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THE
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Editor:

ADAM H. WRIGHT, B.A., M.D.

Associate Editors:

JAMES F. W. ROSS, M.D.

JOHN CAVEN, B.A., M.D.

EDMUND E. KING, M.D.

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LIST OF CONTRIBUTORS.

- | | |
|---------------------------------|-----------------------------|
| ADAMS, E. HERBERT, M.D. | MCKENZIE, B. E., B.A., M.D. |
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- WRIGHT, ADAM H., B.A., M.D.

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EDITOR:

ADAM H. WRIGHT, B.A., M.D. Tor.

ASSOCIATE EDITORS:

JAMES F. W. ROSS, M.D. Tor.

JOHN CAVEN, B.A., M.D. Tor.

EDMUND E. KING, M.D. Tor.

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PUERPERAL SEPTICEMIA.*

By ADAM H. WRIGHT, B.A., M.D., M.R.C.S., ENG.,

Professor of Obstetrics, University of Toronto.

THE Burnside Lying-in Hospital of Toronto has been fortunate in having a good record in recent years. For two years and three months, up to March, 1893, there had been no case with serious symptoms pointing to septicemia. It was very seldom that any case went in the slightest degree "queer." Suppurative mastitis had not been seen for five years. For several years before 1891, we had been endeavoring to use the modern antiseptic and aseptic methods, with only fairly good success. The patients in uncomplicated labor are attended by the house physicians, whose terms of office are only about six weeks. As a matter of course, all do not learn equally well their aseptic and antiseptic lessons; at least, such has been our experience in this institution. Notwithstanding our precautions, septicemia occasionally appeared; but, on the whole, our mortality rates had been much reduced. We were not satisfied, however.

* Read before the Toronto Medical Society.

Consequently, in January, 1891, a complete set of rules was formulated for the guidance of physicians, students, and nurses, founded on the methods of Leopold, and certain British and American obstetricians. The most important of these rules is one which compels each physician, nurse, and student to spend not less than eight minutes in cleansing his hands, according to a definitely described plan, before touching the patient. Two minute glasses (one five, the other three) are used to indicate the time to be thus employed. They are placed in charge of the matron or head nurse, who is made responsible for the proper observance of the rule. Without any further reference to our methods at this stage, I may say that the results under our new regulations were very gratifying. During 1891 and 1892 the record was almost without a blemish. A similar condition of things existed early this year; but, suddenly, a calamity fell upon us; the old enemy appeared when least expected, and carried off a mother and babe.

I am indebted to Professor Primrose for assistance in looking after the patients, and for the following history, which he took from the hospital records, and to Professor John Caven for his careful investigations, and the valuable report on the *post-mortem* conditions.

M. M., æt. 17, single.

Admitted to the Burnside Lying-in Hospital, Feb. 6th, 1893, apparently a strong, healthy girl, well advanced in her first pregnancy. Labor pains came on at midnight, March 27th, and a well-developed male child was born at 10.30 the following morning, March 28th. There was nothing unusual about the birth, and every precaution was taken to keep the parts aseptic.

The girl came from the country, and it was difficult to obtain her previous history. Since her death it has been found that she had led the life of a prostitute for some years.

There was some slight delay in the third stage, but finally the placenta came away with the membranes intact, without any active interference beyond the mere insertion of the finger of the attendant house physician into the vagina. A slight tear of the perineum required stitching, and this was done with silkworm gut which had been previously soaked for half an hour in 1-20 carbolic acid lotion. After confinement the patient seemed well, with no rise of pulse or temperature; the uterus was well contracted.

On the evening of March 30th (sixty hours after confinement) her pulse was 92, and the following morning (March 31st) the temperature recorded was 102.6°. Sulphate of magnesia was administered until the bowels moved freely. On April 1st, 15 grs. of sulphate of quinine were administered, and an intra-uterine douche consisting of a 1-10,000 bichloride solution, followed by plain hot water. The uterus was small and

low down, and the discharges somewhat scanty and odorless. The patient continued to nurse her baby, and, having abundance of milk, also nursed some of the other babies in the ward. The baby began to look pale and sick on April 1st (*i.e.*, when it was four days old), and on the night of April 3rd it was very restless, and seemed to be in pain. After that date it was not nursed again by its mother. Two days subsequently (April 5th) the baby's right arm was found to be swollen and red; the next day its left leg was attacked in like manner; it died on Saturday, April 8th.

The stitches were removed from the perineal tear on April 4th, and there is a note to the effect that "one stitch hole had a little pus in it, but the general result was good." The patient complained of pain in her right arm and leg on April 6th, the arm swelled considerably, but there was no perceptible swelling in the leg. On April 9th (twelve days after confinement), the following note was made of the patient's condition: The patient was anemic, as evidenced by the blanched appearance of the lips and conjunctivæ; she was breathing very rapidly. The right forearm, on the dorsal aspect, presented a red and swollen appearance, particularly well marked over the ulna, and extending along the greater part of the bone; the greatest amount of swelling was at a point three inches below the elbow; there was a slight degree of redness, and the affected part was exquisitely tender. The condition resembled very much that found in acute periostitis. The left arm was also swollen; the affected area, however, was more limited, the greatest amount of swelling being at a point two inches above the elbow joint over the outer and back part of the arm; the part was very tender to the touch.

The calf of the right leg appeared to be swollen, but there was no redness. On palpation, however, it was found to be very tender, and there appeared to be an indistinct, brawny hardness, somewhat deeply placed; the limitation of this was not readily defined. There was no distension of the belly, and no abdominal tenderness. The patient had no headache, she took her nourishment well, and there had been no history of rigors during her illness. Her pulse, at the time of examination, was 120, respiration 40, and temperature 102.2°. Free incisions were made in the right forearm and left arm; in both limbs the knife was carried down to the bone. The subcutaneous tissue of the right forearm presented a very peculiar appearance; the tissue in question was gray in color, and of a clear, transparent jelly-like appearance; there was no pus, and no collection of fluid of any kind. It was thought that suppuration would sooner or later supervene in the affected tissues, and consequently provision was made for free drainage. The left arm was dressed in a similar manner; the condition of the part resembled that found in the right forearm. In

both limbs the affected area was apparently limited to the subcutaneous tissue. Operative measures did not seem to be indicated in the treatment of the calf of the right leg.

The general condition of the patient did not appear to be affected by the operation. Three days subsequently there was abdominal pain and slight distension; she also complained of some pain along the spine. The discharge from the wounds was now purulent.

Cover-glass preparations were made from discharge obtained from the bottom of the wounds. On examination of these, numerous diplococci were found, and several groups of streptococci; there were no bacilli. From some stabs made in glycerine jelly tubes, there were subsequently found pure cultures of a streptococcus. On April 18th a swelling on the left forearm was opened; this was found to contain pus. The opening was made with antiseptic precautions, and from a culture obtained from this pus, in glycerine jelly and agar-agar, a streptococcus was found similar to that growing in the former cultures.

The patient's condition gradually became worse. The striking features developed in her case during the three weeks of her illness, in addition to the local conditions already described, were a persistent high temperature, ranging from 101° to 105.6° ; the remarkably rapid respirations; during the last week these were recorded very carefully, the lowest being 36 per minute, and the day before her death 74. The respirations were notably more rapid during sleep. The patient was restless and very nervous; her lips would quiver, and it seemed as if she were going to have a rigor, but this never occurred. The pulse rate was never very rapid, averaging about 120; the strength and regularity of the pulse were well maintained. In the latter part of her illness the patient was delirious at times; nourishment was taken freely and well until three days before her death. During the last week the house surgeon opened a small superficial abscess in the right heel, and another in the chin. The pain in the calf of the right leg disappeared altogether, and the trouble there had apparently disappeared. The amount of pus discharged from the wounds in the arm was never very great. In addition to local measures, the patient was treated by free stimulation; she took as much as \bar{z} vi. of whiskey in twelve hours. For a time quinine was administered, but without effect; salol was substituted, but it disturbed her digestion, and was discontinued.

She died on April 21st, twenty-four days after confinement.

Report of post-mortem examination, by Professor Caven. The examination was made seven hours after death. Inspection: The body was very well nourished, but rigor mortis not well marked. Section: No pleuritic adhesions were found, nor fluid in the pleuræ. The lungs were pale and spotted over with areas of collapse; edema and hypostasis were fairly

marked in lower lobes. The pericardium was healthy. The heart substance was markedly pale, showing distinct evidence of cloudy swelling; the cavities of both sides contained ante- and post-mortem clots. The spleen was large (14 ounces), pale, and diffuent, the pulp washing out very readily, and leaving the trabecular frame. The liver was greatly enlarged, and showed marked cloudy swelling; the microscope shows also interstitial hepatitis, recent. The kidneys showed cloudy swelling. The pancreas was unusually firm. A small focus of suppuration was noticed on cutting through the left broad ligament; on close inspection this turned out to be a vein filled with pus and puriform clot. The peritoneum was perfectly normal in appearance. The uterus, which measured four and one-half and two inches (external measurements), was very pale in color, and softer than normal in consistency. The placental site was somewhat elevated, and exhibited a thin film of apparently fibrinous exudate on its surface. The vagina was normal. The fourchette had been torn, and a slight tear was found in the perineum. The surfaces had failed to unite, and the stitch holes were perfectly visible from side to side. No signs of healing were noticed. Careful dissection of the vagina and broad ligaments after removal showed the veins running from the neighborhood of the perineal laceration to be partly filled with puriform clot, and to present the appearance of acute phlebitis.

Microscopic examination demonstrated the presence of streptococci in great numbers in the clot. The posterior aspects of both forearms and of the left arm presented an extensive subcutaneous suppuration, the pus spreading widely beneath the skin, and but to a very slight degree along intermuscular septa. On the left side there was also subcutaneous suppuration over the back of the hand, extending to the roots of the fingers. The calf of the right leg, on incision, was found in the same condition as the arms, the suppuration being extensive, but strictly limited to the subcutaneous tissues. About twelve ounces of pus were found here. Phlebitis was found extending up into thigh.

Post-mortem examination of the child. The examination was made twenty-four hours after death. In the left leg the tissues were in a markedly edematous condition, the cut section of the tissue presenting a gelatinous appearance similar to that found in the first operation on the mother. In the right palm, at the base of the thenar eminence, there existed a collection of fluid, forming a tumor the size of a walnut; the contents resembled thin pus, being white and opaque. This fluid was subsequently examined microscopically, and was found to be an almost pure culture of a streptococcus; there were almost no pus cells. The right arm and forearm showed the same edematous condition noted above. There was nothing abnormal detected in the examination of the viscera.

Bacteriological examination. From the cultures taken at the times noted in the history from the matter, a form of streptococcus was found. This presented the characters claimed for the streptococcus pyogenes. Two guinea pigs were inoculated from a culture in bouillon, but without any perceptible effect upon the animals.

Remarks by Dr. Wright. The histories of these two cases contain many points of interest, and my intention is to refer briefly to some of those which I consider the most important.

Nature. I think that both cases are examples of that form of septicemia which long ago was called pyemia by clinicians. Pathologists are not in love with the word, but have not furnished us anything better as a substitute. As usual, streptococci were found in abundance; but whether they formed the septic matter, or carried it, or were simply "accidental concomitants," I think there is no evidence to show. In many respects it appeared like that milder form of septicemia which frequently ends in recovery. The nerve centres were not suddenly overpowered by the intensity and virulence of the poison, as is the case in the most malignant form, which kills so rapidly, and leaves us little in the way of gross lesions to be found *post mortem*. And yet the blood vessels appear to have been the principal carriers of the poison; consequently, I would suppose there was no let or hindrance to a rapid infection of the whole system. The serous and mucous membranes were remarkably free from any signs of serious infection. Why, I do not know. The force of the poison appeared to have been expended in the subcutaneous tissues; but there must have been a serious infection of certain nerve centres, which produced the extreme rapidity of respiration, which was out of proportion to the accompanying symptoms. Why this rapidity of respiration was most marked, as a general rule, during sleep, I do not know.

Origin. The origin of the septicemia was in both cases involved in considerable obscurity. I think that up to the time of birth the mother and fetus were well. There is nothing to indicate that the child was inoculated by the mother while nursing. In fact, the child showed evidence of illness before or about the same time as the mother. Two or three other children were nursed by the mother without receiving any harm. My opinion, stated briefly, is as follows:—There was a certain amount of foul discharge in the vagina, which poisoned the child as it passed through the parturition canal; this same discharge probably infected the mother through the open-mouthed veins in some vaginal rent, or, most likely, in the slight perineal rupture. The physicians and nurses had no knowledge of any such discharge, but her former methods of living would point to the possibility or probability of such a condition. There was no douching of the vagina before labor, nor for some days after.

Symptoms. In a general way, the symptoms were those of an ordinary surgical pyemia, although there were no pronounced rigors. The temperature chart is very interesting, and yet very like that which was not uncommonly seen in both hospital and private surgical practice before the days of antisepticism. The pulse was not particularly rapid, and not at all like that which is found in septic peritonitis. For many years, especially since Mr. Lawson Tait gave us certain hints on this subject, I have watched the condition of the pulse when things go "queer" after abdominal sections and childbirth, and I have never seen a case recover where it increased in rapidity steadily and continuously for four or five days—as, for instance, rising from 80 to 150 in the way described. In this case the rapidity of the pulse fluctuated considerably, and sometimes became so much reduced that I had strong hopes of the patient's recovery. The rapidity of the respirations, to which I have before referred, and which could not be accounted for by any evidence afforded either before or after death, was and still is a mystery to me.

Treatment. As soon as things went "queer," sulphate of magnesia was administered in quantities sufficient to keep the bowels well evacuated. Intra-uterine douches of 1-10,000 bichloride solution were administered, followed by douches of plain hot water, when the serious symptoms arose, but without much apparent effect. The best of nourishment was given in large quantities, as the patient fortunately had a good appetite during the greater portion of her illness. Whiskey was given in large quantities at times, and appeared to do more good than any other remedy; quinine appeared to have no good effect, and salol disturbed the digestive organs. The swellings were freely incised sometimes before any evidence of pus could be detected. With reference to the left leg, I noticed the swelling during one of my usual morning visits, and thought it would be better to make a free incision. I left instructions to have Dr. Primrose examine it when he came, and, if he concurred, to make the incision as he had done in the other swellings. He, unfortunately, did not see it for some hours afterwards, and then thought it was so much improved that surgical interference was unnecessary. On the following morning there was such an apparent improvement in the condition that I quite agreed with his opinion. At the same time, as the results showed, we were both sadly wrong.

Post-mortem appearances. Dr. Caven's statement of the *post-mortem* appearances is so clear and explicit that nothing remains for me to say except that they were, to a large extent, what one who had carefully watched the case would expect. We had supposed that the point of infection was somewhere in the perineal tear; the *post-mortem* evidences show that there could be little doubt as to the correctness of that opinion. I may say in this connection that I have thought for a long time that in the majority

of cases of puerperal fever the poison was received into the system through open-mouthed vessels existing in the tears of the perineum, or sometimes simply the fourchette.

Lessons to be learned. For many years I have been decidedly opposed to post-partum douching as a routine practice, but I have held no decided opinion as to the advisability or otherwise of such douching before labor. In the year 1892 we tried both methods in the Burnside. For six months a single antiseptic douche was given in all cases during the first stage of labor; for another six months no such douching was done. The results were uniformly good in both periods. We then adopted the rule that there should be no douching unless there appeared to be some occasion for it. I have for a long time had an idea that the mucus which was secreted by the vaginal mucous membrane served a good purpose in labor, and therefore I have supposed its removal by a hot douche might do harm rather than good. However, I have been so much impressed with this case that I have decided that, in the future, all patients who are under my charge in the Burnside shall receive one antiseptic douche, thoroughly and carefully administered, early in the first stage of labor. I have not, however, adopted such a rule in private practice.

With reference to treatment, I learned but little as to its effect in this case. Good food, including milk, eggs, and meat, and stimulants, mostly whiskey, did good. Nature appeared to be endeavoring to throw off the poison in superficial abscesses. We endeavored to help nature by freely opening and draining such abscesses. The poor girl showed wonderful vitality, and made as brave a fight against the dread enemy as I have ever seen. It has been a matter of extreme regret that we allowed ourselves to be deceived by false appearances in the swelling of the left leg. It was decidedly humiliating to learn, *post mortem*, that we had left twelve ounces of poisonous pus in a large cavity with a simple covering of skin; and yet our ignorance was certainly not the result of carelessness. In another similar case I would incise freely all such swellings, whether pus were detected or not.

EXCISION OF THE ELBOW JOINT FOR TUBERCULAR DISEASE.

BY A. PRIMROSE, M.B., C.M., EDIN.; M.R.C.S., ENG.,

Associate Professor of Anatomy, University of Toronto; Surgeon Outdoor Department, Toronto General Hospital; Surgeon to the Hospital for Sick Children.

L. M., æt. 22, came to me in February, 1891, with the following history: Seven years previously, she fell on the ice and injured her left elbow; the injury was slight, and did not attract attention until some weeks after, when she complained of soreness, with some swelling, in the joint. She consulted a doctor, who told her she had an inflamed bursa on the back of her elbow. He painted it with iodine and bandaged it, and subsequently blistered it, with the result that the swelling disappeared and the arm improved. Two years after this she injured her arm again whilst skating; it began to ache ("a dull ache"), but did not swell; she tried various methods of treatment, and found the greatest relief from the use of camphorated oil. She fell downstairs in January, 1891, and hit her elbow; subsequently the elbow got worse, and swelling recurred. She came to me in February, 1891, and I then found a swelling over the olecranon process; this I lanced and drew off some fluid, and subsequently injected carbolic acid, and applied a firm bandage. This swelling disappeared entirely, and did not return. At that time there was slight limitation of movement at the elbow joint.

A year elapsed before I saw her again, when she informed me that about three months previous to her visit the stiffness became much more marked, and the arm had been gradually getting worse; the pain, stiffness, and swelling increasing.

On March 20th, 1892, the following note was made:

Swelling about the joint, marked posteriorly at either side of the olecranon, with distinct thickening over the head of the radius. On palpating the swelling between the olecranon and the condyles, and at a point immediately above the olecranon, a curious crepitant sensation was obtained. The affected joint, too, feels hotter than that of the sound side. The maximum amount of extension is to an angle of 100° ; of flexion,

80°; so that the amount of actual movement is through an angle of 20°. There seems to be absolute fixation, as far as pronation and supination are concerned.

By actual measurement one finds a considerable degree of wasting; this would probably be more evident if the patient were not left-handed. She has pain in the joint at times, particularly in damp weather, but never very acute. She complains of tenderness on pressure over the head of the radius.

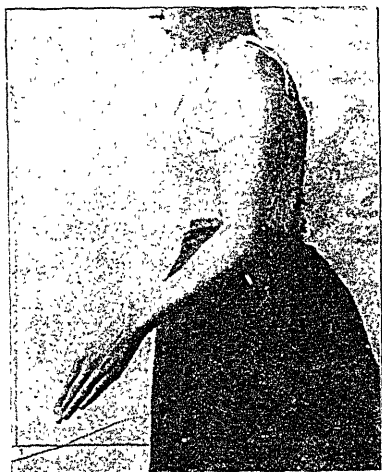
Such was the condition of the patient when she presented herself to me. As to her family history, she tells me that her mother died of consumption; she herself informed me that she had "weak lungs," but on examination of her chest I found nothing abnormal.



The disease was evidently very limited in character, and I determined to try the effect of rest, plus the application of compound mercurial ointment under strapping (Scott's dressing). This was done, and the patient was given cod liver oil and syrup of the iodide of iron. I watched her carefully for a month, but could not detect any improvement. I told her that I was willing to continue the treatment by rest for a prolonged period, possibly a year or more, but suggested that she might make more rapid progress by operative procedure. She was anxious for the latter course of treatment, and accordingly an operation was performed on May 2nd, 1892. Dr. Cameron kindly assisted me.

