Peritonitis frequently follows the escape of the excretory or secretory material of some of

the abdominal organs into the peritoneal cavity. This is usually a very fatal form of peritonitis.

4. The Traumatic Form. This includes all forms due to injury, whether the peritoneum be perforated or not. This form may be due to contusions or penetrating wounds.

5. The Chronic Peritonitis. This form is often due to Bright's disease. It has nothing in common with the acute form. It is most likely due to the constant irritation of some toxic irritant. The peritoneum is usually much thickened and opaque.

6. Tubercular Peritonitis. This form may be primary or secondary. Slow forms are not unlike that just mentioned above, with the addition of the nodular appearance of tubercle,

7. Malignant Peritonitis. Less than one-half are primary, the majority are secondary. Miliary carcinoma may be primary or secondary. Generally the symptoms are mild.

8. So-called Latent Form of Peritonitis. There are fatal cases in which pus or other evidences of diffuse or local peritonitis are found, but in which during life such was not suspected. This form is nearly always characterized by the presence of pus.

9. The So-called Foetal and Uterine Forms. This form may arise from stenosis of the foetal intestines, as shown by Virchow. An inflammatory form has also been noticed to occur shortly after birth. This is often consecutive to disease of the umbilicus.

The second method of classifying peritonitis is known as the anatomical. This is very simple :

1. There is the general or diffuse form.
2. The circumscribed form may result from injuries. It generally occurs about the cæcum. A rare form is found in the cavity of the lesser omentum, and is usually due to disease of the pancreas.

The third method of classification is the pathological:

1. The aseptic form, usually local, and characterized by hæmorrhages or fibrinous effusions, with adhesive tendency.

2. The infectious forms, as staphylococcus, streptococcus, colon infection, septic purulency, putrid from perforation.

3. Specific forms, such as tubercular, gonorrhœal, actinomycotic. Opinions are yet divided regarding a gonorrhœal infection, though held by some good writers to be the case. The colon bacillus is now known to be the cause of peritonitis. It has been shown that the colon bacillus may escape from its usual habitat, and give rise to intense inflammation and very fatal results. The putrid form occurs most frequently after operation for perforation. The exudation is very infectious and foul smelling.

PARASITIC THEORIES OF THE ORIGIN OF CARCINOMA.—Dr. James P. Warbasse, of Brooklyn (in *Brooklyn Med. Jour.*, March, 1894), discusses the parasitic origin of carcinoma. He reviews the works of pathologists who have studied this question. He calls attention to the fact, that observers of high repute, by the same methods of study, have reached contrary conclusions. Many good observers regard the so-called parasites as modified cells. The author, however, has found bacteria in carcinoma. While this is true, he holds that there is no foundation for the opinion that parasites are the cause of carcinoma. No bacterium of constant characters is always found in carcinoma. Thus the first condition of a bacterial theory is wanting. No proof has yet been advanced to show that any germs found in a carcinoma can be isolated and then reproduce the growth in another and suitable soil. There are other reasons against the parasitic theory. Carcinomata are related through the endotheliomata and peritheliomata to sarco-

mata; and through the adeno-carcinomata to benign adenomata.

Then again, on etiological grounds, we have chemical and mechanical irritants as evident causes of all tumours. So too, sarcoma, or carcinoma, may develop in scar tissue. From chronic inflammation of mucous membrane may come polyypi, adenomata, or carcinomata. If we contend for a parasitic origin for carcinoma, we must seek for a similar origin to other malignant and benign growths.

The most plausible parasitic theory is that of the sporozoa. But this does not meet the case. The advocates of this theory are met by equally capable observers who contend that what has been called sporozoa are only endogenous cell constituents. Thus the theory of Adamkiewicz is unnatural and illogical, while the theories of Cohnheim, Virchow, Thiersch and Klebs, based on a cellular theory, meet the phenomena best.

LOCAL TREATMENT OF DIPHThERIA.—Dr. A. Jacobi, of New York (*Therapeutic Gazette*, March), in dealing with this subject, remarks that gargles only act on the mouth but never on any portion behind the anterior pillars of the fauces. Yet, when they can be used, they should not be neglected, as they aid in keeping the oral cavity clean.

Where membrane has formed, if within reach, it should be destroyed by the application, two or three times a day, of carbolic acid and glycerine, equal parts; tr. of iodine; or bichloride of mercury one part in one hundred to five hundred parts. In making these applications to children the author condemns strongly struggling with the child. He says that no remedy will do as much good as the struggling does harm.

Medicine can be given in small and frequent doses, so as to act on the throat. Thus tincture of iron, boric acid, bichlo-

ride of mercury are useful as local agents and act constitutionally on the disease.

The greatest care should be paid to the local treatment of nasal diphtheria. In cases where the nares are filled with pseudo-membrane, a passage must be forced through them by means of a probe covered with cotton wool dipped in carbolic acid. The nares must then be kept clean. The atomizer rarely throws the medicament in with sufficient force to pass back the entire length of the nasal passages. A small glass syringe with a rubber nozzle is the best applicator. The best solutions are table salt 7 in 1000; boric acid 3 in 500; lime water; or bichloride of mercury 1 part, or chloride of sodium 100 parts, in 2,000 to 10,000 parts water; carbolic acid 1 to 10 in 1,000 water. Warm water may also be used.

To dissolve the membrane, papayotin—not the proprietary article—can be used in five per cent. solutions. This may be applied to the trachea. The author has used it stronger than the above below the tracheotomy tube.

For the cervical lymphadenitis, an early and free opening is advised. Do not wait for fluctuation. Much of the swelling is inside of the fascia. To relieve the tension the incision must be a long one. The wound must be well disinfected by subnitrate of bismuth, iodine, iodoform, or antiseptic gauze.

THE PATHOLOGY OF LOCOMOTOR ATAXY.—Dr. Sydney Kuh, of Chicago (*Chicago Medical Recorder*, March, 1894), has an interesting and instructive article on the above subject. He contends that many of the symptoms of locomotor ataxy cannot be explained by referring them to the spinal cord. The disturbances of the bladder, rectum and genital organs, as found in tabes, can be caused by spinal lesions; but they also occur in

diseases of cerebral origin. Westphal's symptom, or loss of the knee jerk, is undoubtedly a spinal one.

No definite knowledge exists as to the localization of the most important symptoms of the disease, namely, that from which it gets its name. Some assume that the ataxy is due to sensory disturbances in the joints. This cannot be a correct view, as there is often marked ataxy, without sensory derangements in any way about the joints. Then there is the opinion of Jendrassik that, apart from locomotor ataxy, no known spinal disease causes ataxy. Experimental injury to the cord has never produced inco-ordination. Then there are cases of pseudo-tabes with ataxy, where the spinal cords, spinal roots, and spinal nerves were healthy. This goes to show that the cause of ataxy must be sought for higher up.

This condition led Goltz to search for a co-ordinating centre higher up than the spinal cord. Wernicke and Kahler have met with ataxic movements in cerebral lesions exactly like those of tabes. The author has seen two cases of this kind. Further, there are some cases of locomotor ataxy in which the onset of inco-ordination is quite acute. It would hardly do to consider a symptom that comes on suddenly, as due to the slow degeneration in the cord. Some of the sensory disturbances of the disease may be explained by lesions of the posterior columns. Others, however, appear to be due to lesions in the perceiving centres, such as polyæsthesia, allocheiria.

These symptoms very probably have their origin in some other part of the nervous system than in the spinal cord. Further, there are the extra spinal symptoms of ophthalmoplegia interna and externa, mydriasis, amblyopia, etc.

There are other cerebral symptoms, such as atrophy of cerebral nerves, paraly-

sis of accommodation, hemiatrophy of the tongue, lightning pains in the head, vertigo, convulsions, where there is no general paralysis and transient hemiplegia. Many persons suffering from tabes are quite gay and satisfied with their condition. Athetosis has also been noticed.

It will appear from what has been said that there is much work to be done on the brains of tabetics. No doubt that brain lesions are much more common than has been generally supposed. The great difficulty lies in tracing microscopic changes through so bulky an organ as the brain. One thing, however, is clear, that the more this disease is studied, the less it will appear to be a disease of the cord, and the more to be one of the general nervous system.