It is not necessary to describe the details of the operation. Suffice it to say that I performed the operation of excision of the elbow joint through a posterior median incision. On opening the joint the tissues

within were soft and gelatinous in character, and of a dirty gray color. On removal of the articular ends of the bones, the surfaces of the sections were examined, and all appeared healthy, excepting a carious depression extending one-half to three-quarters of an inch upwards in the outer portion of the humeral shaft. This was thoroughly scraped with a sharp spoon. The only portion of the articular surfaces of the bones which appeared diseased was the articular cartilage over the capitellum, which was eroded. There was a considerable amount of gelatinous material about the joint, which was freely removed by means of a sharp spoon and scissors. The joint was now apparently free of diseased tissue; it was douched with 1-1000 perchloride of mercury solution, and sutures were inserted. Two medium-sized drainage tubes were placed in the centre of the wound, and a dressing of iodoform gauze and salicylic wool was applied.



The forearm was placed in a position midway between pronation and supination, and the elbow flexed at an angle of 135° . The wool was lavishly applied over the entire limb, and this, secured by a firm bandage, formed an excellent splint.

Subsequent course. The temperature remained normal throughout. Two days after the operation the dressing was changed, as discharge had come through and appeared on the surface of the dressing. The wound looked well.

May 7th (five days after operation). Dressed. One tube was removed and the other shortened. The dressing was repeated two days subsequently, and the stitches removed. The drainage tube was not removed until the twelfth day after the operation, as a slight discharge continued.

It was now discontinued, however, and the wound was soon soundly healed.

On May 21st (nineteen days after the operation) passive movement was begun. Flexion was performed, *without pain*, through an angle of 45°. Pronation and supination were also performed fairly satisfactorily.

The patient gradually gained voluntary control over the joint, and two months after the operation she could voluntarily flex the forearm, whilst the amount of movement possible was almost normal. The muscles gradually regained their power, until ultimately she had an extremely useful joint; and I now present the patient (a year and eight months after the operation) for your inspection. The amount of flexion and extension is almost perfect, and pronation and supination are also well performed. The power of pronation is indicated by the fact that she is able to play the piano.

Remarks. The result of the operation of excision of the elbow joint in this case leaves little to be desired. The cuts shown in the preceding pages are from photographs, and they indicate the extent of movement now possible. The patient has a good useful limb, and there is no indication of any return of the disease. Many forms of splint have been devised for use in the after treatment of such excision cases; but, in my opinion, nothing answers so well as the simple application of absorbent wool in large quantities, over which a bandage is firmly applied from the finger tips to the axilla.

ACUTE MANIA FOLLOWING THE OPERATION OF TRACHELORRHAPHY.

BY K. N. FENWICK, M.A., M.D.,
Professor of Gynecology, Queen's University,
KINGSTON, ONT.

THE occurrence of these cases of acute mania following the operation of trachelorrhaphy leads one to inquire what can be the connection between the operation and the mental state.

CASE 1. Mrs. I. G., *æt.* 30, consulted me about July, 1891, for hemorrhagia, pelvic pains, and backache. I found a double laceration of the cervix, and did a trachelorrhaphy the following week.

All went well for about ten days, when she became melancholy, and at times maniacal. This lasted for a couple of weeks, and gradually subsided.

On enquiry of her physician a few days ago, he says she is doing nicely, is quite herself now, and has no signs of mental aberration, although troubled at times with insomnia.

CASE 2. Miss K. C., *æt.* 24, consulted me for lacerated cervix. She had been confined four years before of an illegitimate child, and for a year back has been at times insane.

I did a trachelorrhaphy for a double laceration, and for a week afterwards she did well, and her mind seemed to be greatly improved. After this the mental symptoms became so marked, and the patient so troublesome, that she was removed to Rockwood Asylum.

As the patient became stronger the mental excitement passed away, and she was discharged in November, 1891.

Her physician wrote me a few weeks ago that she has been married for about a year, and expects to be confined in two months; and that apparently she is quite well, and has enjoyed good health ever since she left the asylum.

CASE 3. Mrs. W. M., *æt.* 35, had suffered from hemorrhagia, and had a disagreeable yellowish discharge, was weak and anemic, and confined to bed for some weeks. I found the cervix badly torn, and a condition

of hyperplasia and cystic degeneration of the os. Indeed, the appearance was so like cancer that I resolved to do a trachelorrhaphy, and remove all the diseased tissue, explaining to her husband my doubts as to the result, for I feared cancerous degeneration had already taken place. The operation was performed on the 17th of May, 1893, and all went well until the sixth day, when she seemed to talk rather queer, and in a few days developed well-marked maniacal symptoms. The temperature in this case rose to 102° a few days after the operation, but soon subsided.

She became so troublesome that we had to strap her in bed, and for a week she had to be fed by means of a catheter passed through her nose into the oesophagus. The symptoms gradually abated until she was able, in four weeks, to leave the hospital, and to-day (August 14) she is perfectly well and able to do her housework. The cervix healed perfectly, and the uterine function is normal.

I believe Dr. T. G. Thomas was one of the first American gynecologists to report cases of mania occurring after gynecological operations. Dr. Kiernan, in his article on "Mental Symptoms after Surgical Operations," says the cases most frequently reported of late occur in connection with operative gynecology.

Barwell, Leith, Thornton, Dent, Lawson Tait, and Denham relate cases after oophorectomy and hysterectomy. Dr. Harrison relates a case in which he had removed a round-celled sarcoma from the vaginal wall and neck of the uterus by Simons' scoop, and applied the cautery. The patient's health had been much depreciated by profuse and offensive discharge and repeated hemorrhages. She recovered rapidly, but unexpectedly became insane, and was sent to Bloomingdale Asylum.

Dr. Baldy read a paper before the American Gynecological Society on "Insanity Following Laparotomy." From eighteen institutions he received reports of fifteen cases, and one of his own for rectocele, and another having chronic confessional insanity after oophorectomy.

With reference to my own cases, there was certainly a previous insane taint in the second one; but in the last case, while there had been family anxiety and worry, there had been no mental trouble in the patient before, nor any family taint. I did think there might be some sepsis in this case, although the temperature was hardly of that character.

The very fact that acute mania more frequently follows gynecological operations than other surgical procedures might point to the close proximity of the sympathetic nervous system, and might suggest, perhaps, that dilatation of the abdominal blood vessels from reflex inhibition of the splanchnics may be a direct result.

The subject, I think, is worthy of attention, and leads us to recognize, with Woundsby, "how entirely the integrity of the mental functions depends

upon the bodily organization, and as physicians we cannot afford to lose sight of the physical aspects of mental states, if we would truly comprehend the nature of mental disease. We recognize the existence of an intelligent mental force linked in harmonious association and essential relations with other forces, but leading and constraining them, and led and constrained by them, in its manifestations."

INTESTINAL TUBERCULOSIS.*

BY DR. W. M. BARNHART,

EAST TORONTO.

WILLIAM I., æt. 17, born in Canada; occupation, machinist's apprentice; had the ordinary diseases of childhood, with no bad results. Present illness commenced January, 1892, with influenza, followed in a month by a second attack, which terminated in chronic bronchitis, lasting about three months. By this he was considerably reduced in flesh, having failed about twenty pounds. About the middle of August he had an attack of lobar pneumonia, affecting the lower lobe of the left lung, from which he made a very fair recovery, gaining a little in weight. In December he came again under my care, much emaciated, with hectic fever and a troublesome diarrhea, three or four liquid motions each day. Early in January, 1893, severe abdominal pain developed, which with the diarrhea continued very troublesome till about the first of March, when they gradually ceased, there being scarcely any pain or tenderness, and the bowels becoming quite regular every one or two days. Temperature was irregular, ranging from 99° to 103° F. There was no expectoration and very little cough, until the last three or four weeks of his illness, when a cavity of considerable size was scooped out of the upper lobe of the left lung. Emaciation was extreme, bedsores a little troublesome, cyanosis very marked. Death by exhaustion and respiratory failure occurred on April 10th.

Autopsy eighteen hours after death. Body very much emaciated; rigor mortis had almost disappeared; *post-mortem* staining in dependent parts.

Pericardium, smooth and normal in appearance, contained about four ounces of clear fluid; heart, normal.

Both pleuræ were adherent; left very firmly. Lungs studded with yellow tubercles in all parts; a cavity in upper lobe of left lung.

Spleen, normal in size; lower half adherent to abdominal wall.

Liver a little enlarged, otherwise normal; stomach, normal.

* A paper read before the Pathological Society of Toronto.

Intestine not distended, no adhesions. Ilium contained isolated ulcers, and miliary tubercles were very numerous in mucous membrane at lower part.

Cecum and vermiform appendix very much ulcerated, the latter distended almost cystic. The upper half of colon was ulcerated; the lower half was not examined, but appeared normal from its peritoneal surface. The mesentric glands were enlarged and congested; some of them showed signs of commencing suppuration. The glands in the meso-colon were also much enlarged. Other organs were not examined.

In the lowest part of the ilium, where tubercular ulceration is most common, the process can be seen in its various stages: (*a*) A mere inflammatory nodulè, or tubercle, occupying the submucous and mucous coats; (*b*) caseation of centre of nodule; (*c*) softening of caseous matter; (*d*) perforation of mucous membrane covering the softened spot, forming the typical tubercular ulcer situated near the mesenteric attachment of the intestine, elliptical in form, with indurated margin and a rosy-hued base, consisting of the muscular coat more or less infiltrated.

The location of the ulcer can be readily recognized from the peritoneal surface by the serous coat being thickened, rough, and opaque from infiltration.

The ulceration of the cecum, appendix, and first half of the colon is extreme, fully half of the mucous membrane having been destroyed, laying bare the infiltrated muscular coat.

The chief feature I have aimed at demonstrating with the microscope is the presence of bacilli tuberculi in great numbers in the infiltrated margin of the ulcer.

Selected Articles.

ON THE NEUROSIS FOLLOWING ENTERIC FEVER KNOWN AS "THE TYPHOID SPINE."

BY WILLIAM OSLER, M.D.,

Professor of Medicine, Johns Hopkins University,
BALTIMORE, MD.

IN 1889 Dr. Gibney, of New York, described at the American Orthopedic Association a sequela of enteric fever which he called "the typhoid spine," and which he regarded as a perispondylitis—"meaning an acute inflammation of the periosteum and the fibrous structures which hold the spinal column together." He stated that his reason for the use of the word was "the production of acute pain on the slightest movement, whether lateral or forward, and the absence of any marked febrile disturbance or neuralgia." He described four cases.

In the first, a lad of fifteen years, toward the end of convalescence, complained of severe pain in the back, particularly in the lumbar region, and especially after any movement. There was no disease of the bone; no pain in the distribution of the sciatic or anterior crural nerve. He was seen in the autumn of 1882 with Dr. Beverley Robinson. A spinal brace afforded relief, and in the course of two or three weeks he was practically well, but the brace was worn for more than a year.

The second case, a young man of twenty-four years, had an attack of typhoid fever, which ran a normal course. After convalescence was well established he complained of pain in the back, but he was able to be up and about, and played tennis. After a fall at tennis the pain became very severe, and he suffered so excruciatingly that he could only rest in a recumbent posture. Deep pressure over the iliac region on the left side and lateral or antero-posterior motion of the spine caused excessive pain. He had some fever. The symptoms persisted from the latter part of November until the beginning of January, but it was not until March that he was able to get about.

The third case, a lad of eighteen years, had typhoid fever in November, was convalescent by December 27th, and went to New York. On January 10th he fell while skating, and struck his left hip. A week after this he had pain in the region of the lumbar spine. The stiffness became more marked and the pains increased in severity. On the 10th of February he went to bed and was seen by a surgeon in Albany, who regarded the case as one of psoas abscess. There was no fever, no evidence of disease of the spine, but the patient could not move without exquisite pain. He did not recover until May.

The fourth case seems to me to belong to an entirely different category, as it was an instance in which during typhoid fever a boy had kept both limbs flexed on the abdomen, and in convalescence was unable to straighten them—an event met with in many protracted illnesses in which the patient lies curled up in bed with the legs flexed.

In 1890, in a discussion at the Association of American Physicians following the reading of a paper "On Some Points in the Natural History of Enteric Fever," by Dr. James E. Reeves,¹ Dr. Loomis, sr., referred to Dr. Gibney's observations and to one of the cases he had asked Dr. Gibney to see. Dr. Loomis knew of no reference in literature to a similar condition. Dr. Jacobi at the same meeting, besides protesting against the introduction of a new name, such as "typhoid spine," suggested that, in the absence of temperature, it might be one of two things, either a neurosis or a spondylitis, remarking that mild forms of spondylitis are not so uncommon as they are believed to be.

In the *American Text-book of Medicine* (page 90) Dr. Pepper remarks in the article on typhoid fever that he has observed in a series of cases "obstinate periostitis of the sternum, or of the crests of the ilia, or in two instances, judging from the location of the pain, and from the effect of movement of the trunk, of the front of the spinal column." Eskridge has also described a case.

I have not been able to find any other references in text-books or monographs on typhoid fever, either in English, French, or German. My attention had not been called to the condition until recently, unless, perhaps, a case which I saw several years ago with Dr. Grasset in Toronto was an illustration—a young officer, invalided from India after a prolonged fever, who had for many months attacks of the most severe pain in the back on the slightest movement, which incapacitated him completely; though when seen by me he looked strong and robust, and had a good appetite. He subsequently got quite well.

The two following cases are, I think, illustrative of the condition which Dr. Gibney has described:

¹ Transactions of the Association of American Physicians, vol. v., 1890.

CASE I. O.T., aged twenty-five years (hospital, No. 8201), admitted, complaining of pains in the back, hips, and stomach. The family history is good. His father and mother are living and well. One brother died of typhoid fever.

Patient was strong and well until July, 1892, when he had a very severe attack of typhoid fever, with relapse. He was in bed for nearly three months; very slow convalescence. He remained well for three weeks; then the present illness began with pains in the back and hips, usually of a shooting character, and paroxysms of pain in the abdomen, of which he would sometimes have several in the day. He had to take again to his bed, and was there for seven weeks, having much pain in the lower part of the back, and down the front of the legs. He never, apparently, from his account, had any paralysis. About June of this year he was well enough to get out and do light work about the farm. In the latter part of June he had another attack of severe pain in the back and abdomen. He had not to go to bed. There was much aching pain and shooting in the right leg from the hip down to the knee. In the latter part of July and August he had severe attacks of diarrhea. Since August he has been up and about, but not working, and has been able to go out shooting. At present he has slight pains at times in the back and in the legs, and yesterday there was an aching pain from the left knee to the ankle. The appetite is good. He never vomits, though he often has eructations. Bowels are costive. He sometimes has dyspnea on exertion.

Present condition. Healthy-looking, well-nourished man, with fairly well developed muscles. He gives one the impression of a neurasthenic patient. Lips and mucous membrane of good color; tongue clean and moist; pupils equal; pulse, seventy to eighty; no increase in tension. Practically, the examination of the thoracic and abdominal organs was negative. The abdomen was soft and nowhere tender. The chief complaint is of weakness in the back, and it hurts him to turn in bed. He describes the pain which he had last year as beginning in the small of the back, passing round the hip bone, and then up the back. Judging from the scarring of counter-irritation, the chief trouble was thought to be in the lower part of the spine. There is still a little tenderness on pressure just above the left sacro-iliac crest. Patient gets out of bed readily and stands well; walks with a natural gait; does not sway with the eyes shut. After prolonged standing or walking he complains of great increase of pain in the back. The knee-jerks are present, a little exaggerated; there is no ankle-clonus. The most careful examination of the spine fails to reveal any signs of organic disease. The urine is normal.

The patient remained in the hospital a little more than a week, took large doses of nux vomica, and was encouraged to believe that he had no

serious organic disease. Subsequent examinations gave no additional information, but the patient evidently was highly neurasthenic.

CASE 2. A. A., aged twenty-one years, architect's assistant. Seen with Dr. King, May 10, 1893. Patient has always been a healthy man, and has never had any very serious illness. He is not of a robust constitution, and, though bright, not of a very strong mental fibre. There are no special nervous troubles in the family.

In November and December last patient had typhoid fever, an attack of moderate severity. On New Year's Day he sat up for the first time, and convalescence was gradually established. There were no sequelæ, no complications, and early in February he went to his work. He gained in weight, and looked very well. He remained at work about three weeks, complaining only at times of pain in the back, and of being very tired after sitting for a long time. One day he was very much jarred in the back by a sudden jerking of the cable car in which he was riding. Early in March, after complaining very much of his back and of the pain on moving, and of tired feelings, he took to his bed, where he has remained ever since. Dr. King tells me that the chief symptom has been pain on movement. His general health has been excellent. The appetite has been good, he has gained in weight, and he has slept well. He has been nervous, and at times almost hysterical. When quiet and at rest, and not attempting any movement, he does not complain of pain; but on turning, or on attempting to get out of bed, or even the thought of moving the legs, is enough to cause him to cry out. The pains have been in the lower part of the back, extending sometimes up the spine and down the back and sides, more rarely the front of the leg as far as the knee. He has no fever, no chills, but has sweated a good deal. He has had no swelling of the joints.

Present condition. Patient is a well-grown young man, well nourished; musculature of moderate development. The palms of the hands are moist and sweating, and he was somewhat excited, and at our entrance flushed over the cheeks and neck, and upper part of the chest. Face does not indicate any special strength of character, rather the reverse. Pupils of medium size, equal, active; tongue, clean. Patient was in the dorsal decubitus, his usual attitude. On pulling down the bedclothes he implored us not to touch him, as he was sure it would hurt him very much. The abdomen was full and natural-looking. On palpation, he complained of a good deal of pain in the left iliac region; but on withdrawing his attention, and pressing forcibly with the left hand in the region of the heart, and asking whether he had pain there, the right hand at the same time could be pressed deeply into the iliac fossa without causing any disturbance. The deepest pressure in the lumbar and iliac

regions failed to reveal any glandular enlargement or thickening. The inguinal glands were enlarged; no special sensitiveness along the anterior crural nerves. On asking him to lift the leg he said it was impossible, as it hurt him so much; but in a few moments, placing the hand beneath it, he lifted it apparently without pain. When lifted in a semi-flexed position, he said it was impossible for him to straighten it; but in a few moments it could be readily straightened, and he straightened it easily on the bed. There was no special wasting of the legs. He could move all the muscles freely, and was able to get up and stand on his legs if he took time. The sensation was perfect; the knee-jerks present, perhaps a little exaggerated; no ankle-clonus. The feet and ankles were perspiring freely. No swelling of the articulations, and no pain on pressure of the muscles or in the popliteal spaces.

On asking him to turn over on his left side he demurred very much, but gradually, and apparently with a great deal of difficulty, he got himself over. The legs could then be moved easily and freely; no pain about the hip-joints, and the legs could be flexed and extended readily. The spine was straight; the lower dorsal vertebræ a little prominent. No tenderness at any point along the spinal column. On both sides in the lower lumbar and sacral regions he was sensitive at a distance of an inch and a half or two inches from the middle line, and particularly toward the sacro-iliac synchondroses and along the posterior third of the crests of the ilia. He stated that these were really the points of greatest pain. On any attempt at twisting, the spinal column was very sensitive, and we could not induce him to sit up. In the attempts to make this movement he seemed to suffer a great deal of pain, and began to cry.

There were no sensory changes, no hemianesthesia, no hemianopsia. The patient said that his chief trouble was more the dread of moving, lest it should cause pain, than any pain itself. Four days ago he sat up for a couple of hours—got out of bed himself and sat on the chair—but felt very tired, and the back was painful. Practically, the examination in this case revealed neither Pott's disease nor neuritis.