THE NERVE THEORY OF MENSTRUATION.—Christopher Martin, M.B., F.R.C.S., of Birmingham (*Medical Age*, February 10, 1894), argues in favour of the nerve, theory of menstruation, holding that the function is due to special nerves emanating from a special centre.

First of all we have the periodicity. Periodicity is an event familiar to physiologists, and is due to the emission of nerve force. The movements of the heart and respiration are good examples.

Then, the onset of menstruation is marked by important changes. The alteration in the girl's gait, figure, manner, mental and emotional life, is abundant proof of this. These changes can be better understood if we suppose that a centre hitherto dormant comes into activity at puberty.

But with each returning period we have marked disturbances. Even in healthy women there is increased nervous instability and excitability. These phenomena are much more marked, however, in lunatics and epileptics. Many of these have violent attacks each period.

With each period there is a wave of vital activity. This is seen in the increased excretion of urea, the increase in bodily temperature, the rate and tension of the pulse. This wave reaches its maximum the week before menstruation, and falls to a minimum the week after menstruation.

Further, menstruation has been known to cease altogether as the result of some strong mental shock. The menopause is generally a period of marked nervous and mental disturbances. These facts can be best explained on the nerve theory of menstruation.

It has been proven that these are centres for micturition, defæcation, erection, respiration, circulation, etc., and there can be very little doubt of the existence of a parturition centre in the lumbar enlargement. It is most likely that the menstrual centre is not far away.

FIVE THOUSAND CASES OF SMALL-POX.—W. H. Welch, of Philadelphia (*N. Y. Medical Journal*, March 17), gives his observations on five thousand cases of small-pox. There were 2,831 cases of variola, with a death rate of 54.18 per cent. There were 2,169 cases of varioloid, with a death rate of 1.29 per cent. The death rate amongst whites was 29.07 per cent.; and among negroes, 42.62 per cent. Those vaccinated in infancy, with good cicatrices, gave a death rate of 8.78 per cent.; those done in infancy, with fair cicatrices, gave 14.71; while those done in infancy, with poor cicatrices, gave 27.10 as the percentage death rate. Post vaccinal cases gave a death rate of 16.26 per cent., and the unvaccinated cases a rate as high as 58.38 per cent. The author strongly contends that a typical good mark is of far more importance than the number of vaccine marks. The above figures are abundant proof of the great value of a proper vaccination.

Where the disease is reduced to simple varioloid by good vaccination, only 1.29 per cent. died ; but where the disease assumed its full form, 54.18 per cent. perished.

THE CAUSES AND DIAGNOSIS OF APPENDICITIS.—Frank Warner, of Columbus, O. (in *Cincinnati Lancet-Clinic*, March 27), remarks that such foreign bodies as cherry-stones, apple-seeds, are by no means always the cause of appendicitis. It is really the exception to find such bodies in the appendix, when operated upon. Again, it has been claimed that hardened fecal masses may cause the inflammation. This is also a very rare cause. In very few cases has any hardened fecal masses been found. On the other hand, hardened fecal masses are found when there has been no trouble in the appendix. It is strongly held by some, that the bacterium *commune coli* is the most frequent cause of appendicitis. This organism finds its way into the cæcum and appendix, and excites an inflammatory condition, often of a very intense nature and very fatal. This, no doubt, is the principal cause of appendicitis.

The author lays stress on the following symptoms: There is pain referred to the region of the umbilicus, with tenderness over the appendix. There is nausea, preceded by pain. This point is important, as it distinguishes the condition from ordinary indigestion, where the pain follows the nausea. Constipation is common, and the more obstinate the graver the condition. The tenderness is usually localized just external to the rectus muscle, and below a line from the umbilicus to the right superior iliac spine. The patient occupies a dorsal decubitus. A chill is rare at the onset, but may occur later if an abscess forms around the appendix. The temperature may vary a good deal. A high temperature and pulse indicates

usually considerable inflammation. But gangrene and perforation may follow slight elevation of temperature. Careful palpation may reveal a tumour in the right iliac fossa. This is either due to inflammatory adhesions, or to the formation of an abscess, or to impacted feces. The above symptoms will enable the physician to make the diagnosis between appendicitis, and renal or hepatic colic. In hepatic colic the pain radiates to the scapular region, while in renal colic, the pain radiates to the thighs and testicles, causing retraction of the one on the affected side.