He was ordered massage and electricity and the Paquelin cautery to the back, given strychnine internally, and urged to sit up a definite time each day.

June 10th. A few days after I saw him he was able to sit up, and improved rapidly. Went out on the 30th of May, and has been doing remarkably well ever since. Called to-day; looks in very good condition. No pain in the back; feels a little stiff; knee-jerks are normal; condition good.

CASES 2 and 3 in Dr. Gibney's paper are very much like the ones here mentioned, particularly in the fact that the symptoms developed after

convalescence, and in both instances there was a slight trauma—in one a fall while playing tennis, and in another a slight fall on the left hip while skating. In the case reported here the patient also lays a great deal of stress on the jar which he received by the sudden jerking of the cable car. In both the prominent symptom was pain on movement, and there was an absence of all signs of organic disease.

An explanation of the symptoms in these cases is by no means easy. As already mentioned, Dr. Gibney regards the lesion as a perispondylitis, an acute inflammation of the periosteum and fibrous structures holding the spinal column together; and with this view, judging from the quotation made, Dr. Pepper seems to agree.

Joint and periosteal troubles are by no means rare sequences of typhoid fever, but the symptoms do not usually develop (as in three or four of the cases here described) at so long a time after convalescence has been well established. The periostitis, seen oftenest about the sternum and the ribs, proceeds, as a rule, but not necessarily, to suppuration. I have on several instances seen a periosteal swelling disappear without suppuration. We do not have, so far as I know, protracted periosteal thickening, lasting for weeks or months, without suppuration; and it is difficult to conceive of the attacks of pain, such as are described in the second and third cases of Dr. Gibney's and in the second case which I here report, lasting for months, due to a simple perispondylitis, which in none of the cases passed on to suppuration. The general impression given by the patients whom I saw was that they were neurasthenic, and while, of course, it would be very illogical to assume that all of the instances are due to the same cause, yet I cannot help feeling that many of them are examples simply of a painful neurosis, an exaggerated condition of what was formerly known as "spinal irritation," and analogous to the condition of "hysterical spine" and "railway spine," in which the patients suffer on the slightest movement of the back or of the legs. In the second case reported the whole behavior during the examination was that of an hysterical patient; thus, he could not think of lifting a leg—even the idea was enough to give him agonizing pain—and yet in a few minutes he lifted it himself as he got out of bed. So also the slightest pressure in the lumbar or iliac regions would cause him to scream out; but while his attention was diverted pressure could be made with the greatest facility. The rapid recovery in a few days, with disappearance of all the symptoms, is quite inconsistent with any chronic perispondylitis.

I have recently seen a case presenting somewhat different features, but which I think may also be reasonably classed as a post-typhoid neurosis:

CASE 3. A.B., aged about thirty years, of New York city, consulted me October 2nd, 1893, stating that he had had trouble with his spinal cord. Family history was good; parents living; one sister, however, was insane.

He was nervous as a boy; used to tremble very much when excited, and had what he speaks of as nervous fits. He had gonorrhoea three or four times; never had lues; acknowledges excesses *in venere*. Takes alcohol, but is not a hard drinker.

September 23rd, 1891, he had an attack of typhoid fever of unusual severity, prolonged delirium, extensive bedsores, and very great prostration. Convalescence was not established until January 10th, 1892. During and after convalescence he was very nervous, and had had uneasy pains in the legs; his feet were tender, and he tired very easily. He had no pains in the back, no soreness; but the tenderness in the feet and nervous feelings persisted for six or eight months after convalescence, and he does not think that they have ever entirely disappeared. He attended, however, to his business, gained in weight, and felt pretty well, though never entirely free from uneasy sensations in the feet and legs. In the spring of this year these symptoms increased, particularly after some sprees. He had neuralgic pains in the legs and felt weak and unstrung, and evidently got into a very nervous condition. He had a dread of walking, and could scarcely force himself to go as far as the corner of the street. He slept badly, and got into a state of extreme neurasthenia. There were twitchings of the muscles, the feet and hands felt numb, and he complained that when his shoes and stockings were off there was a smooth feeling, as if something was between the feet and the floor. At this time a doctor in New York suggested that there was some oncoming spinal trouble, and stated that in testing the sensation down the spine with hot and cold water he could not distinguish between them. He ordered him electricity and massage and general tonics, and for the past seven or eight weeks he has not been at work and has improved a good deal.

Present condition. Tall, able-bodied man; looks a little pale; gait is normal, not spastic; station good; no Romberg symptom; no atrophy of muscles; legs scarcely in proportion, however, to rest of the muscular development. The spine is straight; nowhere painful on pressure; no special prominence of any vertebra. Sensation is everywhere good; no retardation; distinguishes easily between heat and cold. He thinks that about the feet and ankles the sensation is a little blurred and unnatural. He feels, however, a sharp point, and distinguishes readily different objects, and the thermic and painful sensations are unaffected. He has no abnormal sensations about the back and abdomen, and has not any sense of constriction

or girdle pains. There is no vasomotor disturbance. He sweats, however, easily and the hands are clammy, and he has had at times, he states, marked blueness and congestion of the feet, and they are often cold in the morning.

The reflexes are increased, knee-jerks active, particularly on the left side, and a slight ankle-clonus can be obtained. The skin reflexes are normal. There is no disturbance of the special senses. The pupils are a little large, equal, and react to light. The optic disks are normal; there is no restriction of the visual fields.

The examination of the thoracic and abdominal organs is negative.

Here, after a protracted and severe attack of typhoid fever, with delirium and severe nervous symptoms and tardy convalescence, the patient had disturbed sensations in the feet and legs, aggravated shortly after, but diminishing somewhat within five or six months, never entirely disappearing, and recurring with some intensity during the period characterized by pronounced neurotic manifestations. Unlike the cases before described, there were no pains in the back and abdomen, only a sensation of weakness. The symptoms suggest (1) central (spinal) lesion; (2) neuritis; or (3) a neurosis. From his statements, it was evident that the doctor in attendance feared a central affection; but the patient's condition two years from the date of the fever would speak very strongly against any such view; nor does the case conform in its clinical history to a neuritis. The man insists that the feelings he has now in his feet were also present during the convalescence, and some months subsequently. There did not appear to have been any very special muscular weakness, such as sometimes develops after an attack of typhoid fever without any evidence of peripheral neuritis. In the paper by Dr. George Ross, "On Paralysis after Typhoid Fever,"* he refers to those cases in the following words: "It is not unusual after typhoid fever of considerable severity to find a definitely enfeebled condition of the lower extremities persisting for some time, and sometimes a person never entirely recovers his capacity for walking long distances. Such paretic cases have never been specially studied, but it is probable they would if any should fall under the head of defective innervation from prolonged exhaustion of the nervous centres." On the other hand, in the case under discussion the history and the general appearance of the patient suggest a neurosis following typhoid fever. The paresthesiæ such as described are not uncommon symptoms of neurasthenia, in which, also, exaggerated reflexes are not at all infrequent.

It is not unlikely that under the designation of "typhoid spine" Dr. Gibney has described several distinct affections, and I would not be under-

* Transactions of the Association of American Physicians, vol. iii., 1888.

stood as holding that there may not be a perispondylitis. Nor are all of the painful backs following typhoid fever neurotic. Thus, a patient recently under my care (hospital, No. 8049) was admitted in an attack of moderate severity about the end of the third week, the temperature falling to normal by the twenty-sixth day; then, after a period of apyrexia of seven or eight days, he had a well-marked relapse of about two weeks' duration. During convalescence he began to complain of severe pain in the back of the neck, and at the attachment of the muscles of the occipital bone. There was no actual tenderness in the vertebræ, and movements to and fro and laterally were not associated with any very great pain. An application of the Paquelin cautery relieved it for a few days, and then it recurred. The examination from the pharynx was negative. The condition persisted for at least two weeks, and, while at first confined to the neck, subsequently he had soreness and stiffness of the back; he walked stiffly, and held himself very erect. He says that it is better when moving about than when lying down. No special tenderness in the spine; no sharp pains; no increase in the reflexes; no indication of neuritis. He gradually improved, and when discharged he was very much better, having gained 11 1/2 pounds in weight.—*The American Journal of the Medical Sciences.*

HEMORRHAGES OF PREGNANCY: THEIR MANAGEMENT.¹

BY JOHN O. POLAK, M.D., BROOKLYN,

Instructor in Clinical Obstetrics in the New York Post-Graduate Medical School and Hospital, and
the Long Island College Hospital.

THE time allotted for this paper is so limited that I will only speak of the more important hemorrhages: bleeding as a symptom of miscarriage, placenta previa, and accidental hemorrhage from the partial separation of a normally placed placenta, occurring ante-partum; while of those post-partum I will consider hemorrhages from uterine atonicity, from lacerations in the cervix, vagina, and vulva, and, finally, secondary uterine hemorrhage, leaving rupture of the uterus and ectopic gestation to the consideration of others of a wider experience.

Hemorrhage as a sign of miscarriage, when very slight, may be controlled by rest in bed, the hips elevated, with the initial use of morphia per rectum, followed by \bar{z} j. doses of the fluid extract of viburnum, or gr. iv. pill of the solid extract. Though I admit the value of opium and the bromides in these cases, and their almost universal use, I must urge the efficacy of viburnum as a uterine sedative.

If time would permit, I should be pleased to report in detail the histories of thirty-two cases of threatened abortion treated by rest, initial suppository of opium, and fluid extract of viburnum prunifolli, no case resulting in miscarriage. The more severe cases with abortion inevitable, cervical softening, dilatation, and the ovum separated, perhaps protruding, everything being aseptic, the cervical and vaginal tampon is to be advocated.

Method. After emptying bladder and rectum, patient in Sims' position, douche with an antiseptic solution, then through a Sims' speculum, with anterior lip of the cervix fixed, carry strips of iodoform-gauze into the cervical canal through the internal os, making a firm intra-cervical plug; then pack anteriorly, posteriorly, laterally, and, finally, against the cervix, filling the whole vagina with gauze.

¹ Read before the Section on Obstetrics of the Pan-American Medical Congress, Washington, D.C., September 5th, 1893.

The importance of the intra-cervical plug is threefold :

(1) It stimulates uterine contractions by its presence.

(2) Thus hastens dilatation.

(3) Completes the separation of the ovum by causing the blood to accumulate between the womb and fetal membranes.

When the hemorrhage is profuse, sepsis imminent, or the patient suffering from acute anemia, thorough evacuation with the aseptic finger or curette is the procedure. If the uterus be septic, irrigate the cavity with one-third strength solution of peroxide of hydrogen, and subsequently pack with iodoform-gauze, after leaving from thirty to sixty grains of iodoform within the cavity.

There is no difference of opinion as to the necessity of controlling the bleeding in cases of inevitable abortion, and it is generally agreed that the tampon is the method, *par excellence*, leaving it in position from six to twelve hours. Its removal will be followed by the ovum or fetus in the majority of cases, and the immediate symptoms will subside, yet the uterus may not be completely emptied, especially in the early months; portions of the secundines will certainly be retained, later the placenta. In these cases shall we pursue the expectant plan, waiting for subsequent hemorrhage or ptomaine absorption before interfering, or advise radical interference? Notwithstanding the views of such men as Tarnier and Parvin, I believe better results will be gained, and many deaths from sepsis be averted, by the curette, irrigation, and drainage, with iodoform-gauze; if possible, it is safer to use the aseptic finger than either the sharp or dull curette. Ergot should not be given until the womb has been relieved of its contents.

I want to add to the record of Diirhssen, who reports one hundred and fifty cases with no deaths attributable to the treatment, twenty-seven cases during the last two years, with no deaths and perfect recovery; the patients subsequently having neither suffered from hemorrhage nor endometritis, which are such frequent sequels to improperly managed miscarriages.

Placenta previa. Clinically, a placenta is previa when it has an attachment in the lower zone, and the cervix, from which it is detached during canalization, or as Rigby describes it in his essay more than one hundred years ago: "A previa is fixed to that part of the womb which always dilates as labor advances." The hemorrhage is primarily from the ruptured uterine sinuses exposed as the placenta is separated; and secondarily from the placenta itself.

Clinically, we may classify the varieties as total, lateral, and marginal.

The treatment is best considered under three heads :

First, before viability; second, after viability; and, third, the management of labor.

Before viability. Diagnosis made with the fetus dead, total previa,

or copious hemorrhage, empty the uterus; none of these conditions being present, wait.

After viability. Act with the occurrence of the first hemorrhage, for not only is it proven by statistics and clinical observation that the mortality in these cases is greatly reduced by induction of premature labor, but it is not right to leave the patient to the chances of a fatal result from hemorrhage, nor allow her strength to become exhausted by repeated or continued bleedings—not to speak of the nervous strain she sustains. Murphy and Barnes advocate separation of the placenta within reach by insinuating the finger through the os between placenta and uterine wall, and sweeping it about, thus detaching the placenta from the walls of the womb, as high up as the finger can reach; then put in a Barnes' bag and wait; the bleeding will not continue with dilatation if the placenta has been sufficiently separated at first. Proceed in this manner until the os is fully dilated; then decide which is the preferable course to pursue: forceps, version, or to leave it to nature. Murphy "gives ergot freely to start up pains." This I do not believe to be safe practice.

If the cervix be closed, douche, then tampon with iodoform-gauze, taking special care to introduce strips in through the cervical canal. Remove after four or five hours, keeping the patient under close observation, and the cervix in most cases will admit one or two fingers. There is now ample dilatation to perform version by the Braxton-Hicks method; bring down a foot, which acts as a most efficient tampon, and by drawing it through the os perfect control of the hemorrhage may be had. Then leave to nature as far as possible. Let me urge in this connection separating in all cases, when possible, the two operations of version and extraction.

The advantages of podalic version by the Braxton-Hicks method—first, it is possible to turn when the os will only admit one finger; second, by early rupture of the membranes further separation of placenta is prevented; and, third, the breech acts as an aseptic natural tampon controlling hemorrhages.

In my last two cases, considering the fetal mortality, and the mothers desiring to bear living children, hemorrhage occurring at the end of eighth month I resorted to bi-polar version, Dierhssen's incisions in the cervix extraction, manual delivery of placenta, and the intra-uterine tamponade, with good success. It must be borne in mind when the incisions are used that the portia-vaginalis must be effaced, and we should be prepared to repair the cervix at once to control hemorrhage, if necessary. When labor occurs spontaneously, tampon to control hemorrhage and promote dilatation, turn and extract; forceps may be used if the head is engaged.

Digital dilatation, podalic version and extraction, have proved success-

ful in the hands of many. The incisions are quicker if the cervix be effaced. In total previa, as recommended by Wigand, Zweifel suggests, to avoid perforating the placenta, that the fingers be carried over the edge anteriorly, thus reducing fetal mortality, though less hemorrhage is caused by perforation. In head presentations, previa lateral or marginal, pains good, strong, and regular, there being no disproportion between the head and pelvis, rupture the membranes, apply a binder and wait; deliver by nature or forceps.

Accidental hemorrhage from partial separation of a normally placed placenta.

Varieties: concealed and apparent.

Management. If the os uteri be sufficiently dilated to admit of delivery either with forceps or podalic version, one or the other is to be employed. If undilated, digital dilatation, the Barnes' bag, or, if the portio-vaginalis be effaced, the bloody method must be employed; then rupture the membranes, and deliver by either forceps or version. Remove the placenta immediately, and tampon the uterus with iodoform-gauze to prevent further hemorrhage. To combat the acute anemia in these cases lower the head; give stimulants hypodermically, and a saline infusion between the scapulæ. Craniotomy may be resorted to if the fetus be dead or non-viable. I wish to condemn ergot in these cases before delivery, as giving rise to a spasmodic condition of the uterus, and constriction of the lower segment.

Post-partum hemorrhage from uterine atonicity. There have been innumerable suggestions as to the management of this accident, yet I will simply outline the methods which have been of most service to me, mentioning them in their order of application:

(1) Proper management of the third stage, waiting a full half hour before delivering if there be no hemorrhage; grasp the fundus, and keep up continuous friction until retraction is firm. If bleeding occurs express the placenta at once, or remove it manually. After expressing the placenta, squeeze out the clots and press the fundus well into the iliac fossa. A full bladder after labor has caused hemorrhage from atonicity in my experience.

(2) Ergot hypodermatically deep into the tissues. Preferably, the posterior aspect of the thigh.

(3) Hot douche with the hand in the uterus, the fingers raking down the walls.

(4) The intra-uterine tamponade, which acts as an irritant, stimulating contraction, and by so doing plugs the open sinuses.

Cervical hemorrhage from laceration may be controlled by the aseptic suture, or the uterine and vaginal tampon, taking care to plug the lacerations.

Suture-ligatures will control tears in the vagina and perineum. Combat the acute anemia consequent upon flooding by lowering the head, stimulants, as ether, whiskey, ammonia, etc., hypodermically, auto-transfusion and subcutaneous injections into the loose cellular tissues, and rectal enemata of .6 salt solution at 100° F.

Formula of normal saline solution :

R.—Soda carb.	- - - -	gr. xv.
Sodii chlor.	- - - -	ʒiss.
Aquæ	- - - -	oii.

In conclusion, let me very briefly call your attention to secondary hemorrhage occurring one or more days after labor.

Mainly due to following causes : Retention of fragments of placenta, membranes, a placenta succenturiata, blood clots, especially in multiparæ, and full bladder.

Treatment. Empty the uterus with the fingers of blood clots, shreds, etc., douche, tampon, and give ergot.—*New York Journal of Gynecology and Obstetrics.*

Clinical Notes.

PARTIAL EXCISION OF THE ASTRAGALUS FOR CARIES: RECOVERY, WITH PERFECT MOVEMENT AT THE ANKLE JOINT.

BY A. PRIMROSE, M.B., C.M., EDIN. ; M.R.C.S., ENG.

Associate Professor of Anatomy, University of Toronto; Surgeon Outdoor Department, Toronto General Hospital; Surgeon to the Hospital for Sick Children.

THE patient, D.B., æt. 14, was admitted to the Children's Hospital under my care, with the history that, a short time previously, he had been kicked by a companion in the region of the right ankle. The ankle had troubled him a year previously, pain and swelling having occurred at that time. A few days subsequently the ankle began to swell, and became red.

On admission, January 19th, 1893, he complained of great pain in the ankle. Temperature, 103°. Suppuration had occurred, and a sinus existed over the outer malleolus, and one over the inner malleolus, both discharging pus. I operated on June 22nd. An incision was made over each malleolus, and a considerable amount of pus removed. I now found the astragalus bare and eroded. I scraped away the diseased bone and removed a large part of the upper portion of the bone, including a portion of the articular cartilage. An excavation of considerable size was made, exhibiting a direct communication from side to side of the ankle, between the two original incisions in the soft parts. The bony cavity and surrounding soft parts were thoroughly cleansed and douched with bichloride of mercury solution, 1 in 1000. The cavity was now packed with iodoform gauze, and an antiseptic dressing applied. The limb was secured on a splint, the foot being fixed at a right angle. The wound did well for a time, and the packing was changed at each dressing. The patient went to the Lakeside Home, and I did not see him during the summer months, as I was absent from the city. About a month after the operation, vesicles appeared on the foot and leg, and the skin was red-

dened and angry-looking. It was thought to be erysipelatous in character. In a few days this developed into a raw, bleeding surface. The wound, however, had closed. Up to this time a wet dressing of bichloride of mercury had been employed. It was now discontinued, and a dry dressing substituted ; the leg speedily assumed a normal appearance, and the boy made a complete recovery.

Remarks. The case is interesting as evidence of the amount of surgical interference which is possible at the ankle joint without permanent ill-effects. This boy now walks without a limp, and the function of the articulations implicated in the operation is perfectly preserved.