AN UNDEFINED FACT IN PHARMACOLOGY.—Dr. Heinrich Stern, of New York (in the *St. Louis Courier of Medicine*, January, 1894), has an interesting article. He deals with the question of protoplasm per se; and shows that it undergoes very important changes under varying conditions. The writer calls attention to the well-known fact, that different persons have a very different predisposition to disease. There must be some difference in their protoplasm. Attention is then directed to the important consideration that drugs vary in action according to the season, soil, temperature, etc., under which they are produced.

But the most interesting feature of the article is that which calls attention to the difference that exists with regard to certain diseases in different climates. Doses of 25 grs. of quinine are ordered in the South for malaria, while 7 grs. is considered sufficient in New York. From 15 to 30 grs. are safe doses of antipyrine in Germany, but 5 to 10 grs. are the usual doses in America that can be ordered with safety. He speaks of a preparation of iron, ordered in one to four tablespoonfuls in Germany. In New York it is ordered in doses of one dessertspoonful.

SHALL THE TERM AUTO-INFECTION BE RETAINED? (Dr. J. T. Duncan, M.D., Toronto, in *Medical News*, March 24th.) The subject of auto-infection (the endogenous origin of puerperal fever, as Barnes now prefers to speak of it) is prominently before the profession again, both in America and in Europe. In the New World it has been brought forward by Williams in an admirable paper, and in the Old World by the address of Robt. Barnes before the British Medical Association. Williams holds that auto-infection is possible in a large proportion of cases, but admits that its actual occurrence is very rare. Barnes, on the other hand, while appearing to doubt its very existence, yet proceeds to describe it, and is of the opinion that it occurs frequently. These authorities, however, differ essentially in their conception of what endogenous puerperal fever is. Barnes holds that it may be caused by a chill or other abnormal condition of the system, while Williams strictly maintains its bacteriologic origin. A vast amount of the doubt and difficulty that now surrounds this subject will be cleared away if we can accept the latter theory. And it appears to me, after careful consideration of the subject, that not only is it permissible to hold this theory, but that the evidence produced compels its most unequivocal acceptance.

This being the case, the definition of puerperal disease is easily given. Puerperal infection (following Williams) is simply the infection that leads to surgical fever. It is produced by the same micro-organisms and manifests itself in similar ways. "In other words, puerperal infection is wound-infection." As a corollary to this it may be stated that there can be neither wound-infection nor puerperal infection without the presence of pus-producing organisms. It follows from this again that no matter what the condition of the patient may be, no matter how

much fever, for instance, may be found in a patient after confinement—if that fever be not caused by absorption of pus-producing organisms—then that fever is not true puerperal fever.

Only one possible source of auto-infection exists, and that is the presence of pathogenic organisms in the canal before confinement.

That streptococci (and other pus-producing organisms) do exist in the canal before confinement is fully admitted. They are present in many pregnant, and apparently healthy women. Williams remarks in regard to this subject: "Pathogenic organisms may exist in the genital tract during pregnancy without giving rise to any symptoms whatever, and only exert their influence during labour or the puerperium, when the wounds which follow labour will afford abundant opportunity for their absorption."

Nothing can be more plain than this. Bacteriologists believe that the pathogenic micro-organisms in the canal produce no harm till the surface is lacerated during labour. Then they are absorbed, the result being puerperal fever; and this, because the streptococcus dwelt in the body of the patient before confinement, they consider to be an auto-infection. But is such a deduction justifiable? That streptococci are present in the canal all will admit. But they are foreigners—coming from some external source—never originating in the canal, and never becoming part of the body of the bearer. We must deny, then, that these foreigners can ever produce endogenous puerperal fever. On the other hand, any fever caused by them would be strictly exogenous—as truly so as though these same micro-organisms infected a wound on the external surface of the body. So plain does this appear to be, that it is misleading to use the term auto-infection in such a case.