The clinical history also indicates the fact that the boy suffered from a local dermatitis, due to the employment of wet alembroth dressings. The writer has seen several instances of this, and has been struck by the erysipelatous character of the skin affection produced from this cause. In the present instance the cause was not discovered early, and consequently the process went further than usual before the trial of a change of dressing demonstrated the true cause of the condition. Whenever there is any indication of dermatitis under an alembroth dressing, some other form of antiseptic dressing should be substituted at once.

CLINICAL NOTES ON A CASE OF EMPYEMA—OPERATION,*

By A. PRIMROSE, M.B., C.M., EDIN.; M.R.C.S., ENG.,

Associate Professor of Anatomy, University of Toronto; Surgeon to the Outdoor Department,
Toronto General Hospital; Surgeon to the Hospital for Sick Children.

THE following notes indicate the clinical history of a patient on whom an operation was performed for the relief of an empyema of long standing.

F.G., æt. 23; male. Was admitted into the Toronto General Hospital on October 10th, 1893, under the care of Dr. Cameron. Four years ago he was thoroughly healthy, and was working on the cable cars in Montana. The air of the city in which he worked was contaminated by noxious gas from smelting works. On January 24th, 1891, he was chilled on his car; he was taken home, and has been sick ever since. The chill proved to be the precursor of an attack of pneumonia. Shortly after this the doctor in attendance aspirated the chest, and drew off some fluid. This operation was performed six times in as many weeks, and on one of these occasions the chest cavity was washed out. He spent the summer of 1891 in Barrie, Ont., and felt better while there; but after coming to Toronto in September he began to lose ground, and became very weak. An abscess opened on the left side of his chest about this time, and left a sinus in the sixth interspace anteriorly, which continued to discharge—the discharge being thick and thin by turns, and usually offensive. He was losing weight, and suffered from night sweats. He had a constant cough, with profuse but difficult expectoration. His pulse was frequent, but temperature normal. On physical examination of the chest, breath sounds were absent over the collapsed lung, and the apex beat was seen under the right nipple. At this time he was placed under treatment as follows: Fellows' Syrup of Hypophosphites, with cod liver, oil were administered. He was directed to take breathing exercises, and the greater part of the day he spent in the open air, whilst at night he kept his bedroom window open. As a result of this treatment his sweats stopped, his cough decreased, and his appetite improved. The collapsed lung

* The notes of this case were taken by Mr. J. Stenhouse, M.A., Edin.

expanded considerably, and air entered the upper portion of the lung. His weight was, at the time referred to, 135 pounds, whilst a year previously he weighed 175 pounds.

During the winter of 1892 the discharge continued, and was at times streaked with blood. The following summer he returned to Barrie, but did not gain much benefit; towards the latter part of the summer, however, the sinus closed and remained so for five months, when it opened again. In May, 1893, a doctor attempted to insert a drainage tube, but was unable to do so; the operation had to be abandoned, as the patient choked under the anesthetic. During his whole illness there has been more or less edema of the feet and hands, while the finger tips are clubbed to a remarkable degree.

Such was his history previous to his admission into the Toronto General Hospital. As to his family history, it is stated that his father died of pneumonia, mother of Bright's disease, an uncle of phthisis, and a grand-uncle of "stonemason's lung."

Physical examination of the chest was made on admission. The right lung was normal. On the left side inspection reveals the depression of the infra-clavicular and mammary regions. On palpation, vocal fremitus above the fourth rib is perceptible, but it is absent below that point. Percussion gives a resonant note above that point and dullness below. The same condition obtains at the back on the same level. Bronchial breathing is heard over the upper portion of the lung, while just above the fourth rib it is cavernous. Below this level the breath sounds cannot be heard. The sputum examined contained no bacteria. The apex beat of the heart is diffuse, the mitral sound being best heard in the fourth interspace of the right side, two inches from the middle line. The urine exhibits an abundance of phosphates.

A note was made regarding his cough and expectoration. When walking about the ward his cough was not at all troublesome, but the discharge from the sinus was increased, whilst the expectoration diminished. On the other hand, when he went to bed, the moment he assumed the horizontal attitude his cough returned, and he was at times almost choked by copious expectoration, whilst the sinus ceased discharging.

After consultation, it was decided to perform an operation for his relief.

Operation. October 25, 1893. Chloroform was administered with extreme difficulty. The cough was almost constant, and with it expectoration. The moment the anesthetic was pressed far enough to abolish the excitability of the air passages he became cyanosed, apparently because of the muco-purulent material collecting in the trachea. The operation, therefore, was proceeded with without complete anesthesia; the patient

struggled considerably during the incisions, but he afterwards stated that he was unconscious of pain.

An incision almost vertical (there was a slight degree of obliquity from above, downwards, and inwards) was made in the anterior axillary line, from the upper border of the fourth rib to the lower border of the ninth rib; the edges of the wound were then held aside by ligature-retractors. The sixth and seventh ribs were bared of periosteum for three inches of their length; they were partially severed by a Hey's saw, and the division completed by means of bone pliers. Two inches of each rib were removed. The bed of the sixth rib was then incised, and a director thrust through into the empyema cavity. This was followed by a sequestrum forceps, which was opened, and the thickened pleura being thus freely opened a large quantity of putrid pus escaped.

The patient's pulse, which had been very feeble up to this stage, improved, and the breathing became quiet. The extraordinary thickness of the seventh rib is worthy of note. It was fully as thick as the mid-portion of an adult ulna, and was rounded and quadrilateral in shape.

The finger was now passed into the abscess cavity. The extent downwards was, to the diaphragm, about a finger's length; not quite as deep forwards to the mediastinum. The lung could be felt high up, just within reach of the finger. The upper limit of the abscess posteriorly could not be determined.

The pleura was freely incised throughout the entire length of the opening afforded by the excision of the ribs; and thus a large drainage opening was established. The cavity was washed out with 1-20,000 perchloride of mercury, and a tracheotomy tube was fixed in position. A dressing of absorbent wool was applied.

October 30th (five days after operation). The patient feels much better. Cough much diminished, and expectoration not one-fifth of what it was before operation. His appetite is good.

He continued to improve uninterruptedly. He gained 21 pounds in as many days. The discharge diminished, the cough almost entirely disappeared. The cavity closed below the opening, so that now the probe will not pass in that direction. The probe still passes upwards, however, for a very considerable distance. The man has no cough now, and his general condition has improved tremendously.

CASE OF PRIMARY DIPHTHERITIC LARYNGITIS.

By W. B. THISTLE, M.D.,

Assistant Demonstrator of Anatomy, University of Toronto; Physician to the Victoria Hospital for Sick Children, etc.

WITH reference to the much-discussed question of the etiology of membranous croup, a recent case in Victoria Hospital may be of interest.

Tommy B., æt. 4 years, was admitted on Sunday evening. The mother said he had been croupy since the previous Thursday. The dyspnea was fairly constant, but at times there was paroxysmal increase of the difficulty. There had been no sore throat in the family, or amongst the neighbors. The other children were well.

The child's throat and nose were examined, and no trace of membrane or exudate discovered. Temperature, 100.2°. Child seemed drowsy.

On the morning of the same day a case of catarrhal laryngitis had been admitted, and the appearance of the two cases had very much in common. The patient was therefore put to bed in the same ward, given a purge, and allowed to breathe in warm and moistened atmosphere until the morning visit. During the night the dyspnea suddenly became much increased, and before the house surgeon reached the ward the child was dead.

A complete examination was not permitted, but the larynx and a portion of the trachea was removed. The nose and throat were carefully examined, but no trace of membrane was discovered. The larynx, seen from above, showed the rima glottidis filled with pulpy, grayish-white exudate, which seemed to well up between the cords.

On opening the larynx, a pseudo-membrane was found lining the entire larynx, and extending about an inch down the trachea. The exudate covered the lower and inner surfaces of the valve cords. It was thicker above than below. When stripped up, it left a smooth, glistening surface beneath, and formed a perfect cast of the larynx. The trachea, except the portion directly below the larynx, seemed quite clear.

Microscopical examination of the membrane by Dr. John Caven, the pathologist of the hospital, discovered numerous rod-like bacilli answering to the description of the Klebs-Loeffler bacillus, besides numerous streptococci and clusters of micrococci.

The diagnosis *post mortem* was diphtheria. Subsequently, cultures were made from the membrane which proved the rod-like bodies to be the specific germ of diphtheria—the Klebs-Loeffler bacillus. Unfortunately, owing to the sudden death of the child a few hours after admission, neither the condition of the reflexes nor the character of the urine was ascertained. In all probability there would have been albuminuria, with loss of knee-jerk. In the associated case—which recovered in a short time—the urine remained normal, and there was no loss of reflex.

The other children remained well, although one slept with the patient during the time he was ill.

Here, then, was a case which, in the absence of *post-mortem* examination, might have been classed as simple croup in catarrhal laryngitis, but was, in reality, primary diphtheria of the larynx. The history shows, too, the necessity of exhausting the means of diagnosis in every case.

The cause of death was the filling up of the larynx with membrane, with, perhaps, the additional element of the induced spasm.

Progress of Medicine.

MEDICINE

IN CHARGE OF

W. P. CAVEN, M.B. Tor.,

Lecturer in Clinical Medicine in the University of Toronto; Physician to
Home for Incurables.

BRONCHIAL SEPTICEMIA IN INFANTS.

Drs. Hutinel and Claisse have published observations on a form of acute septicemia observed in young infants, which they believe to be due to rapid infection of the bronchial mucous membrane by micro-organisms derived from lesions in or about the mouth or pharynx. The cases occur frequently as complications of measles, but sometimes arise independently. They are particularly likely to arise in hospital wards, when an extensive epidemic of measles has led to crowding. The infant, without obvious cause, becomes rapidly extremely ill, the face is pale, and of a leaden color, the eyes sunken, the cheeks blotched with red, the expression anxious, the *alæ nasi* work, respiration is hurried, the pulse rapid (150 to 180), and the temperature rises quickly to 104° F. Auscultation reveals numerous sub-crepitant râles; there may, however, be no dullness, and the extent of lung occupied by râles may be no greater than a few days earlier, when the patient did not appear very ill. Vomiting and diarrhea of gray-green stools may be present. In a large number of such cases an infective process may be observed on the lips—cracks with a grayish bottom and indurated surface, especially on the upper lip. From these cracks a superficial serpiginous ulceration extends; the lower lip is excoriated and covered with pultaceous sordes. The buccal mucous membrane is red and bleeds easily, the pharynx is red, the tonsillar crypts are filled by a creamy exudation, the nose runs, and the discharge excoriates the upper lip. The prognosis is exceedingly bad. In a considerable proportion of such cases no pneumonia is found after death. The mucous membrane of the larger bronchi is inflamed, and this inflammation may extend to a greater or lesser distance toward the smallest bronchi, which, however, are

not uniformly affected. The liver is enlarged and presents fatty degeneration, affecting especially the portal side. Bacteriological examination of the contents of the bronchioles showed that a streptococcus was present in every case but one, and generally in large numbers, sometimes in pure culture. In one case the pneumococcus was present alone; in others the streptococcus was associated with staphylococci or the bacillus coli. The streptococcus was in an extremely virulent state. In three cases only was the streptococcus found in the blood, and the pneumococcus once. As a rule, the bronchial glands, liver, kidneys, and spleen contained no microbes. The symptoms, the authors conclude, are produced by the absorption of soluble poisons elaborated by the streptococci in the bronchi and bronchioles.—*Revue de Médecine.*

THE MODERN DIAGNOSIS AND TREATMENT OF DIPHTHERIA.

Whatever else sanitation has done, it has not yet succeeded in checking the prevalence of diphtheria either in city or town. The disease is still the scourge of childhood, the dread of parents, and the reproach of medical art. For the recent practical application of bacteriology to the diagnosis of diphtheria has revealed in a very startling manner these two facts: First, that in over one-third of the cases the disease diagnosed as diphtheria was not the genuine malady at all; second, that the mortality-rate of true diphtheria is between forty and sixty per cent. All the numberless contributions to diphtheria therapeutics which have been made so industriously for fifty years must be thrown aside as valueless, or nearly so. For we know that all the gentlemen who have reported a "new treatment" of diphtheria, with a trifling mortality-rate, have simply not been treating true diphtheria at all. Diphtheria diagnosis and diphtheria therapeutics have got to be started over again on a new basis, viz., that of bacteriology. The admirable work of our City Board of Health has already shown the need of this new work, and its brilliant promise for the future. Dr. F. H. Williams, of Boston, has also called attention to it in an address delivered before the Massachusetts Medical Society (*American Journal of the Medical Sciences*, October, 1893). Dr. Williams gives the results of his clinical and bacteriological work in diphtheria at the Department for Contagious Diseases of the Boston City Hospital. His figures show very much the same thing as do those of the New York City Board of Health. In other words, in Boston as well as New York, only about one-half of the cases diagnosed as diphtheria are really such; the mortality is very low in pseudo-diphtheria and very high in true diphtheria associated with the Klebs-Loeffler bacillus. To Dr. Williams belongs the credit of making some quite extended studies of the therapeutics of true diphtheria.

Dr. Williams first of all destroys some of the fetiches of the past. Iron, for example, he does not find often indicated in many cases. Among nineteen cases there was one hundred per cent. of hemoglobin in sixteen. The tincture of iron he found useful mainly on account of the free hydrochloric acid. Weak solutions of this acid in water answer just as well. He says: "Chlorate of potash does not seem to me of service, and in excessive doses may do serious harm. Nitrate of silver is a caustic that does not penetrate deeply. Chromic acid is one of the most relentless of all caustics. Iodine is irritating when inhaled, as are the vapors from saturated solutions of chlorine. Solutions of carbolic acid are poisonous and inefficient as germicides. I have not succeeded with digestives." The action of corrosive sublimate is only inhibitory, not germicidal, and it is often futile. Dr. Williams finds in peroxide of hydrogen the most active, and, at the same time, the least harmful, of germicides. This substance must be used, however, in strong solutions, *i.e.*, twenty-five or fifty volumes. The advantages of these are that they are good germicides, and are not poisonous nor harmful to the mucous membrane; they cleanse a foul throat and break up and disintegrate certain portions of the diphtheritic membrane, thus rendering the bacilli more accessible. They likewise assist in diagnosis, for when the hydrogen peroxide, even in weak solution, is applied to the throat where there is any trace of membrane, it causes it to assume a white color from the presence of fine foam, which is made by the liberation of the oxygen gas. It thus becomes a useful agent in detecting spots of membrane earlier than they would be apparent in any other way, and thus indicating the areas to which the treatment should be directed. With this end in view, the throat may be sprayed or the mucous membrane may be swabbed with dilute hydrogen peroxide. It is known that corrosive sublimate, to a considerable extent, is inhibitory rather than germicidal in its action, but it would be difficult to conceive of a merely inhibitory action on the part of hydrogen peroxide, as this substance is so readily decomposed.

No rule can be given for applying these solutions that will cover all cases. In a general way it may be said that the strong solutions of hydrogen peroxide containing about one-half per cent. of acid, made up chiefly of hydrochloric or sulphuric acid, should be gently but thoroughly applied every four hours during the night, and more frequently during the day for the first few days. The 25-volume solution may be used in spray; the 50-volume may be applied, a drop or two at a time, on a swab, until the membrane is removed or much diminished, or in certain cases the 50-volume solution may be applied with the syringe. Even a stronger solution than fifty volumes may be used for resistant membranes. It is well to use cocaine before applying the peroxide. By the help of bromide at

night the patient loses very little sleep in being aroused for the local treatment. Every precaution should be taken to spare the patient's strength, and it is not necessary that the head should be raised from the pillow while the applications are being made.

There are some disadvantages to the peroxide treatment which are enumerated, and the limitations of it, and indeed of all local and late treatment, are dwelt upon. Still, by means of peroxide of hydrogen in strong solution, applied early and judiciously, it seems probable that the mortality-rate from true diphtheria may be reduced much below forty per cent. Of fifty-eight cases treated by Dr. Williams sixteen died, and among these the mortality was in some cases explained by incomplete or late application of the germicide.—*New York Medical Record*.

SUPRACLAVICULAR INSPIRATORY DEPRESSION IN EARLY PHTHISIS.

Dr. Revillet once more draws attention to the above phenomenon. Practitioners know how difficult the diagnosis of early phthisis may be, and how important it is to have this point clearly settled. The search for bacilli in any sputa that may be expectorated is, in suspected cases, helpful. But one may have to wait a long time before any micro-organisms can be detected. In like manner, dullness on percussion and crepitation may be absent, and we have to rely on the presence of such delicate signs as rough, feeble, and wavy breath sounds in solving the problem. In weak girls the detection of feeble and staccato respiration at the apex may mean nothing; but, according to Dr. Revillet, if to such ambiguous signs is added unilateral inspiratory depressions of the supraclavicular fossa the presence of tuberculous pleurisy of the apex may be unhesitatingly affirmed, this sign being pathognomonic of the lesion. It may be absent, however, in cases of apical pleurisy where adhesions co-exist consecutive to diaphragmatic or parietal pleurisy, for in such instances the play of the apex of the lung is interfered with. In five *post-mortem* examinations of patients in whom, during life, this supraclavicular inspiratory depression had been noted, thick and tough adhesions of the corresponding apices were observed. In two instances atrophy of the platysma myoides and of other muscles of that region was observed. If, in such a case, traction is made on the lung from below, the phenomena may be easily reproduced. It must not be forgotten that evident signs of early phthisis may be masked by the râles of bronchitis, and here, again, Dr. Revillet's sign may prove to be of use. When the tuberculous process is more advanced both apices become attacked, and the sign loses its significance; but in this case, again, the greater amplitude of the depression at one apex enables the medical attendant to say that that apex was the first attacked. In a

period of four years Dr. Revillet has proved in the *post-mortem* room that these apical adhesions may disappear ; and, in fact, this observer tells us that, as the tuberculous deposit may be limited to the pleura, and as, moreover, these adhesions may be absorbed, a comparatively favorable prognosis may be made in these cases. Of twenty-six cases kept under observation during four years, only one terminated fatally, the rest remaining *in statu quo* or becoming only very slowly worse.—*La Semaine Médicale*.

INSURANCE OF OPIUM USERS.

Perhaps the most important evidence secured by the British Parliamentary Commission appointed for the purpose of investigating the opium question is that tendered by the management of the Oriental Life Assurance Company, which possesses what may almost be described as the monopoly of the native business of India. According to the testimony of the directors of that institution, no extra premium is charged to users of the drug, and this estimate of the risk seems to be confirmed by the surprising fact that during twenty years not a single claim has been paid for death which could be attributed to the use of opium.—*The Tribune*.

NEURECTOMY IN SPASMODIC TORTICOLLIS.

Gardner and Giles, in a paper on neurectomy in spasmodic torticollis and retrocollic spasm, report two cases, one of spasmodic torticollis, the other of retrocollic spasm without torticollis, which were treated by exposure and partial resection of both spinal accessory nerves and subsequent division of the posterior branches of the second and third cervical nerves. This treatment was completely successful in the first case, nearly five years having elapsed since the last operation. In the second case it was followed by cessation of all bad symptoms, save some trifling spasmodic movements of the deep rotators of the left side, which, it is anticipated, will be completely cured by another operation. Gardner, who had charge of these cases, claims precedence over Keen with regard to section of portions of the posterior branches of the second and third cervical nerves, having performed this operation a few months before it had independently been thought out and practised by the latter surgeon.—*New York Medical Record*.

THERAPEUTICS

IN CHARGE OF

GRAHAM CHAMBERS, B.A., M.B. Tor.,

Professor of Analytical Chemistry and Toxicology, Ontario College of Pharmacy ; Lecturer
in Organic Chemistry and Toxicology, Woman's Medical College ;

AND

WILLIAM LEHMANN, M.B. Tor.,

Physician to the Home for Incurables and House of Providence.

THE VALUE OF CREASOTE IN GASTRIC FERMENTATION.

Creasote has been so largely used within the last few years in the treatment of bronchial or general pulmonary disease that many of us have forgotten the valuable results to be obtained by its employment in the treatment of gastro-intestinal troubles associated with fermentation. As is well known, the name of the substance is derived from the fact that it was found to prevent decomposition of nitrogenous matter, and that it therefore acted as a distinct antiseptic. There are two classes of cases of indigestion or disorder in the alimentary canal in which creasote is of great value. Aside from those instances of persistent vomiting where by its local action it often renders us great service, it is also useful in those cases of fermentation or chronic indigestion in which there are formed large quantities of flatus some time after eating. Whether the distention is caused by the fermentation of starches or the decomposition of nitrogenous materials, a minim or two of creasote half an hour or so after eating, or immediately after eating, will often help such cases. Another instance in which creasote is of value is in a case of severe acute gastro-intestinal fermentation, which is often manifested, in the more severe cases, by an actual attack of cholera morbus. The administration of creasote in such an instance not only tends to prevent the vomiting, but to inhibit the production of poisonous products which are developing from the bad food that the patient has been unfortunate enough to take. Here, again, the dose of from one to three minims of creasote, well diluted, proves of value. In those instances in which the vomiting is too intense to permit the swallowing of much liquid, it may be administered in the dose of from one-half to one minim in a tablespoonful of water, milk, or brandy, a few drops of this mixture being given at a time. Notwithstanding the laudatory statements which have

been made as to the value of thymol, naphthaline, and other gastro-intestinal antiseptics, we believe that creasote is the best one which we can employ, and we doubt, if it is administered carefully, that it is as apt to produce disturbance of the digestion by irritation of the mucous membrane as some of the more highly praised and more expensive remedies. It is hardly necessary to add that it is important to use the beechwood creasote, and not that derived from the mineral kingdom.—*The Therapeutic Gazette.*

THE PHARMACOLOGY OF THE NITRITES AND NITRATES.

Under this interesting title, Professor Leech delivered the Croonian lectures for 1893 before the Royal College of Physicians, and the following summary, which formed a leading article in the *Lancet* for July 22nd, 1893, will prove of interest to our readers :

Although the first two Croonian lectures, which dealt with the pharmacology of the nitrites and nitrates, contained the results of a large amount of labor and of close experimental research, the third and fourth lectures are, we venture to think, more likely to be of value to busy practitioners, since they deal mainly with therapeutic considerations. While laying due stress upon the various conditions in which the nitrites and nitrates may be of service, Professor Leech does not hesitate to indicate clearly their limitations, even though he thinks that they are too often discarded through excess of caution. In their favor he points to the small quantities necessary to influence the vascular system, to the relative absence of risk unless employed with suicidal intent, and to the evanescent action. After referring to the broadness of the definition of angina pectoris adopted by Sir Richard Quain, he maintains that, according to clinical experience, this condition is always associated with a rise in tension due to temporarily decreased calibre of either systemic or pulmonary vessels, and that the symptoms are the outcome of the heart proving unequal to the work it has to perform. The theory that the relief due to the administration of nitrites is the result of true analgesic action is not supported, the reduction of tension, as originally held by Dr. Lauder Brunton, being maintained as the true explanation. On account of their rapidity of action he prefers the nitrites of the fatty series, which can be employed by inhalation, but he considers that experience has shown that later attacks are of longer duration, and that, although inhalations are beneficial in earlier attacks, they may frequently have to give place to remedies of more prolonged activity, such as nitro-glycerin. Nitrite of amyl, as is well known, is not a stable compound, and it may on that account fail when it is given in solution, although a disappointing result may sometimes be due to the short duration of its period of action, or to special insusceptibility of the individual. On

the other hand, Professor Leech records many cases in which it has been found expedient to largely exceed the Pharmacopeial dose of the liquor trinitrini, and it is noteworthy that in his experience it is far safer to employ somewhat large doses of nitro-glycerin than to resort to injections of morphine. Ethyl nitrate has scarcely been sufficiently employed in angina pectoris to warrant any very definite conclusions, but it appears to exert a more powerful and more persistent influence in reducing tension than that possessed by ethyl nitrite. Although the nitrates of propyl, isobutyl, and isoamyl are as effective as the nitrite of ethyl in lowering tension, they cause so much headache that they have not been employed medicinally. It must not be forgotten that the influence of nitrites and nitrates upon angina pectoris is palliative rather than curative, and that they should therefore be used concurrently with such remedies as iodide of potassium and arsenic.

Paroxysmal cardiac dyspnea may be relieved by the action of the nitrites on the pulmonary system of vessels as well as on the systemic system, but the ordinary shortness of breath consequent on exertion, which is so frequently met with in simple valvular lesions of the heart, seems to be unaffected by them. On the other hand, Professor Leech is convinced that some good and no harm has resulted from the use of nitrites in cardiac failure or in syncope such as that occurring during the administration of chloroform. Of the value of this group in asthma and bronchitis there can be no doubt, but the rationale is not easy to explain. It is possible that asthma is not the result of simple bronchial spasm, but that there may also be, as has been suggested by Sir Andrew Clark, some hyperemia or tumidity of the bronchial mucous membrane, and that the influence on the pulmonary vessels may also relieve the bronchial vessels. Whatever explanation is adopted, testimony is largely in favor of using nitrites in many of those cases which are ordinarily treated with ammonium carbonate and ether. In uremic dyspnea and in migraine the results are disappointing, but the converse holds good for the treatment of forms of headache associated with high tension. The value of the series in tetanus, strychnine poisoning, and epilepsy is open to considerable doubt, notwithstanding the favorable statements which have previously been made. In the treatment of acute Bright's disease there is also great lack of certainty of the efficacy of the nitrites; although diuresis has appeared to be hastened by the administration of nitro-glycerin or sodium nitrite, headache and other discomforts have been relieved by them, and they certainly have the advantage of causing no ill effects. Similar difficulties attend the estimation of the results in cases of large white kidney and in mixed forms of chronic nephritis, but in dyspnea and cardiac failure of late stages of contracted kidney nitro-glycerin adds to comfort, and perhaps tends to prolong life.

Among other practical points may be noted the remarks upon the official compounds. On account of the decomposition of nitro-glycerin in presence of any salt, it is better to employ the tabellæ, or else a simple dilution of the liquor trinitrini with distilled water. For subcutaneous injection, in the rare cases where inhalation of amyl nitrite fails, nitro-glycerin is better than sodium nitrite. The benefits of spiritus etheris nitrosi have depended upon the proper proportion of nitrite of ethyl, and lack of appreciation of this fact appears to be largely the result of the rapid decomposition which occurs on mixture with water; hence the valuable recommendation that the dilution should be effected only at the time when this drug is required. It is curious, however, to learn that this decomposition is retarded or prevented when solutions of acetate or citrate of ammonium are mixed with the spirit of nitrous ether. This combination has so long found favor with practitioners that it is comforting to know that their faith was grounded, even though unconsciously, upon sound scientific foundations.—*The Therapeutic Gazette.*

A SUGGESTION FOR THE TREATMENT OF SKIN DISEASES.

Dr. Alston, of Trinidad, is the inventor of an ingenious and possibly effectual plan of securing the entrance into the diseased integument of medicaments destined to combat the ravages of the parasite of tinea tonsurans. His idea, which he is unfortunately debarred from putting into practice owing to the scarcity of this particular parasitic disease in his parts, consists in the application over the affected area of a miniature air-pump *qua* cupping glass, the which would, it is conceived, withdraw the air from the skin, and render it more than usually porous. This having been done, and the cupping glass being retained *in situ*, the medicament is sprayed therein, to be greedily absorbed by the thirsty integument.

OBSTETRICS

IN CHARGE OF

ADAM H. WRIGHT, B.A., M.D. Tor.,

Professor of Obstetrics in the University of Toronto; Obstetrician to
the Toronto General Hospital.

FEEDING DURING LABOR.

Dr. Gundrum, of California, publishes in *The Therapeutic Gazette* a paper on the subject of "Preparing delicate pregnant women for labor by proper exercise and food, and feeding at frequent intervals during labor." He refers to a case where a poor delicate woman went through twenty-eight hours of the severest physical exertion and suffering in her labor, during which time she took only two cups of tea and two crackers. At the same time the physician in attendance took his regular meals, and a supper during the night, besides considerable sleep, and, of course, "he stood the labor well."

In a second pregnancy, which commenced fourteen months after this labor, the patient was compelled to take regular exercise out of doors, and do part of the housework; at the same time to take plenty of nutritious food. During labor, particularly during the latter half of the first stage, she received small amounts of egg-nog, or beef tea, or strong coffee with cream, every eight to fifteen minutes. At the end of labor the patient was almost as fresh as at its commencement, and she made a rapid recovery; although after her first labor she was much exhausted, and had a very slow recovery.

He reports other cases of a similar character, and advises all practitioners to prepare their obstetric patients by a course of exercise and proper feeding. He says that patients during labor should, as a rule, be fed frequently and regularly with beef tea and egg-nog, or something of that sort. He says he is well aware of the fact that some authorities claim that beef extract or beef tea contains but little nourishment, but he claims to know by personal experience that a well-prepared beef extract will produce muscular energy, and will help a patient in labor by keeping up her strength, and increasing the power of the muscular forces, particularly those of the abdominal wall.

PUERPERAL SEPTICEMIA.

At a recent meeting of the London Obstetrical Society, an interesting discussion took place on the subject of puerperal septicemia. The president of the society, Dr. Herman, remarked that defective sanitary conditions are not matters of importance in the causation of puerperal disease, and is reported to have said "that he knew of no evidence that the relation between the drainage and the illness was anything more than one of coincidence." Dr. Cullingworth is reported to have said that "it is a very dangerous doctrine to propagate that puerperal septicemia could be caused by defective drains and sewer emanations. There was no evidence that would bear criticism in favor of such a view; and to preach such a doctrine was to divert attention from the point of real importance, which was personal cleanliness on the part of all around the patient." Dr. W. S. Playfair, in a letter published in the *British Medical Journal*, takes strong ground against these views, which he characterizes as extremely pernicious, and likely to do harm, in coming from men who hold such high positions as teachers of obstetrics. He quotes the history of a case which appears in his work on midwifery, which, as he considers, proves that a case of serious puerperal disease was produced by sanitary defects. On the eleventh day the patient left her bed, and was placed in a current of sewer gas and instantly poisoned. On the twelfth and thirteenth days she was again exposed to the same sewer gas, and more intensely poisoned. He goes on to show that there could not possibly be any flaw in the chain of evidence in this direction.

In the same connection Dr. Playfair made a statement which we cannot unreservedly accept. His words are: "For neither he (Dr. Herman) nor any one else, I believe, ever saw a case of septicemia from conveyed infection which did not commence before the twelfth day." Dr. Playfair, in his work on midwifery, says that phlegmasia dolens is a local manifestation of a general blood dyscrasia. By the term "blood dyscrasia" we understand that he means a septic and hyperinotic state of the blood; and we had supposed that this septic condition was due to conveyed infection, and that the symptoms arising therefrom appear in certain cases after the twelfth day. We do not, in making this comment, desire to throw any doubt on Dr. Playfair's opinion that in his case the puerperal disease was certainly due to the sanitary defects. Dr. Playfair goes on to say: "It will be observed that I have been careful to talk of defective sanitation as a cause of puerperal disease. I am quite prepared to see it proved that such disease is distinct from septicemia. There are more things in puerperal disease than are dreamt of in our philosophy, and the whole subject is too much in its infancy to justify very dogmatic assertions

with regard to it. For aught I know to the contrary, it may yet be shown that the two types of disease are as distinct as typhus and typhoid fevers. All I can say is that hitherto I have not been able to distinguish them, and, therefore, in my book on midwifery I have described them both under the head of 'puerperal septicemia,' and I have never been able to see why infective germs suspended in the atmosphere should not be as dangerous as analogous germs on the hands."

THE REPLY OF DRs. HERMAN AND CULLINGWORTH.

Drs. Herman and Cullingworth published in the *British Medical Journal* a joint letter in reply. They say that they do not think that defective sanitary conditions are not matters of importance, and they have no doubt that defective drains may make puerperal women ill, just as they make any one else; but they do not think that such conditions cause puerperal septicemia. They agree with Dr. Playfair in thinking it not only possible, but probable, if not certain, that the disease caused by sewer gas is distinct from septicemia. They will not undertake to furnish Dr. Playfair with a differential diagnosis between sewer-gas poisoning and septicemia, because the effects of the former are little understood. Many kinds of illness are put down to it, but they know of no set of definite symptoms that has been proved to be a regular effect of sewer-gas poisoning. The phenomena of septicemia, on the other hand, are uniform and well marked, whether it occurs after a delivery, or after a surgical operation. They also add that it is a striking fact that one never hears of septicemia being produced by sewer-gas poisoning except in the case of puerperal women.

They acknowledge the ability which has been displayed by Dr. Playfair in his papers on this subject; but differ from him chiefly with reference to his method of investigation, which, they say, is by applying to individual cases a very imperfect method of exclusion. A patient gets what appears to be septicemia, a search is made for some source of septic infection, the source is not found, and it is assumed that therefore none existed, and that the disease must have been due to some other cause. Some fault is discovered in the drainage, or there is a case of scarlet fever in the next house, and, as the case *cannot* be septicemia (no source of infection having been found), the drains or the scarlet fever *must* be the explanation. They think this mode of investigation is fallacious.

They still adhere to the correctness of the statement that it is a dangerous doctrine to propagate that puerperal septicemia could be caused by defective drains and sewer emanations. They consider that the returns of the Registrar-General show that the medical practitioners of Great Britain have not yet generally adopted the use of antiseptics in their private

practice ; and they consider that anything that gives medical men a ready excuse for not adopting them, and a ready way of accounting for any case of puerperal disease that may occur in their practice, is rightly stigmatized as dangerous.

CORROSIVE SUBLIMATE IN MIDWIFERY.

At the present day probably corrosive sublimate is the favorite anti-septic in midwifery practice. Dr. Illingworth, in a recent letter to the *British Medical Journal*, recommended solutions of the biniodide of mercury as superior to bichloride in obstetric practice. Dr. Boxall replies in the same journal, and emphatically endorses the use of bichloride, and discusses certain of the objections of those who are opposed to it.

Tarnier, who had used it for several years, is said to have discontinued it, at the same time denouncing it as too dangerous. Dr. Boxall, in reply, says that Tarnier denounced it as dangerous *for intra-uterine injections*. Probably the great mass of those who use the bichloride will agree that its injection into the uterus is a source of great danger ; but they are not inclined, on that account, to discontinue its use in cleansing the hands of the accoucheur, as well as the body, especially the vulva, of the patient.

Dr. Boxall considers that, in spite of its drawbacks, the bichloride has given the best results up to the present time. He has watched carefully, in hospital practice, the results when using other disinfectants ; and compared them with his results under the routine employment of the sublimate, and has found that the latter is much superior to phenol or Condy's fluid.

He concludes that for external purposes, such as disinfecting the hands, the use of the sublimate is attended by no danger. He also thinks that the sublimate may be safely used as a douche before delivery ; but he is opposed to sublimate douching after labor unless done very carefully by a doctor who recognizes the dangers and understands the means of preventing them.

Of course, we must remember that certain pathologists, such as Welch and others, have concluded, after careful laboratory work, that the sublimate, on account of its chemical affinities, is practically useless for the purposes of disinfection in surgery and obstetrics. When clinical experience is not in accord with scientific demonstrations, we may hope that time will bring sufficient light to make all things clear ; but, in the meantime, the writer will not despise the results of the former.

SURGERY

IN CHARGE OF

L. M. SWEETNAM, M.D. Tor.,

Lecturer on Therapeutics in the Woman's Medical College; Surgeon to the Outdoor Clinic, Toronto General Hospital; Surgeon to St. Michael's Hospital;

AND

A. PRIMROSE, M.B., C.M. Edin.,

Associate Professor and Demonstrator of Anatomy, University of Toronto; Surgeon Outdoor Department, Toronto General Hospital; Surgeon, Victoria Hospital for Sick Children.

THE CAUSE OF DEATH AFTER BURNS.

Salvioli (*Centralblatt für Chirurgie*, January 28, 1893) says that the cause of death after burns is due largely to the involvement of the blood vessels in the different organs. According to Bizzozero, the great increase of blood plates in the normal circulation is essentially the result of burns. When the mesenterium of mammals is examined microscopically, and then heated to a temperature of from 50 to 55 C., it is noticed that the flow of blood becomes quickened, and that the blood plates collect along the walls of the vessels and cause the formation of white thrombi. These, in turn, are torn loose by the blood stream, and as a result we have an enormous number of emboli. In certain cases, and especially when considerable heat has been applied, the blood does not circulate. This condition of stasis is partly due to thrombotic and embolic conditions, which stop up the arteries; partly to contraction of the arteries; and, lastly, to a change in the red blood corpuscles, which become sticky and hang together, and thus hinder the blood flow. After death, numerous emboli are found in the lung parenchyma and many blood-plate thrombi in the vessels. To prove that these results are due to the increase in number of the blood plates, we have only to defibrinate the blood, and the application of heat will produce but little effect. In performing this experiment, it is necessary to remove a large quantity of blood defibrinate by whipping, filter, and again inject into the animal. This should be repeated ten times in two hours. Through this process the blood loses its power of coagulation, and is poor in blood plates. Before this procedure, one plate to thirty-five corpuscles was counted; after it, one in two hundred and seventy.—*Omaha Clinic.*

A NEW METHOD OF CHECKING BLEEDING AFTER TONSILLOTOMY.

Dr. R. H. Dawbarn (*Pacific Record*) recommends a simple means of controlling this form of hemorrhage, which, while it is rarely fatal, occasions much anxiety to the patient, if not to the physician himself.

Briefly, it consists in surrounding the bleeding surface with a stout purse-string ligature, of silk or catgut, which when tightened is entirely hidden in the tissues about the tonsillar stump.

The surgeon selects a large needle, preferably semi-circular in shape, and a needle-holder. The mouth is held open by a cork between the back teeth. Four stitches are now introduced. Less than two minutes is needed for this.

When the free ends are drawn upon, the loops, of course, disappear. The ligature is now tied tightly enough to stop bleeding, and the ends cut moderately short. The thread may either be left to slough out, or, and probably preferably, may be cut and removed in twenty-four to thirty-six hours.

As to the distance to which the needle penetrates, the two transverse strokes may enter to about one-quarter inch in depth. The two vertical ones, running parallel with the carotids, could, if desired, probably be passed with safety rather more deeply; though there would seem to be no special advantage in this.

It is not necessary to include the pillars of the fauces in the grasp of the thread. The two vertically placed stitches run, of course, very near the pillars, but not really in their substance.

Regarding the source of hemorrhage after tonsillotomy, of one thing we can be certain, namely, that it never comes from either of the carotids. The external and internal carotids are very nearly equidistant from the tonsil, and behind it; the nearer, the internal, being rather more than half an inch away (1.5 ctm.); the external being, say, three-quarters of an inch (2 ctm.). If a tonsillotome be used, cutting either of these vessels is a mechanical impossibility.

At least six arteries supply the tonsil; all being branches, indirectly, of the external carotid. Of these the largest, as a rule, are from the ascending pharyngeal, and the ascending palatine.