But, leaving aside this objection to the

term, a more important inquiry is: Are those streptococci in the canal ever a cause of puerperal fever; in other words, are they ever infective? The author holds that they are not, and gives a number of cases from his own practice to support this view.

In all of his cases daily records were kept of the pulse and temperature, these remaining normal, even after severe cases of labour, during the lying-in period.

Evidence such as the foregoing, though negative, is strong. Presumably in many of these cases the streptococci were present in the canal. And yet, although the labours were, as a rule, severe; although examinations were frequently made; although the instruments were passed into the uterus itself, and air necessarily freely admitted, in none of them were the streptococci virulent. Does not this point to the conclusion that they will not become infective without extraneous assistance?

But in addition to many such records which could be produced by the obstetricians of this continent, let us look at some investigations by European experts. Merman (quoted by Williams) in 900 cases did not douche the vagina, yet had so little fever that he thinks there is no room for the idea of auto-infection. Leopold, of Dresden, in a series of cases had only one-fifth of one per cent. (1 in 500) in which the fever could have been due to auto-infection. Surely such records go far to prove that the streptococci of the canal will not of themselves become infective.

The author believes, then, that auto-infection in any form does not exist, and that, therefore, the term should not be retained.

It may be asked whether any practical benefit will result from the elimination of the word from the obstetric vocabulary. Among other benefits, its elimination should prevent pre-partum douching of the vagina. For if there be no auto-

infection, this measure of "meddlesome midwifery" would no longer be used. It is useless to remove non-pathogenic organisms.

In the second place, the absence of this term should lessen the amount of careless midwifery. So long as it is retained, so long will careless obstetricians have a way of escape from the consequences of their own want of care. That it is sometimes impossible for the attendant to prevent puerperal fever, all will admit. He can, however, avoid conveying streptococci or the pabulum necessary for their support into the canal, on his hands or instruments.

Items, Etc.

A short time ago it was decided at a meeting of the medical faculty of the University of Toronto that it was not advisable to create any more professorships at present. Perhaps it was thought that the remuneration paid professors would not stand further subdivision.

Brown-Sequard, the noted French physiologist, died at Paris on the 2nd of this month. He was born April 8th, 1817, and graduated in medicine 1840. From 1864 to 1869 he was a professor in Harvard College. In 1869 he was called to fill a chair in the School of Medicine, Paris; a few years later he returned to America and was again recalled to Paris to succeed the distinguished Claude Bernard in the College of France.

An Association, to be known as the West Toronto Territorial Medical Division Association, was formed on the 7th of April, with the object of advancing the material interests of the profession in the riding. The following officers were elected:

President, Dr. A. J. Johnson ; 1st Vice-President, Dr. A. A. Macdonald ; 2nd Vice-President, Dr. Hamilton ; Secretary-Treasurer, Dr. Carveth ; Council, Drs. Orr, Spence and McPhedran.

CUT IT SHORT.—We are glad to learn that a large number of papers are in preparation for the meeting of the Ontario Medical Association. To those who are engaged in this work we strongly suggest brevity. Avoid poetry and unnecessary statistics. Let Hippocrates, Harvey, Hunter, and even Hahnemann repose undisturbed. Do not quote at unnecessary length from the Reference Handbook or from Gowers, or Osler, or Gray. Put your own ideas on paper and the meeting will be a brilliant success.

Two years ago the medical faculty of Toronto University underwent a reorganization, when three of the members of the staff contend that they were unjustly treated. More than a year has passed since they petitioned the Senate to have their claims considered. There was much delay in dealing with this important question, but at the last meeting of the Senate, held April 13th, the justice of their claim was recognized, and it was resolved that compensation should be made to the petitioners.

Enquiries are constantly being made by physicians in the country regarding the prospects of practice in this city, as they are tired of hard work and country life. To be candid, in answer we must say that there are too many physicians in Toronto. The profession is decidedly over-crowded, and collections are not so good as they should be. Many doctors, in fact, find it difficult enough to get a comfortable living and pay their honest debts. Any country physician, therefore,

who has even a fairly lucrative practice, had better content himself in his present location rather than make the mistake of moving to the city, where he will have to face long hours of weary waiting.