Fatal bleeding from tonsillotomy is practically unknown. But bleeding to the verge of syncope, long continued, and severe enough to alarm most seriously the relatives and friends, if not the doctor—this is not so rare by any means. In such cases (in addition to nearly a dozen lesser mechanical devices) even ligation of one or another of the carotids has been advised, and actually practised; although of these vessels tying the external carotid alone would seem rational; and that, too, only at a point

between its first two branches—the superior laryngeal and the ascending pharyngeal.

However, with such certain, safe, and easy device at hand as that which has been described, so severe a measure as cutting down and ligating a carotid can never be needed. Indeed, it would seem wisest to use the buried tonsillar ligature without waiting and wasting time and blood while trying less sure plans.

The nearest approach to this idea which the writer has anywhere found is a method suggested by Dr. E. W. Clark, of New York, who has run two large needles through the bleeding base, and, leaving these in place, wrapped a ligature firmly around them. Manifestly, even if this were equally certain in effect, it would be quite as difficult to do as the writer's device, and must be much more annoying to the patient while in position. Indeed, the side of the tongue would be likely to be lacerated against the sharp needle-ends unless, in some way, these were covered.

The suggestion has also been made to seize with a volsellum forceps the bleeding surface, and, drawing firmly upon it, tie a ligature about it. I have in one instance tried this, and found the ligature repeatedly slipping off in spite of my best efforts. Indeed, as there is nothing like a stump or pedicle left (if the tonsillotomy has been properly performed), such slipping is almost unavoidable.

I only mention this latter plan as being the other of the two which remotely resemble the method upon which this paper has been written.

THE PRESERVATION OF CATGUT LIGATURES.

Catgut is in many respects so convenient a material for the ligature of arteries that if it could be relied on as being free from septic contamination it would still be preferred by many surgeons to any other kind of ligature; moreover, it is desirable to have at hand a ligature which can be kept ready for immediate use without further preparation. The preservation of catgut in carbolyzed oil is generally recognized as being untrustworthy and objectionable; it seemed, therefore, to be worth while to ascertain whether this ligature could be kept in some convenient and reliable anti-septic solution whence it could be taken ready for use. I therefore asked Dr. Charles Slater whether he would be kind enough to submit to bacteriological examination some specimens of sulpho-chromic catgut in solutions prepared for me by Mr. Montague, of the firm of Messrs. Wright & Co. These were as follows: (a) Sulpho-chromic catgut, No. 4, placed for forty-eight hours in a 10 per cent. solution of carbolic acid in glycerine, then for five hours in a $\frac{1}{2}$ per cent. solution of chromic acid in water, and finally preserved in absolute alcohol. (b) Sulpho-chromic catgut,

No. 4, preserved in a solution of one part of carbolic acid in twenty parts of absolute alcohol. (c) The same quality of catgut preserved in a solution of one part of carbolic acid to twenty parts of distilled water. (d) The same catgut preserved in a solution of one part of carbolic acid to forty parts of distilled water. (a) had been kept for three years; (b), (c), and (d) for rather more than one year. It was observed from Dr. Slater's experiments that (a) and (b) were neither of them free from contamination, but that both (c) and (d) were absolutely sterile; that is to say, sulpho-chromic catgut kept in an aqueous solution of carbolic acid (1 in 20 or 1 in 40) is aseptic, and can be used without further preparation. Catgut thus preserved remains strong (according to Dr. Slater's experiments as to its breaking strain), pliable, and smooth; it is easily tied, and remains sufficiently long unabsorbed. Embedded in the tissues as a suture, I have found it at the end of a fortnight to be practically unchanged.

The catgut in (a) and (b) (alcoholic solution) was hard, less pliable, and not easily tied with security. Of the two specimens in solutions of carbolic acid, that in the stronger solution (1 in 20) was found to be the firmer and more inelastic. This is, therefore, the most appropriate of the solutions experimented with, and from it a ligature can be taken ready for use without any further treatment.—*Lancet*.

CHANGES IN THE TESTICLES OF AGED PERSONS.

Dr. Joseph Griffiths, F.R.C.S., at the end of an interesting paper on "The Structural Changes Observed in the Testicles of Aged Persons," summarizes the following conclusions:

In the testicles of the aged, two distinct stages may be recognized in the process of involution or decay to which they are liable.

In the *one*, the epithelium of the seminal tubules, and also that of the tubules of the globus major of the epididymis, undergoes, more or less, complete fatty degeneration and partly disappears, the tunica propria of the tubules of the testicle becomes somewhat thickened, but the intervening intertubular connective tissue remains practically unaltered. In the epididymis the muscular wall of the tubule is replaced by fibrous connective tissue, and the intertubular connective tissue is increased, dense, and fibrous. In the *other*, or *second stage*, the seminal tubules are much reduced in size, the epithelium having in great part disappeared, leaving only, in many instances, a single layer of long, tapering, columnar cells, lining and filling the tubule, the central spermatozoa-producing cells having completely disappeared, while the tunica propria is greatly thickened from proliferation of its own connective-tissue cells and the formation of a fibrous matrix. The intertubular connective tissue is, in this *second stage*,

relatively increased, owing perhaps to the diminution in the size of the seminal tubules, but it still remains of loose texture, and contains, as in the normal, many connective-tissue cells. The epididymis shows no other changes than those incident to the *first* stage.

Besides the above, there is a *third* change which is more partial, and much resembles the result of that inflammatory process. It is usually observed in the small or shrunken testicles of old men, and affects both organs. In the altered patches, the seminal tubules, in the majority of instances, are completely transformed into fibrous rods or cords; but in some there still remain in the central fissure that represents the original lumen traces of epithelial cells derived from the degenerated cells of the seminal tubes. The intertubular connective tissue is increased in amount, and converted into a dense fibrous variety.—*Journal of Anatomy and Physiology.*

TREATMENT OF BRAIN INJURIES.

As yet, antiseptic surgery is attempted by the many, and asepsis by the few. It is well, therefore, to keep before us the fact that all tissues do not equally resist the action of antiseptic solutions. From an article in the *Deut. Med. Woch.*, an abstract of which appeared in the *Pacific Medical Journal*, we quote the following :

Physiological investigations have shown that the brain is extremely sensitive to chemical irritants, and some experiments have been recently made to determine the action of antiseptics upon the cerebral tissue. It was found that carbolic acid in strength above 1 to 200 speedily produced death. Corrosive sublimate always inflicted severe injury upon the brain tissue, even as weak as 1 to 10,000. Boracic acid in 3 per cent. solution was found to be absolutely devoid of injurious effects. The deductions from these experiments are that the use of carbolic acid and bichloride of mercury should be avoided in cases of wounds of the brain.

THE TREATMENT OF PERFORATIVE PERITONITIS.

There has recently been a case under care in London which shows a continued advance in the surgical treatment of peritonitis due to the perforation of an ulcer in the duodenum. These cases are of the most fatal kind, and death rapidly follows the intense peritonitis which supervenes on perforation in this situation. Abdominal section has frequently been performed with the view of arresting this fatal course; but we are not aware of any operation which has been completed by excision of the ulcer and suture of the wound thus made. It is usually very difficult to find the

point of perforation, and the surgeon has to be contented with washing out the abdominal cavity and leaving in a drainage tube, the opening caused by the perforation still permitting of the escape of bowel contents into the peritoneum. A young woman, a domestic servant, was suddenly seized with severe pain in the right hypochondrium at 7 p.m. on September 21st. Vomiting set in next morning, and she was then treated for intestinal obstruction by repeated enemata, etc. Becoming much worse, she was admitted to the Middlesex Hospital under the care of Dr. Cayley, who diagnosed perforative peritonitis. Twenty-six hours after the onset of the illness, Mr. Gould opened the abdomen above the pubes, and found the pelvic organs and the vermiform appendix normal, and the fluid that escaped from the peritoneal cavity acid in reaction. He, therefore, made another incision above the umbilicus, and found a small circular perforation in the anterior wall of the first part of the duodenum. This he excised, and closed the opening in the bowel by two rows of silk sutures and an omental flap. There was intense general peritonitis. The peritoneum was washed out with several quarts of warm boric solution and drained by a glass tube in each wound. About two pints of salt solution were injected into the left median cephalic vein. The patient died (from the peritonitis) ten hours after the operation. At the *post-mortem* examination it was found that the lesion had been entirely excised, that the wound was water-tight, and that no other ulcer was present. There was intense general peritonitis. Had the case been treated immediately after the occurrence of the perforation, there is reason to think that a favorable result might have been obtained.—*Lancet*.

THE TREATMENT OF BURNS.

Antiseptic treatment, combined—when necessary—with skin-grafting, has done much to reduce not only the suffering, but also the deformity consequent upon this comparatively common and too frequently serious injury. In a recent paper, T. S. Morton (*International Journal of Surgery*) outlines tersely, but clearly, the more modern treatment of this class of cases. He says:

Burns and scalds, if of any considerable area, are attended by much shock and very low temperature. The paradoxical complaint of those severely burned is of intense cold. This is often, but not always, accompanied by agonizing pain. This shock should be relieved by the usual warm, external applications, and by the hypodermatic administration of such agents as atropia, digitalis, and brandy. Pain in this stage can best be relieved by subcutaneous doses of morphia; particularly should this agent be given in those cases where the burns extend over two-thirds of

the body, and death can be postponed but a few hours. In certain cases after reaction from shock is complete, and pain remains severe, it is well to induce full anesthesia while a thorough primary dressing is applied to all the injured parts. While under the anesthetic, the patient must be kept as warm as possible, and but a single part exposed for dressing at a time.

For the pain of less severe burns, nothing is so efficient as dusting the parts thickly with bicarbonate of soda, and upon this applying a plain gauze dressing wrung out of warm water. To preserve the required moisture of this dressing, rubber or gutta percha tissue should be bound upon the outside. This dressing should be left on but a few hours, or a day at the outside, when it should be replaced by some application which will render the parts sterile, and maintain them, as nearly as possible, in that condition. Or, if it is desired to at once proceed with the final dressing, a strong solution of the soda may be applied by immersion of the parts, or placing upon them of mops of absorbent cotton wrung out of the solution. Application, by the same means, of two per cent. solution of cocaine also answers this purpose very well. It is, however, but rarely necessary to apply either the soda or cocaine, as most burns, when they reach the surgeon, have passed the acutely painful stage, or have assumed an angry, suppurative condition from home treatment. In these latter cases, as well as in all where the pain is not very acute, the carbolic bath to be mentioned in connection with the dressing will exert ample analgesic effect to produce comfort.

When pain has moderated and shock has disappeared, the following is my customary procedure: All detached fragments of skin or other tissue are carefully dissected away, and the covering of any blebs is likewise removed. The parts are then immersed or bathed for ten minutes in a two and a half per cent. solution of carbolic acid. This accomplishes a double purpose: the burn and its surroundings are thoroughly sterilized, and the exposed or irritated nerve ends are benumbed into comparative insensibility. The carbolic solution has the additional advantage of sterilizing any fatty matters that may be upon the skin, and extends its antiseptic action down into the sudoriparous and fat glands. If any portions of clothing or other material adhere firmly to the burned surfaces, it is well to allow them to remain until thrown off upon the dressings. The soaking in carbolic solution will render all such sterile.

The injured regions are next subjected to a spray of full strength peroxide of hydrogen solution. This, with all detritus arising from its action, is washed away with salt solution (one drachm of common salt to the pint of water). The parts are now covered in completely with strips of Lister protective, which should extend for half an inch upon sound skin in all

directions. If extensive areas are to be thus covered, and expense is an object, gutta percha tissue may be substituted for the Lister silk protective, but the latter is far superior. Either of these protectives should be immersed for some moments in the carbolic acid solution before application. A copious dressing of sterilized gauze should next be neatly applied so as to well overlap the edges of the protective strips, and over this a thin layer of absorbent cotton is bound with moderate compression. If the burns have become very septic, it is well to apply the gauze wrung out of 1-4000 bichloride solution, and cover the dressing in with the rubber or gutta percha tissue to retain it in a moist condition. In either case the dressings should be renewed not later than every second day. Sometimes daily dressing of an originally very septic burn will be necessary.

Thorough spraying with the peroxide of hydrogen solution (diluted if its full strength application gives rise to pain), washing with salt solution, reapplication of the protective strips, gauze, and cotton, constitute the necessary steps in redressing until cicatrization is complete, or the surfaces are granulating and ready for skin-grafting. Bathing with the carbolic or 1-2000 bichloride solution may also be necessary until asepsis is perfect. Any sloughs that may form in the process of healing are apt to separate very slowly under antiseptic conditions, but their removal may be hastened by dissecting them out (cutting a little within the edges of the slough to avoid pain and hemorrhage).

Contraction is then much less extensive when burns have been treated antiseptically, but very large denuded areas in the neighborhood of joints, the neck, breast, or small surfaces near the mouth or eyes, are still liable to produce sufficient contraction to be undesirable. Much the same line of treatment is to be maintained until the entire surface is covered by healthy granulations, and epithelium has commenced to form on it. If, then, it becomes apparent that undesirable contraction will be inevitable, if the natural process of healing is permitted to continue, Thiersch's operation of skin-grafting must early be resorted to, and the denuded surface covered in, as much as possible, with new skin.

Where burns are situated near or in the flexures of joints, whether grafting is resorted to or not, splints should be applied to resist the tendency of the parts to assume a fixed position during healing. When several fingers or toes are burned, each one should be dressed separately, that the cicatrizing surfaces may not come in contact and permit two or more of the digits to grow fast together; here grafting is often of great utility.

In burns and scalds about the genitalia, nates, and portions of the face or ears, the protective and gauze dressing cannot always be well applied or kept in position. If it slips and permits the parts to become dry or

adherent to the gauze or bandages, more harm than good will result. In these regions we may be forced to rely upon some form of ointment. But, even under these circumstances, washing with carbolic or salt solution and spraying with the peroxide solution, with frequent change of dressings, will maintain the parts in a state of very fair disinfection, and largely abate odor, suppuration, and fibrous cicatrization. The preparation that has given me the most satisfaction for this purpose is the benzoated oxide of zinc ointment spread thickly upon lint, dusted with iodoform or aristol, and bound on with the usual thin layer of absorbent cotton. Or a mask of the spread and dusted ointment can be cut and simply laid upon the face, with openings for the mouth, nose, and eyes. Of the two dusting powders mentioned, aristol is much to be preferred because of its more active antiseptic and anesthetic powers, as well as its lack of odor.

In general burns, an air or water bed is almost essential for the comfort of the sufferer; it also prevents pressure upon denuded parts and the formation of bedsores.—*Philadelphia Polyclinic.*

PEDIATRICS AND ORTHOPEDICS

IN CHARGE OF

W. B. THISTLE, M.D., L.R.C.P. Lond.,

Assistant Demonstrator of Anatomy, University of Toronto; Physician to Victoria Hospital for Sick Children; Clinical Lecturer on Diseases of Children in the Woman's Medical College;

AND

B. E. MCKENZIE, B.A., M.D.,

Lecturer on Orthopedics and on Surgical Anatomy in the Woman's Medical College, and Surgeon to the Victoria Hospital for Sick Children, Toronto.

VICTOR HORSLEY ON THE TREATMENT OF CEREBRAL TUMORS.

In the opening address in this section, Prof. Victor Horsley points out the futility of continuing mercurial treatment over a lengthened period, and urges early operation, either for the purpose of removing the growth or as a palliative measure. He agrees with Louis Starr when he says that "if mercury and iodide of potash fail to relieve in three months, or if within that time the symptoms rapidly increase, the operation is not to be performed." Only in the case of syphilitic or tuberculous growth is there the slightest chance of cure from mercurial treatment. Undoubted cases of tubercular nodules have recovered, but most frequently with blindness or defect, and after death the cicatrized nodules have been found.

Prof. Horsley leaves this part of the subject, and turns to the question of operation. "He would advise operation (*a*) for removal and cure of the neoplasm. Cure in the case of malignant growths cannot be expected except the operation be done at as early a period as it would if the tumor were in the leg, for example. Innocent tumors are more certainly cured by operation. Gummatic frequently give rise to a chronic and progressive meningitis, and this the author thinks can be prevented by operation at an early date for the removal of these growths. (*b*) Operation is strongly urged for relief of the classical symptoms of tumor, headache, optic neuritis, and eventually blindness, and vomiting. Prof. Horsley found that in every case where the skull was opened, no matter whether the tumor was removed or allowed to continue its growth, the headache was relieved, and in the case of the latter the relief from severe pain persisted until the patient's death. Regarding the optic neuritis, the effect of opening the skull was to at once diminish the swelling of the disc, and, if atrophy has not commenced, go on to complete recovery. With reference to vomiting, as soon as the tension is relieved it stops."

Opening the skull has the effect in many cases of, in some way, causing the growth to degenerate and disappear. This, Prof. Horsley observes, is in harmony with the well-known tendency of cerebral tumors to undergo degeneration. Such a result cannot be expected as likely to follow of necessity, but it is an argument in favor of deliberately opening the skull for the purpose of palliating a condition which cannot be cured.

Concerning the shock of operation, formerly many died, but this can now be wholly avoided by the simple expedient of doing the operation in two stages: in the first merely the exposure of the skull and removal of the bone.—*British Medical Association*, August, 1893.

ANTIDIPHThERIN.

Kunne (*Wien med. Blatter*, December 14th) has tried Klebs' "antidiphtherin" (see *British Medical Journal*, November 11th, p. 1070) in four cases of diphtheria in Elberfeld Hospital. In two of these, the children were admitted with moderately high fever and slight membranous formation on the tonsils. They were at once treated with applications of a 5 per cent. solution of antidiphtherin three or four times a day, and on the following day the fever had subsided and the membranes had disappeared. In a third case in which the affection was very severe, with abundant formation of false membrane, tracheotomy had to be done on the second day after the commencement of the treatment; and as the application could not be made in the usual way, a 1 per cent. solution of antidiphtherin was dropped into the trachea through the cannula, but without effect. The child died from extension of the disease process to the bronchial tubes. In the fourth case the patient was a member of the assistant medical staff of the hospital, who contracted the disease at a tracheotomy. As soon as false membranes were visible, applications of antidiphtherin were begun. The remedy appeared at first to have a favorable effect; the membranes began to disintegrate, and the fever subsided on the day after treatment was begun. Soon, however, the membranes formed again and spread over the palate and uvula, and at the time of Kunne's report the issue of the case was still doubtful. He thinks, however, that it may fairly be concluded that in this case the remedy had no particular effect.

EFFECTS OF ALCOHOLIC ABUSE UPON POSTERITY.

A distinguished specialist in children's diseases observed ten families of drinkers and of temperate parents for a period of twelve years. He records his observations as follows:

The ten drinking families produced in those twelve years fifty-seven

children. Of these, twenty-five died in the first week of life, of weakness, of convulsive attacks, or of edema of the brain and membranes. Six of the children were idiots; five were stunted in size, and were of real dwarfish growth; five, when older, became epileptics; one, a boy, had grave chorea, ending in idiocy; five had inherited diseases and deformities, such as choreic hydrocephalus, harelip, and club foot; two of the epileptics mentioned became, by inheritance, drinkers. Only ten, therefore, of all these fifty-seven, or 17.5 per cent., showed during youth normal disposition and development of body and mind.

The ten temperate families produced in twelve years sixty-one children. Of these, five died in the first weeks of weakness; four, in the later years of childhood, had curable nervous affection; two only showed inherited nervous defects. The remaining fifty, or fully 8.19 per cent., were normal in every way, developing well in body and mind.—Dr. A. E. Schmid, *in Medical News*.

PATHOLOGY

IN CHARGE OF

JOHN CAVEN, B.A., M.D., L.R.C.P. Lond.,

Professor of Pathology, University of Toronto and Ontario Veterinary College; Pathologist
to Toronto General Hospital and Home for Incurables.

WOOD (H. C.) ON A NOVEL EXPLANATION OF CHOREIC MOVEMENTS.