Correspondence.

The Editors are not responsible for any views expressed by correspondents.

Correspondents are requested to be as brief as possible.

BACTERIOLOGICAL LABORATORY.

EDITOR DOMINION MEDICAL MONTHLY :

Sir,—In the *Canadian Practitioner* for March, I notice an editorial expressing the hope that "the Government of our Province," will spend some of its surplus on a bacteriological laboratory. The *Canadian Practitioner* does not say where it should be placed. It remarks that "Medical students would have a chance to learn many valuable lessons in it ; but as far as they are concerned, the work would be mostly post-graduate in character." Now if the laboratory should be placed in Toronto, how could the students of London or Kingston attend it or make use of it? And again, if in Toronto, under which school would its management be placed? or would it be made a portion of the present University system? I cannot agree with the idea of the Government establishing such a laboratory and placing it under the control of any school or university for the use of students or for post-graduate study. The state has no right to use public funds in this way. If such a laboratory were placed under the control of any school or university, it would be an act of injustice to all the other medical schools and universities. It would be so grossly unjust that the other

colleges would not allow any such scheme to be carried into effect; nor would the Government attempt any such liberties with the public purse or the rights of other colleges.

The only way, then, would be to establish it as under the control of the Government. The Government would have to put a staff in charge of the laboratory and run the institution for the good of the public, without regard to medical students in any way. I take it that the Government has nothing to do with the care of the medical student. The state has no right whatever to furnish a laboratory for him, any more than it has to furnish ploughs for the farmer. Thus I take it that the Government is not likely to be in any hurry about a laboratory. Neither can I see why the Government should interest itself in this matter. To add the cares of looking after a public laboratory to the many duties it now has, does not seem very likely to attract the attention of the average politician. When the laboratory could not be used for the use of any college without injustice to the others, I do not know what advantage it would be to the general public. A scientific establishment under the control of the state does not meet the general views, as it would come under the influence and changing conditions of politics.

It is quite certain that no further inroads can be made on the funds of the University, and I do not think that the Legislative Assembly is at all likely to vote a grant for this purpose. It may therefore be pretty safely taken for granted that the laboratory question will be allowed to remain in abeyance till someone voluntarily donates a large sum of money to some of our medical colleges for such a purpose, and a state-aided college is not likely to get private gifts.

Yours, etc.,

PRACTITIONER.

EDITOR DOMINION MEDICAL MONTHLY:

SIR,—Kindly afford me space in your next issue for the inclosed letter. It was mailed last month to the *Ontario Medical Journal*. In reply to notes of inquiry, written on the 19th and 23rd, regarding the non-receipt of the customary revise, I was curtly informed on the 29th ult., that, on account of the length of my letters, the management had concluded to discontinue giving me space in that periodical. As my letter plainly purported to be the last of the series—its exclusion speaks for itself.

Yours, etc.,

JOHN H. SANGSTER.

Port Perry, April 3rd, 1894.

EDITOR *Ontario Medical Journal*:

SIR,—As a rule, your admirable editorials on my letters are quite superior to criticism, and require no comment from me. Always exact, logical and convincing, you occasionally surpass even yourself, and become really brilliant. The second paragraph of your last (February) article is a notable example of this. In it, without deigning to go into details, with a single characteristic and artistic sweep of the editorial pen, you not only annihilate me, but also utterly demolish the authenticity of the Financial Returns. These, as published in the Council's Announcement for 1892-93, pp. 201 and 202, set forth the Total Receipts for each year up to 1874, inclusive, as \$4,046.53, \$959.64, \$2,008.51, \$2,502.00, \$2,688.07, \$2,971.60, \$1,473.00, \$2,365.95, \$4,896.14; and the Total Disbursements for the same years, as \$1,350.00, \$1,858.99, \$2,194.75, \$2,205.56½, \$2,743.83½, \$3,671.55, \$1,428.20, \$1,826.25, \$3,263.90. Now, deducting the disbursements from the receipts of the first year, then of the first two years, then of the first three years, and so on, the remainders must be the balances, clear of all liabilities, banked to the credit of the