The interesting observation was made, clinically, that whereas in chorea the patellar reflex phenomenon, or knee-jerk, was lessened uniformly, this reflex became greatly exaggerated, by reinforcement, if some other voluntary movement were performed at the same time, such as raising the arms or clenching the fist. This he also explained on the theory of weakening of inhibition, and the failure of inhibitory resistance to the overflow of impulse from certain spinal motor cells to neighboring centres.

In the study of the pathology of chorea, it is a strange fact that we have hitherto overlooked the phenomenon of inhibition. The phenomena of chorea, like those of hysteria, are not phenomena of increased excitement of motor centres, but of paralysis of inhibition. The conjunction of increased muscular and nervous discharge, with evident weakness of the spinal centres, is explicable very plausibly upon Wood's theory that the motor cells are weak, but the inhibitory cells are weaker still. It only remains to add that in several patients very prompt and marked improvement followed the application of this theory by the use of full doses of quinine.—Editor, *Boston Medical and Surgical Journal*.

THE BACILLUS OF LEPROSY.

Campana, who has long experimented with the bacillus of leprosy (*Rif. Med.*, Nos. 292 and 293, vol. iv.), believes that he has succeeded in cultivating the organism. He describes the organism which he has cultivated as "a bacillus similar to the bacillus of leprosy," which developed in attempts made to cultivate an organism from tissue taken from a case of tubercular leprosy. The bacillus which he describes has a length of one-third to one-half of the diameter of a red corpuscle of the human blood; that is, it is from two to four micromillimetres long, its breadth at the thickest parts being one-fifth to an eighth of its length. It is usually straight,

but in rare instances somewhat flexed. When stained, the protoplasm is homogeneous, but sometimes interrupted by minute points clearer than the rest. Campana cultivated the organism in agar-agar with grape sugar, with the addition of 1 per cent. peptone. It thrives most luxuriantly at a temperature of 37° to 37.5° C. Treated with fuchsin and nitric acid, it retains the red coloration until placed in the second stain, which then takes the place of the first.—*British Medical Journal*.

OBSERVATIONS ON PERNICIOUS ANEMIA.

Various observers, as Klebs, Frankenhauser, Bernheim, etc., have described motile organisms in the blood in pernicious anemia. These, however, are now regarded as being simply altered blood corpuscles. Perles, adopting the hanging-drop method, has found peculiar motile bodies in the blood in three cases of pernicious anemia. They are best seen at the margin of the drop in the spaces between the corpuscles. Their shape varies with their position. When flat, they appear as long, narrow, thin, ovoid platelets; when on edge, as rods, standing on end almost as pin points, always surrounded by a clear zone due to their high refractility. Their size is constant; length, 3.4m.; breadth, one-sixth of length; thickness, one-twentieth of length. Their movement, which is more or less fish-like, varies in rapidity. They may wander across the field in a few minutes. He is inclined to believe that they possess a flagellum, but this is not definitely proved. They have not been observed in cover-glass preparations fixed and stained by the ordinary methods. Attempts at cultivation have failed. They were constantly present in all the specimens of blood examined by the hanging-drop method, and were especially numerous in those from the most severe of the three cases. They were absent from the blood in a large number of cases of secondary anemia.

Perles is inclined to regard these as living organisms, presumably protozoa, and also, from their constant presence in the blood of pernicious anemia cases, as the exciting cause thereof, but reserves final conclusions until after further examination.—Perles, in *Berlin klin. Woch.*, No. 40, 1893.

PRESERVATION OF PATHOLOGICAL SPECIMENS.

Moreau, of Tours, describes, in the *Journal of Hygiene* for October, 1893, a new method of preserving morbid specimens in such a manner as to show out their characteristic lesions. The various methods heretofore employed, though preventing putrefaction, do not preserve color. Moreau's procedure is as follows: The specimen is prepared according to ordinary methods, being dissected so as to make plain important points,

and mounted on a frame in glass, if it be large. So much done, the specimen is then colored, the colors applied representing exactly the natural tints, and then the whole preparation is submerged in the preserving fluid. Dr. Moreau has specimens which were prepared thus twenty years ago, and which have undergone no alteration. Oil colors cannot be utilized, since they are soluble in alcohol. Certain water colors also, which are prepared with dextrine, are soluble in alcohol. Those which may be used are five fundamental colors, viz., Prussian blue, chrome yellow, silver white, vermillion, and smoke black. These, and mixtures of them, give all the tones necessary. They ought to be pulverized, or, better, sifted. The colors should be tempered, according to the preservative employed, with a concentrated solution of gum arabic or the best gelatines. In place of the latter a cold solution of albumen may be used.—*Rev. Intern. de Bibliog. Med.*

GRAVE'S DISEASE.

In the Bradshaw Lecture for 1893, Professor Greenfield shows reason for considering exophthalmic goitre to be primarily an affection of the thyroid gland. He has held this view for some years, although nearly all English pathologists have believed otherwise. We give his own summary of evidence :

(1) The examination of the thyroid in Grave's disease reveals, in nearly all cases, a peculiar form of proliferation, resembling a proliferation for the performance of increased function.

(2) Partial or entire removal of the enlarged gland affords relief.

(3) The changes in the nervous system are such as may be seen in toxic diseases, *e.g.*, hydrophobia, and suggest toxic origin.

(4) The symptoms and anatomical changes in myxedema and Grave's disease contrast in such a manner as to suggest the local origin of both.

(5) The phenomena of Grave's disease correspond in important respects with those due to thyroid feeding.

The conclusion is that in Grave's disease the symptoms are due to an overproduction of the special elements manufactured normally by the thyroid, the overproduction being a result of overgrowth of the active glandular tissue of the organ.

Thyroid extract, in proper doses, acts as a remedy in myxedema ; in excessive doses, it gives rise to toxic symptoms. In Grave's disease a more or less continuous overdosing goes on from the enlarged gland, and the symptoms are those of a toxemia.

Editorials.

THE CANADIAN PRACTITIONER.

THE *Canadian Journal of Medical Science* made its first appearance in January, 1876, under the editorship of Drs. Uzziel Ogden and Richard Zimmerman. The title was found to be a heavy load to carry; and, as a consequence, in time the more modest name of THE CANADIAN PRACTITIONER was given to it. By the latter title our journal is now fairly well known to the profession in our own country, and to a certain extent beyond the Dominion of Canada.

In January, 1888, Messrs. The J. E. Bryant Co., of 58 Bay street, Toronto, assumed the business management of the journal, and have retained it up to the present time. As proprietors of THE CANADIAN PRACTITIONER, the members of the company have always taken a deep interest in its success; and in the year 1892 gave the editor full permission to enlarge the journal, improve its appearance, and increase the editorial and contributing staff, with a view of putting it on a level with the best medical publications in the world. They also decided that no expense would be spared in attaining the object they had in view.

The generosity and enterprise of the publishers were highly appreciated, and a strong effort has been, and is being, made to produce a medical magazine which will be a source of pride to men who have shown such a strong desire to furnish a really good medical journal, and at the same time a source of satisfaction to the medical profession of Canada. We are glad to be able to say that the publishers are quite satisfied with the success which has been achieved. We have also reason to believe that the members of the profession are not dissatisfied with our progress.

We have much pleasure in announcing that in the future our eighty pages of ordinary reading matter will not be marred by the presence of inserts or fly-leaves of any description pertaining to advertisements, nor will they contain what are called reading notices of articles advertised. Our advertisements

will appear in the place allotted to them, and none of an objectionable character will be allowed to appear.

We desire to tender our thanks to the numerous friends who, during the past year, have said many kind things about 'THE PRACTITIONER. It is unlikely that we shall make any further comments on these matters for some time to come. We will allow the journal to speak for itself, with the hope that it will be judged only and solely on its merits. We trust that all our subscribers will make it a point to remember us, and send us contributions from time to time. The success of any medical journal depends largely on the character of its original articles. Will our friends kindly remember this, and endeavor to do their share in making THE CANADIAN PRACTITIONER a first-class journal in all respects?

TEMPERAMENT.

IT seems to be generally admitted that the world has lost the greatest physician of this century through the death of Sir Andrew Clark. Many kind things have been said about him, and much that is exceedingly interesting with reference to his life and character has appeared in both the lay and medical press. While holding the highest position among physicians in Great Britain, he was also highly honored and esteemed by many of the most distinguished men of his country outside of the profession of medicine. Mr. Gladstone and the late Lord Tennyson were two of his most intimate friends. It is well known that he was in poor health a great portion of his life; and yet he did an enormous amount of work. Some think that he should have reserved his strength by doing less work, by which course of conduct his life might have been prolonged.

The *British Medical Journal*, December 2nd, has an interesting article on the subject of temperament, from which we quote the following:

"Far be it from us to say that a man shall close his ears to the advice of his friends and well-wishers, but let his well-wishers remember that a man is not made up of snips of wisdom; but, if he be a man of mark, he has his own temperament, and by this temperament he will stand or fall. This temperament may, no doubt, be modified by education during the earlier and more plastic years of life, but it may also be spoiled. In any case, it must be taken as a whole and educated as a whole, not tinkered at in detail; for, inconsistent as its parts may seem to be on the surface, all its parts have an organic consistency within.

“Had Andrew Clark delegated much of his work to others ; had he availed himself of labor-saving devices ; had he shirked work lest work should kill him, he would have been a more calculating man, perhaps a more prudent man, but he would have been another man. Do we wish him other than he was ? Do we wish that one striking personality had been wanting to the roll of the great men of our day ? If not, then let us cherish the memory of Andrew Clark thankfully, as of one who has been well compared with a soldier who listens to no counsels of safety as he goes into battle, and with that sentry who, overwhelmed with ashes from Vesuvius, stood to his post.”

DR. SANGSTER AND THE MEDICAL COUNCIL.

DR. SANGSTER, of Port Perry, having received a requisition signed by a considerable majority of the medical electors of Territorial Division No. 12, has consented to allow his name to be placed in nomination for the next election of the Ontario Medical Council. We have no desire to discuss any issues, personal or otherwise, which may come up in the election for this division—in fact, at the time of writing, we know not who will oppose him ; but we desire to say, in a general way, that the election of Dr. Sangster, as a member of the next council, is very desirable, for various reasons.

As secretary of the Ontario Defence Association, he has shown great activity and undoubted ability ; and, we think, he may be fairly considered the chief representative of that very strong organization. He is, therefore, in a way, the leader of the opposition, and, as such, should have a seat in our medical parliament. He has been firing pretty hot shot into the ranks of the council ; his party has achieved a most signal victory ; and it seems proper, all things considered, that he should be invested with the responsibilities of office. As an attacking sharpshooter, he has shown but little mercy ; he has hardly noticed the white flag—which was never held up very high, however. As a member of the council, he might become less radical and less extreme ; he would certainly discuss ably and intelligently the various medical questions requiring deliberation and legislation.

We have received a copy of Dr. Sangster's letter of acceptance in answer to the requisition. It contains a clear exposition of his views respecting a number of the vexed questions which are now creating so much interest in the ranks of the medical profession of Ontario. We have extracted from the letter that portion which deals with council matters,

and publish it in this issue of *THE PRACTITIONER*—not because it represents the views of any one man, but because we regard it as practically the platform of the Defence Association at the present time.

ONTARIO MEDICAL ASSOCIATION.

WE are requested by the secretary to remind the members of the Ontario Medical Association that the next meeting will be held in Toronto early in June. Members who intend to prepare papers for the meeting are requested to send in the titles of such as soon as possible. It will be remembered that the meeting of last year was not up to the average, as far as numbers were concerned; but the falling off was probably due to causes which will not exist during the year 1894. We will have no World's Fair nor Pan-American Medical Congress to act as counter-attractions for our members.

The association has been, in many respects, very successful in the past; and now, it seems to us, has reached a stage where it cannot stand still. Will it take decided steps in advance, or will it fall backwards? That depends entirely on its members. Never in the history of medicine in Ontario have we had a better class of practitioners in this province, nor a greater number of men well qualified to write able and well-digested papers.

The scientific worker in the laboratory and the intelligent general practitioner has each his proper sphere in an association such as this. Many of those who have borne the chief burden in the past will prefer now to see younger members step forward and do the major portion of the work. We believe that the younger men will be found quite equal to the occasion, if they can be induced to act; but we sincerely hope that each of them will not wait for a special invitation from some officer of the society before he commences to prepare his paper.

Correspondence.

DR. SANGSTER'S VIEWS ON MATTERS PERTAINING TO THE MEDICAL COUNCIL.

Dr. J. H. Sangster, of Port Perry, has sent a circular letter to the medical electors of Division No. 12. We extract from it the following statement of his views on certain questions now before the electorate:

(1) The Ontario Medical Act contains a number of provisions that have been conceived in the interests of the profession, and some that, from the same standpoint, call for repeal. As soon as such amendments as the experience of the past, and a general consensus of professional opinion, show to be necessary shall have been secured, the Act, in its essential features, should, I think, be carefully preserved.

(2) The Medical Council must be retained, and, by every possible means, strengthened, as a barrier against mendacious quackery and the too easy access of new men to the profession. While I am in favor of very materially modifying its composition so as to make it strictly elective and representative, and, at the same time, less unwieldy in bulk and less costly in maintenance, I would diligently oppose anything being done to lessen its usefulness, or to hamper it in its action as our executive. I would remodel it—not to destroy, but to perfect, and to establish it on a just and more enduring basis. The territorial representation has been increased from twelve to seventeen, not because it was thought desirable to enlarge the council as a whole, but because, owing to the present divergence of opinion among medical men, that was found to be the only practicable mode of securing to the profession a controlling voice in the management of its own affairs. As soon as practitioners, generally, recognize the fact that a large measure of professional abasement is involved in their tame submission to the unwarrantable dictation and interference of school appointees, an effective remedy will be found within their easy reach, and, thereafter, a homogeneous council of ten or twelve members will prove amply sufficient for our protection and government.

(3) While emphatically reaffirming the principle of self-government, pure and simple, and recording my conviction that we shall eventually secure it, I am prepared—pending the full development of public and professional opinion on this point—to insist on the elimination, from the council, of the representatives of defunct institutions or those no longer having a separate corporate existence, and the strict limitation of the functions of the remaining university appointees to matters of curriculum and education.

(4) No sensible man desires to see the practice of medicine made a close monopoly, but the public is almost as much concerned as the profession in keeping the number of practitioners within reasonable bounds. Yet our ranks have been suffered to become so much overcrowded in Ontario that there are now fully twice as many medical men in the province as the public service requires. The demoralizing and injurious tendencies of this large surplusage on the profession itself must be obvious to all. The schools have, in the furtherance of their own interests, suffered the professional curriculum to become as advanced as can reasonably be required, but the same dominant influence has, since the election of the present council, secured the degradation of the matriculation standard, and, as a consequence, the new medical matriculants registered annually by the council have increased during the last three years from 70, in 1890, to 125 in 1891, and to 210 during only the first ten months of 1892. I am prepared to advocate an immediate and material increase in the requirements for matriculation, and the adoption of a single professional examination—comprehensive, rigid, and impartial—to be held at the close of the student's course of study. I do not approve of multiplied examinations on the instalment plan, or of supplemental or of simultaneous examinations. I hold that it is not the business of the council to thus oil the approaches to the profession. It appears to be quite as anxious to secure new recruits as the Foreign Mission Board of any live Christian church. I consider that this is unnecessary in the present lamentably overcrowded condition of the profession, and that in facilitating access to our ranks, by these and other means, it is alike disloyal to the public and to the medical electorate. The Medical Council owes, or should owe, a higher and a more imperative duty to those who are already members of the College of Physicians and Surgeons than to those who simply desire to become such.

(5) The finances of the council call for wise and careful management. The most rigid economy, compatible with efficiency of service, must be insisted on, and not only should a detailed annual statement of receipts and expenditure be submitted to the profession, but the accounts should be subject to an annual audit by reliable and impartial officers, appointed

from outside the council for that purpose. I need not here enter into any detail of the many particulars to which retrenchment is both possible and desirable; but I unhesitatingly express my conviction that, when unnecessary items of expenditure are lopped off, and extravagant outlays curtailed, and the mere luxuries of officialism sharply reduced, the council's ordinary income will be found amply sufficient to meet its liabilities without the assessment of any annual tax.

(6) If, however, through the contraction of its yearly receipts, and notwithstanding the exercise of such wise economy as the board of a company of shareholders would employ in the management of its finances, it should become requisite, in the more or less immediate future, to supplement the council's ordinary income, I would agree to a moderate tax on the profession—always providing the educational bodies, having and using the right to speak and to vote in the council, by their representatives, on questions involving the expenditure of money, agree or are compelled to assess themselves proportionately. The certainty that, in future, an assessment on the electorate will necessitate a liberal contribution from the schools will probably have the effect of making the appointees, while they remain constituent parts of the council, much more economically inclined than they have been heretofore, and will thus tend to obviate the necessity of either assessments or contributions.

(7) In no case would I agree to the reinstatement of the penal clause known as section 41 (a), which, in 1891, was surreptitiously engineered into the Ontario Medical Act by the present council, and which, together with the assessment clause, in spite of the determined opposition of the council, was suspended by the Legislature last spring, and remains a dead letter, unless restored and put in force by the men whom you and your professional confreres throughout the province are now about to elect.

(8) I believe that the law never contemplated the council becoming the holder of real estate for the purposes of speculation, and that the sooner the council can disembarass itself of its Toronto property the better. I do not, however, think that the property in question should be recklessly sacrificed. I would advocate its being placed in the hands of a real estate agent, and sold as soon as a price is offered which approximates anywhere nearly to its cost. Having relieved itself of this incubus, the council, for less than half the sum it now annually pays as interest on the mortgage, would probably be able to lease its present accommodation; or, failing this, it might proceed to erect, in a less expensive locality, an unpretentious structure, suitable to its wants, and easily within its means.

(Sgd.) JOHN H. SANGSTER.

CANADIAN MEDICAL ASSOCIATION.

A GOOD many years ago it occurred to some of the members of the profession in the Dominion that there should be a way of forming a closer bond of union among the doctors in all the provinces. With that object in view, a medical conference was called, with delegates from each of the provinces, to consider the matter. They met in the hall of Laval University, Quebec, on Wednesday, October 9th, 1867. Dr. James Arthur Sewell, president of the Quebec Medical Society, was in the chair. Dr. Alfred Belleau acted as secretary.

After some preliminary business had been transacted, Dr. Wm. S. Harding, of St. John, N.B., moved, seconded by Dr. William Marsden, of Quebec, Q., "That it is expedient for the medical profession of the Dominion of Canada to form a medical association, to be named 'The Canadian Medical Association.'" Carried.

A nominating committee was appointed. They brought in a report, which, after some discussion and one or two amendments, was adopted. The first officers of the association were: President, Hon. Charles Tupper, C.B., Halifax, N.S.; vice-presidents: Quebec—Dr. Hector Peltier, Montreal, Q.; Nova Scotia—Dr. R. S. Black, Halifax; New Brunswick—Dr. LeBarm Botsford, St. John; Ontario—Dr. E. M. Hadder, Toronto; general secretary, Dr. Alfred G. Belleau, Quebec; local secretaries: Quebec—Dr. W. H. Hingston, Montreal; Nova Scotia—Dr. James R. DeWolf, Halifax; New Brunswick—Dr. W. S. Harding, St. John; Ontario—Dr. Wm. Canniff, Belleville; treasurer, Dr. Robert Henry Russell, Quebec.

Thus commenced an organization the value of which cannot be overestimated by the profession of this Dominion. Since then large and successful provincial societies have sprung up, and it has been thought that the work of the Canadian Medical Association has been completed.

Fortunately for the profession generally, this opinion has been held by but a limited number, and up to the present all attempts to curtail its usefulness have failed. During the last few years there has been much enthusiasm over the meetings, and the attendance has been large. Next year the meeting will be held in St. John, N.B., some time in September; and, if united effort can do anything, the members of the profession in the Maritime Provinces intend to make this one of the most successful meetings the association has ever known.

F. N. G. STARR, Secretary.

BRANT COUNTY MEDICAL ASSOCIATION.

THE usual quarterly meeting of the Brant County Medical Association was held on December 4th, 1893, in the hall of the John H. Stratford Hospital, Brantford. There was an unusually large number of members present, both from the county and city. Dr. Griffin, president, in the chair, and Dr. Keane, secretary. The subject of the advisability of nominating a candidate as representative in the Ontario Medical Council for Division No. 8, which includes the counties of Brant, Haldimand, Simcoe, and Welland, at the next election was discussed, and the following resolution was moved by Dr. Addison, St. George, seconded by Dr. Dunton, Paris: "That we, the members of the Brant County Medical Association, in convocation assembled, desire to express our appreciation of the valuable services rendered by our representative, Dr. D. L. Philip, in the Ontario Medical Council during the past ten years; that we desire to express our hearty approval of the general policy pursued by the Medical Council in legislating for the benefit of the public and the profession, and in which our representative has taken a prominent and useful part; and also, as important questions are likely to arise in the near future affecting the welfare of the profession, and in which his knowledge and experience in the council would be of benefit to the profession, that it would not be desirable to change the representative at the present time, and that we, therefore, respectfully request Dr. Philip to allow himself to be nominated as a candidate in the election for 1894." Carried unanimously.

Dr. Philip, in accepting the nomination to become a candidate for another term, thanked the members for the hearty support which he had always received from them and from the profession throughout the division while acting as their representative in the council. In the event of his election he would endeavor to serve them faithfully and to the best of his ability, and he would ever entertain a grateful remembrance of their kindness, whether elected or not, in the support which he had received at their hands. Dr. U. M. Stanley, Brantford; Dr. Burt, Paris; Dr. Harris, and others, spoke in the most commendatory terms of the course pursued by their representative, and trusted that, under present circumstances, he be elected without a contest.

Dr. Bremner, Toronto, gave an address on Orthopedic Surgery, more especially the treatment of spinal curvature, showing some ingenious mechanical contrivances in their treatment. On motion, a cordial vote of thanks was tendered to him for his instructive address. A paper by Dr. Bishop had to be postponed till next meeting, owing to want of time. Several routine matters were disposed of, and the meeting adjourned till the first Wednesday in March.

M. I. KEANE, Secretary.

Brantford, January, 1894.

Book Reviews.

PHYSICIANS' OFFICE DAY-BOOK. Designed by C. Henri Leonard, A.M., M.D., Professor of Medical and Surgical Diseases of Women and Clinical Gynecology, Michigan College of Medicine, Detroit. Price, \$2.00; postpaid to any address. Issued by *The Illustrated Medical Journal* Company, Detroit, Michigan.

In speaking of Leonard's pocket day-book in our November issue, we referred incidentally to the larger office day-book as above described. The writer of that notice stated that he had used the office day-book with satisfaction for eight years. Since that time another member of our editorial staff has adopted the Leonard system, and considers that this office day-book is the best of the kind available. It is so arranged that it will last four years for twenty-five families per day, two years for fifty families per day, or one year for one hundred families per day. The family names need to be written but once per month.

THE PHYSICIANS' VISITING LIST (Lindsay & Blakiston's) for 1894. Forty-third year of its publication. Philadelphia: P. Blakiston, Son & Co.

This has been a favorite visiting list for a long time; in fact, ever since its first issue, forty-three years ago. It contains in its earlier pages a good deal of useful information on various subjects, including the metric system of weights and measures, dosage, new remedies, incompatibilities, poisons, disinfectants, etc.

The general arrangement of the visiting list is convenient for practitioners. After the visiting list proper comes a portion of the book which contains blanks for general memoranda, addresses of patients, accounts, obstetric engagements, obstetric reports, etc. It contains much in a small space, and occupies but little room in one's breast pocket.

INTERNATIONAL CLINICS. A quarterly of clinical lectures on medicine, neurology, pediatrics, surgery, genito-urinary surgery, gynecology, ophthalmology, laryngology, otology, and dermatology. By professors and lecturers in the leading medical colleges in the United States, Great Britain, and Canada. Edited by John M. Keating, M.D.; Judson Daland, M.D.; J. Mitchell Bruce, M.D., F.R.C.P.; and David W. Finlay, M.D., F.R.C.P. Published by The J. B. Lippincott Company, Philadelphia.

Volume I. of the third series has been in hand for some months, but, from an oversight, it has not been reviewed. It is an especially good number. The

clinics are concise, yet thorough. When we see such names as David W. Finlay, F.R.C.P., Sir Dyse Duckworth, M.D., Beverley Robinson, M.D., Roswell Park, M.D., J. Bland Sutton, M.D., Arpad E. Gerster, M.D., Reeves Jackson, M.D., A. Pearce Gould, F.R.C.S., appear as the authors of these clinics, we need nothing further to confirm our opinion of their high order. The series has been exceedingly popular amongst the profession, and deservedly so, because the editors have exercised the greatest care in selecting the clinics, and have only utilized those of practical value.

A SYSTEM OF GENITO-URINARY DISEASE, SYPHILOLOGY, AND DERMATOLOGY. By various authors. Edited by Prince A. Morrow, A.M., M.D. In three volumes. Published by D. Appleton & Co., New York. Toronto agency, Geo. N. Morang, 63 Yonge street. Subscription only. Volume II., "Syphilology."

The second volume of Morrow's system contains a rare collection of the very highest opinion on the subject of syphilis. Each chapter is written by a gentleman who has paid some more *particular* attention to the subject in hand. It opens with a chapter on history and geographical distribution, by Dr. J. Nevin Hyde, which is exceedingly interesting reading.

Chapter II., by Dr. J. A. Fordyce, on the etiology, is very carefully prepared. It deals with the syphilis poison—the micro-organism of syphilis—and shows the difficulties that have been, and are, in the way of demonstrating it. The different methods of making sections, and staining, to best discover them are all thoroughly discussed. Dr. Bulkley discusses the modes of infection.

The primary affection is treated by Dr. Bronson. This chapter is a most important one, and should be read carefully. The difficulties in the matter of diagnosis in some sores are well put forward, and means of sailing safely between Scylla and Charybdis are pointed out. It is an exceedingly difficult question to answer, in some cases, and a positive answer requires much mature consideration.

Dr. Zeisler, of Chicago, treats of constitutional syphilis—that is, in its secondary stage, in the resulting cachexia, in its effects on injuries sustained by the patient, etc. The many different organs are each treated of in chapters by themselves—that of the skin, possibly the most frequently affected, taking up two chapters, one by Dr. Morrow, and the other by Dr. Alexander.

Hereditary syphilis is treated of in five chapters, and the whole range of the subject well gone into. There are three chapters, particularly, that should be carefully read and digested—those on "Diagnosis and Prognosis," by Dr. Hermann G. Klotz; "Prophylaxis and Treatment," by Dr. J. William White; and "The Relation of Syphilis to Public Health, Marriage," etc. In these three chapters much valuable knowledge is contained. The whole bibliography of the subject has been gone through, and the opinions *pro* and *con* are given, with the personal views of the writer. They are all written with a freedom of opinion that is charming, but you can easily recognize the authority behind each statement; it is analyzed for you, and the argument is usually very clear.

We most sincerely recommend the work to the profession. Those who see many cases cannot afford to be without it, and those who only see occa-

sional cases ought not. They will always find contained in the volume the best and latest authority, together with the opinions held long ago.

The publishers can again be congratulated on the typography, presswork, and binding of this volume. We shall look forward with renewed expectation for the concluding volume on Dermatology.

ANATOMY, DESCRIPTIVE AND SURGICAL. By Henry Gray, F.R.S., Lecturer on Anatomy of St. George's Hospital, London. New American, from the thirteenth enlarged and improved English edition. Edited by T. Pickering Pick, F.R.C.S., Examiner in Anatomy, Royal College of Surgeons of England. In one imperial octavo volume of 1100 pages, with 635 large engravings. Price, with illustrations in colors: Cloth, \$7; leather, \$8. Price, with illustrations in black: Cloth, \$6; leather, \$7. Philadelphia: Lea Brothers & Co., 1893.

We are glad to see that the American edition of this great English text-book of anatomy is no longer issued as a work greatly modified by the American editor. No one would impugn, for an instant, the ability of the editor of former American editions, but this text-book is essentially an *English* text-book, and is best known under the editorship of Mr. T. Pickering Pick. We prefer to have it (as in the present American edition) in a form in which he alone is responsible for the statements therein contained. The system of adding a large amount of information (in brackets) by an American editor is, to our mind, a great mistake. It alters the character of the work, and in no sense tends to improve it.

Of recent years mistakes, usually of minor importance, have crept into this work. These have been corrected, from time to time, and the present edition seems to be more free from such errors than its predecessors. There are certain inaccuracies which still exist. As an instance of this, we will mention one. The temporal muscle is described (p. 405) as arising from the whole of the temporal fossa, *except that portion of it that is formed by the malar bone*. In the description of the malar bone (pp. 198 and 199), the bone is figured with an attachment of the temporal muscle represented thereon, and the statement is made that the temporal muscle *is* attached to it. Here there is a discrepancy in the statements, the mistake being in the description of the bone.

This work stands in the front rank of anatomical text-books. It has always been a favorite with students of all schools, and it is safe to predict that the reputation which it has attained will continue to be preserved. There is no work of the kind more widely used and more deservedly appreciated.

Medical Items.

PROF. OSLER, of Baltimore, visited Toronto during the Christmas holidays.

PROF. BERGMANN has been elected Dean of the Medical Faculty of the University of Berlin.

DR. A. JACOBI, of New York, was offered the position of Professor of Pediatrics in the University of Berlin, but declined to accept it.

MISS EMILY WINIFRED DICKSON, M.B., Royal University, obtained the Fellowship of the Royal College of Surgeons, Ireland, December 1st.

DR. JAMES CAMPBELL, of Detroit, formerly a student of the Toronto School of Medicine and a graduate of Victoria University, 1882, died Nov. 18th.

DR. M. V. MULCAHY (Tor., '89), of Elk Point, South Dakota, has been appointed a member of the Pension Examining Board of Washington, D.C.

DR. HARLEY W. SMITH delivered a lecture on the subject of "Nervousness" in Toronto at a meeting of the Y.W.C. Guild on Monday evening, Jan. 8th.

THE contributions from England and her colonies to the Semmelweiss memorial fund amount to only about four hundred dollars, but it is hoped that additional contributions will come in.

A QUARTERLY meeting of the Huron Medical Association was held in Seaforth, January 9th. We are glad to learn that this admirable society continues to be in a flourishing condition. We wish there were many more of the same sort in various parts of Ontario.

THE *New York Journal of Gynecology and Obstetrics*, which enters on its fourth year this month, will in future be published by Messrs. D. Appleton & Co. This journal has been remarkably successful during the last three years; and its future, considering the ability of the editors and the well-deserved reputation of the Appletons, is likely to be a very bright one.

DR. JAMES F. W. ROSS, of Toronto, will read a paper on "Influences Affecting the Results of Abdominal Operations" at the Albany meeting of the New York State Medical Society. After the meeting he expects to go to Philadelphia and spend a few days as the guest of Dr. Joseph Price, who expects to have some hysterectomies on hand at that time.

THE new journal being published at Louisville, Kentucky, is to be called *Matthews Medical Quarterly*. It will be devoted to diseases of the rectum, gastro-intestinal diseases, and rectal and gastro-intestinal surgery, under the editorship of Dr. Joseph M. Matthews, Professor of Surgery and Clinical Lecturer on Diseases of the Rectum in the Kentucky School of Medicine.

DR. EGERTON Y. DAVIS, who so highly distinguished himself by his publication of the results of his investigations among the savage tribes of the great Northwest Territory, paid a recent visit to Toronto. He likes not the commonplace things of civilized life, and it is rumored that he has returned to his old haunts, where he is likely to remain until he is called to the "Happy Hunting Grounds."

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.—After a somewhat exciting contest, Dr. J. Russell Reynolds was elected president of the college in the place of Sir Andrew Clark, deceased. The vote was a very close one; Dr. Reynolds, who represents the interests of the University College, received seventy-five votes, while Dr. Samuel Wilkes, who represents the interests of Guy's Hospital, received seventy-two votes.

CANADIAN MEDICAL ASSOCIATION.—We publish in this issue an interesting communication with reference to the Canadian Medical Association from Dr. Starr, the secretary, containing an account of the organization of the Canadian Medical Association in Quebec in the year 1867. The next meeting will be held in St. John, N.B., some time in September, 1894. We understand that our brethren in the east are making arrangements to give us a cordial greeting, and we hope there will be a large attendance from Ontario, Manitoba, and the Far West.

LONGEVITY AND OVARIOTOMY.—Dr. Harris, of Philadelphia, has written to Sir Spencer Wells to inform him that there is living, and in excellent health, an unmarried lady, 81 years of age, for whom the late Dr. John L. Atlee performed ovariectomy in June, 1843, more than fifty years ago. Dr. Harris asked if this case can be paralleled in England. This was Dr. Atlee's first ovariectomy. He had 80 cases; he operated on seven in the year he became 84 years of age; he performed tracheotomy when nearly 85, and died when nearly 86. We are indebted to Sir Spencer Wells for the interesting facts furnished by Dr. Harris.—*Brit. Med. Journ.*

WE have received a short report of the last meeting of the Brant County Medical Association, which we publish in this issue. It contains a resolution with reference to the candidature of Dr. D. L. Philip, of Brantford, in the next election for the Ontario Medical Council, and cordially endorsing his actions in the past as a member of that body. We think it will be generally admitted that Dr. Philip has been a very useful member of the council during the last ten years. He is rather a worker than a talker (although he can talk enough when it is desirable). He has shown excellent judgment, as a rule, and has made few mistakes. He is very highly respected by his conferees in and about Brantford, and we are told that he is likely to be re-elected.

At a meeting of the Hamilton Medical and Surgical Society, held January 17th, the following officers were elected: President, Dr. G. S. Rennie; vice-president, Dr. J. W. Edgar; secretary, Dr. R. H. Gowland; treasurer, Dr. Balfe.

HURON MEDICAL ASSOCIATION.—At the annual meeting of this association, held in the Mechanics' Institute, Seaforth, on Tuesday, the 9th January, papers were read by Dr. Bruce Smith and Dr. Campbell on "Typhoid Fever and Alopecia Areata," along with the presentation of cases in their practice, eliciting interesting discussion. The following officers were elected for the ensuing year; President, Dr. Turnbull, Clinton; vice-president, Dr. D. Smith, Mitchell; secretary-treasurer, Dr. Shaw, Clinton. Dr. Bruce Smith was chosen as the candidate of the association for a seat in the Ontario Medical Council. The next meeting will be held in Clinton in April. J. W. Shaw, M.D., secretary.

The International Medical Congress will meet in Rome, March 29th to April 5th, 1894. We have received communications from Dr. Jacobi, chairman of the American International Committee, from which we extract as follows: First, paper to be read should be announced on or before Jan. 31st, 1894; second, the title of the paper ought to be accompanied with a brief abstract of its contents and conclusions; third, the reductions granted by the railway companies will be available from March 1st to April 30th, 1894; fourth, it will be in the interest of those attending to obtain credentials from Dr. Jacobi, and also passports, before sailing for Europe; fifth, "travelling documents" will be sent to subscribers on or before Feb. 15th, 1894, after that date "congressists" will have to apply to Dr. Jacobi; sixth, members dues are \$5, guests dues are \$2, all are entitled to "travelling documents."

In the *Buffalo Medical and Surgical Journal* for December, 1893, we find that a Mr. Anthony Comstock, a special agent of the Post Office Department, has been on a visit to Buffalo, and has placed the manager of the Daggett Table Company under arrest. According to the *Buffalo Medical and Surgical Journal*, the cause of this arrest was the fact that the company had mailed circulars that were unmailable, and that were in violation of the statutes, no matter for what purpose they were intended or used. The journal says, further, that such an attack is absurd; for if it were held by the court to be just, the whole illustrated literature of medicine must necessarily be excluded from the mails. Scarcely a medical journal can be picked up but would be liable to seizure, and its editors liable to arrest, if such plates as those of the Daggett Table Company are contrary to the statutes relating to mailed matter. We will look with considerable interest for the final settlement of this case. It seems to us that it should have but one ending, and seems, further, absurd that such an attack should have been commenced.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The eighty-eighth annual meeting of this society will be held on February, 6th, 7th, and 8th, at Albany. We learn from the provisional programme that over seventy papers have been promised, mostly by regular members, and also by parties living in Canada and certain States of the Union outside of New York, who have been

specially invited. Among the invited guests whose names appear on the programme, we find the following: Dr. J. F. W. Ross, of Toronto; Dr. W. Gardner, of Montreal; Drs. Joseph Price and C. F. Noble, of Philadelphia; Drs. C. A. L. Reed, A. W. Johnstone, and R. B. Hall, of Cincinnati; Dr. Howard Kelly, of Baltimore; Dr. W. E. B. Davis, of Birmingham; Dr. D. P. Allan, of Cleveland; Dr. Cushing, of Boston; and Dr. Daly, of Pittsburg. Among the regular members who will read papers, we find the following: Drs. Satterthwaite, O'Dwyer, Jacobi, Coe, Boldt, Skene, Mundé, Currier, Sturgis, Powell, Bulkley, McBurney, Meyer, Bryant, St. John, Roosa, and Morris, of New York; and others equally well known from Brooklyn, Buffalo, and other cities of New York State. The meeting is likely to be a very successful one.

OBITUARY.

DR. GEORGE HENRY BOULTER, of Stirling, County of Hastings, died, after a short illness from pneumonia, January 18th. He graduated at the McGill University, 1852, and was one of the best known and most popular physicians in Central Canada. He had for many years a large and lucrative practice. In addition, he devoted much time to municipal and provincial politics; was warden of his county for a time, and also represented it in the Ontario Legislature for sixteen years. He was an enthusiastic volunteer, and was for many years colonel of the 49th Battalion, Hastings Rifles.

ROLPH BIDWELL LESSLIE, M.A., M.D., L.R.C.P., LONDON.—Dr. Rolph Lesslie was a graduate in Arts and Medicine of the University of Toronto. After receiving his degree in medicine, he went to England, where he became a licentiate of the Royal College of Physicians of London. He also did post-graduate work in Berlin and Vienna. During the Servian war he went out with the Turkish army as Surgeon-Major. During the Russo-Turkish war he served with the Red Cross Ambulance, and saw a great deal of hard fighting. At the close of the war he was appointed medical officer to the Turkish Compassionate Fund (organized by the Baroness Burdette-Coutts). He afterwards served with the English army during the Zulu war. After this he spent nearly two years in London, where he held Resident Hospital appointments. He then visited India, China, and Australja, after which he went to Congo, with others, on a special mission for the King of the Belgians. On his return he was thanked by the king for his services, and shortly afterwards was again sent to Africa, where he remained two years. Shortly after this he went on a tour round the world.

Dr. Lesslie was a son of Mr. Lesslie, the ex-postmaster of Toronto, and a brother of Dr. Jos. Lesslie, and was well known and highly esteemed by his friends in this city. It was hoped many times during his wonderfully eventful career that he would return to his own country for permanent residence. He paid a few visits to Toronto, but could not be induced to remain long. He was subject to serious perils, and endured great hardships at different times in his life, but especially during his last experience among the wilds of Africa. It is possible that his health and strength were in this way permanently impaired. At the time of writing we know not the particulars as to his last illness, excepting that he died of fever on the island of Dominica, West Indies, December 20th.