Council at the close of each year. These remainders, from 1867 to 1874, inclusive, are \$2,696.53, \$1,797.18, \$1,610.94, \$1,907.37½, \$1,851.61, \$1,151.66, \$1,196.46, \$1,628.16 and \$3,240.40. Yet you venture to say that, from facts in your possession, you know that in 1874, and for several years before, the Council was so hard up, indeed, so very hard up that "the then Registrar had to give his own personal note for the printing account in order to have the printer satisfied before undertaking the work." As the examiners of the Council Board, prior to 1874, persistently refused to use printed examination questions, and the Annual Announcement was as yet a thing of the future, the whole printing account must have then been a very small affair. Now, sir, with these very handsome balances to its credit in the bank how could the Council be so very hard up, and why should its solvency be so seriously impugned? You must see that your startling averment can only mean one of two things—either that the Treasurer has been palming off a set of bogus Financial Returns on the profession, or that, from 1867 to 1874, the annual surpluses, which ought to have been in the bank, had been gobbled up by the Council or its employees. As neither of these explanations can, for a moment, be accepted without the most ample proof of its correctness, perhaps, in this instance, you will condescend to particulars, and, for the moment, be exact and explicit rather than merely brilliant. By all means, then, let us at once have the "facts" in your possession, so that we, too, may be enabled to understand this financial paradox. Your refusal or neglect to meet this challenge, fairly and squarely, cannot fail to deepen the tinge of romance which already colors your literary efforts, or to necessitate the use of an extra grain of salt on the part of your readers.

In my last three letters it has been conclusively shown that the professional tax as heretofore levied and applied—clearly violated every one of the primary conditions or fundamental principles—strict conformity to which alone could warrant its authorization and collection. I may remind you that had it infringed merely any one of these conditions, its payment could not have been regarded as obligatory on the members of the College, and that violating as it did all three of them, and that grossly, it became an oppressive and an arbitrary exaction—arousing opposition and impelling to resistance. That some medical men did pay it is undoubtedly true, but their so doing is a proof neither of its righteousness nor of their discrimination. Greatly to their credit, 1,184 practitioners, or considerably more than half the members of the College, resident in the Province, refused point-blank to pay it, except upon compulsion. Of the remainder a very large number paid it under protest and that only after being notified that unless the money were at once forthcoming a writ for its recovery would be promptly issued. Others paid it reluctantly, under the mistaken impression that being sanctioned by law it must necessarily be right. Not a few paid it because the amount was small and it was less trouble to pay than to refuse. The number of those who paid it willingly and intelligently must have been small indeed. Now, sir, you and your associate territorial representatives in the Council were fully cognizant of all these facts. You and they knew that the professional tax had been repudiated by more than half the medical electorate. You and they knew that 1,184 members of the College had suffered themselves to be put to the cost and annoyance of suits in the Division Court rather than tamely submit to it. You and they knew that hundreds more paid it only under the pressure of threatened writs for its re-

covery. You and they knew that it was almost universally unpopular, that to the great bulk of the profession it was simply odious and that very few paid it without protest or demur. You and they knew (Annual Announcement, 1890-91, p. 144) that to enforce the payment of this detestable tax, even by the members of the Medical Council, it was found necessary to instruct the treasurer to deduct the arrearage of each from his sessional indemnity. And yet, sir, knowing all this, and, consequently, fully aware that there was something radically wrong with the tax itself, instead of faithfully and fearlessly searching into the causes of its unpopularity, and endeavouring either to have it abolished or to have it equitably assessed on both the interests served, and thus made just and acceptable to all, you and they pursued the fatuous course which has brought you where you now are! Truly "*Quas Deus vult perdere, prius dementat.*" That you and they had a lively conviction that the profession would resent, and deeply resent, the precious legislation of 1891 is sufficiently attested by the Council roll-call on the afternoon of June 13th, 1890, as given in the Announcement of 1890-91, p. 131, whence it appears that, though you were all present on every other occasion, half your number then deliberately absented yourselves so as to shirk the vote. It may be a question among soldiers, whether the poltroon who skulks or runs away from the field of battle, or the traitor who boldly deserts to the enemy on the eve of the fight, most richly deserves the execration of his fellows. Probably, however, in the coming elections, the independent portion of the medical electorate will see but little or nothing to choose between those of you who, in a most important crisis, ran away—basely deserting the post of duty and of honour,—and those of you who defiantly aided the irresponsible elements

of the Council to perpetrate an unpardonable outrage on the profession.

I have now discussed, as I promised to do, the ethics of the professional tax. The facts set forth, though but feebly expressed, are quite sufficient to convince any unbiassed reader that the electorate must continue to resist payment of the so-called Annual Assessment until its objectionable features are removed. There are some other points, of interest to the profession, to which I would gladly advert were it not that space in your journal is so grudgingly given as to compel me to desist. The character of the Council's last effort to increase the Annual Assessment ought to be exposed. Great pains were taken to allow nothing to transpire, either in the Medical Journals or in the Annual Announcements, as to the nature of that attempt. True, as now appears, the direct amount asked for was only \$5, but \$5 with an added fine of \$1 for every six months it was suffered to remain unpaid, which made it incomparably worse than a straight \$10 annual tax. Thus the indebtedness of a member of the College, six years in arrears, would amount to the aggregate of \$15, \$13, \$11, \$9, \$7, and \$5, or to \$60 in all. A practitioner ten or fifteen or twenty years in arrears could clear himself with the Council only by the payment of \$140, or \$285 or \$480. What fascinating visions of brilliant financial possibilities must have recommended such a scheme to a Council, so competent as the present one, to spend all the money by any plan procurable! Take your time, Gentlemen, no need to pay up before we begin to press you for your arrears. The profession was saved from this delectable concoction only by the firmness and good sense of the legislature, but what can we think of the men who deliberately proposed it and sought to obtain permission and power to enforce it? How can any

intelligent and self-respecting elector, without stultifying himself, vote for the return of one of them to the next Council? You may, perhaps, claim that a chief, or that the chief object of the scheme was to force prompt payment, but to urge or to attempt to force the payment of an unnecessary, an unjust and an unconstitutional tax is tyranny—is a wrong to which no liberal minded, upright man would care to be a party.

In closing these letters, I regret that I cannot compliment you on the graciousness with which you have admitted my communications to your columns, or on the fairness of your editorial comments upon them. The time has probably come when the medical profession in Ontario should have a Journal untrammelled by schools or Council, and exclusively devoted to its special interests. In this respect your own periodical is out of the question. The other medical serials published in the Province—though distinctly higher in tone, and more liberal in conduct, have all, it must be confessed, alliances and aims which essentially unfit them for doing yeoman's work in the service of the medical electorate. I am not, of course, here referring to them in their capacity as vehicles of scientific information and professional enlightenment, since in that respect, I believe them to be an honor to the Dominion, and to bear favorable comparison with the best medical journals in the world. Where they fall short is in that alert guardianship of the rights and immunities of the profession, and fearless advocacy thereof—even, on occasion, as against both Council and schools—which is necessary to our future welfare. The entire absence in the Medical Journals, then in existence, of a single note of warning to the profession with respect to the proposed legislation in 1891—of which it may be assumed that they at least had some foreknowledge—is an in-

stance in point, and the past two years have supplied many others. The *Canadian Practitioner* in several instances, and the *DOMINION MEDICAL MONTHLY*, on at least one occasion, have, it is true, risen superior to what may, perhaps, without offence, be termed their natural antipathies, and have referred to or discussed some of the claims even of the Medical Defence Association with dignity and fairness. All honor to them for such manifestations of liberality and spirit of fair play. It, nevertheless, remains true that we cannot expect much help from these and similar sources—that if the more healthful and more manly professional sentiment, which now begins to exist in our ranks, is to become fully developed in the near future, a free journal, in which, editorially and otherwise, all questions relating to the government, the internal economy, the alliances, the hopes and aspirations of the medical electorate, could be discussed freely and honestly, from a purely professional standpoint, is just now, without doubt, an important desideratum.

Yours, etc.,

JOHN H. SANGSTER.

Port Ferry, March 8, 1894.

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