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CANADA MEDICAL & SURGICAL JOURNAL

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Original Communications.

VIENNA LETTER.

NERVOUS DISEASES—SPINA ON TUBERCLE BACILLUS.

(From our Special Correspondent.)

VIENNA, March 12, 1883.

Diseases of the Nervous System.—There is probably no department of medicine better taught in Vienna than the nervous system. The material for teaching is abundant, and, what is much more important, the teachers are able, thorough, and hard-working men. In any large city, material for clinical purposes in this, or, in fact, in any special department of medicine, is sufficiently plentiful, if only men can be found who are both able and willing to make use of it. There are courses here on the coarse and minute anatomy of the nervous system by Professors Meynert and Exner, on the experimental physiology by Prof. Obersteiner, and on the pathology of the central nervous system by Prof. Stricker. Professors Meynert, Rosenthal, Benedikt, and docent Weiss have each their daily kliniks, at which they give clinical demonstrations of nervous cases. Prof. Nothnagel, who is the director of one of the general medical kliniks, directs special attention to nervous cases. Prof. Meynert is the director of what is called the "observation wards." Cases of epilepsy, hysteria, delirium tremens and "borderland cases" are under his charge. He also oversees and gives special instruction to those who want to work at the finer anatomy of the brain, a department he has done much to clear up by a long series of very patient and laborious investigations. Prof. Benedikt, who

has for many years occupied a prominent position in the scientific world, is still a very hard worker. Besides his daily klinik, he conducts a course on what he calls craniography. Professor Rosenthal is well known to your readers as the author of an excellent little work on the nervous system, which appeared in Wood's Medical Library. Although an old man, he still works away at his cases with great vigor.

The Causes and Treatment of Locomotor Ataxia.—Locomotor ataxia is by far the most frequent of all the chronic diseases of the spinal cord. In spite of its pronounced symptoms, it is very frequently mistaken for something else. It is often called rheumatism, "flying neuralgia," paralysis, or "disease of the spinal cord." There is not a week but one sees in some of the kliniks a case of locomotor ataxia that has generally been called something else, and what happens here happens also in Canada. This is not a matter of indifference, as some "practical physicians" may think, but one of vast importance. The opinion is steadily gaining ground that locomotor ataxia is, at least in its earliest stages, a curable disease. Erb and Weiss are both convinced that the early treatment of this disease will, in the near future, be generally practised. At present, this is not usually done, for when the diagnosis of locomotor ataxia is made, the patient is usually told that he has an incurable disease. Prof. Benedikt has stretched both sciatics for not only the relief of the pain in locomotor ataxia, but also for the cure of this disease. The latter object he, however, has never attained, and he has come at last to the conclusion that it is not attainable by these means. He showed recently a woman whose sciatics were stretched over a year ago, with the effect of not only banishing the pains, but also of greatly benefiting the trouble in other respects. The patellar reflex, which was absent before, returned after the operation, and she ceased to suffer from the paresis of her bladder and rectum also after the stretching. She was also able to walk round much better. Lately, however, the ataxia, bladder and rectum paresis, as well as the loss of the knee reflex, have returned, and are all, in fact, more pronounced than they were previous to the operative interference. He con-

siders, however, that the stretching of the sciatics and crurals will always remain one of our most valuable means in relieving patients from the terrible pains which are often present in this disease.

As to the cause of locomotor ataxia, it is well known that Erb, Gowers and others have recently published statistics which showed that in about 50 per cent of cases there was a distinct history of syphilis. Weiss of Vienna, who has carefully examined over 100 cases, could only find a syphilitic history in about 10 per cent—a per centage not higher than could be found in 100 healthy persons. Weiss maintains that exposure to wet and cold is the great cause of tabes dorsalis. After the short campaign of 1866, there were many cases of locomotor ataxia in the Austrian army. In one regiment, as many as ten cases occurred. This is attributed to the fact that they suffered great privations from lying night after night on the wet ground. It would be very instructive if the statistics of the Canadian cases could be collected. The writer is of the opinion that it would be found that raftsmen would head the list. If syphilis was a direct cause of locomotor ataxia, we would expect some benefit from anti-syphilitic treatment. It has, however, been shown that neither mercury nor iodide of potassium have any beneficial influence over it.

In Vienna, electricity is considered to be the best means we at present possess in retarding the progress of this disease. It is even asserted by a few that a cure is at times possible. The direct application of the galvanic current to the spinal cord is the method usually employed; one pole being applied to the nape of the neck, and the other over the spine, in the lumbar region. Strong currents of long duration should be avoided. Daily sittings of from 3 to 5 minutes' duration are recommended by both Benedikt and Weiss. To treat this, or, in fact, any other disease, by electricity in a scientific manner, it is absolutely necessary that the physician should make use of a good galvanometer. Different persons possess greatly different powers of resistance to the electrical current, and it is only by employing the galvanometer that this resistance can be measured. At the

meeting of the International Electrical Congress last summer it was decided to use a new form of galvanometer. This instrument, which is made by Dr. Edelmann of Munich, has been in use here for three weeks. It is found to be very sensitive, and it possesses a still further advantage over the older forms, in the fact that when the needle is deflected it immediately comes to rest, and does not oscillate for a minute or more. It is called a *Milliampère*. In future, in reporting the electrical condition of muscles or nerves, the expression, "it took 10, 20 or 30 milliampères to bring out a contraction," will have to be used, and not that "5, 15 or 20 cells were used." In some people 5 cells will deflect the needle more milliampères than 20 cells in others.

The faradic brush is recommended highly by some German physicians in locomotor ataxia. Rumpf of Bonn reports two cases of at least temporary cure by this means.

In addition to exerting a beneficial influence over the general state of ataxics, galvanism is useful to relieve some of the most annoying symptoms that these patients suffer from. The lightning pains are often subdued when one pole (the positive) is placed over the spinal column and the other over the painful spots. The bladder and rectum troubles can also be relieved by the same means.

The internal use of nitrate of silver is still believed in here as a means of retarding, in many cases, the progress, and, in a very few cases, of actually curing, locomotor ataxia.

The controversy which has been going on during the last five years between Westphal and Erb as to the nature of the "knee phenomenon" has at last apparently been settled. Westphal has always maintained that it was a "local phenomenon," a muscle tonus. Erb, on the other hand, contended that it was of a reflex character. Schultze and Furbinger's experiments have proved that it is a true tendon reflex. That the absence of the patellar reflex is not always to be relied on as a diagnostic symptom of tabes dorsalis is proven by the fact that it is absent in about 2 per cent. of healthy people. Neither, as the following case shows, does its increase prove the absence of tabes. A man,

aged 25, with a good family and previous history, began to complain two years ago of giddiness and headache. Shortly afterwards both internal recti were paralyzed. His present state is as follows: There is atrophy of both optic nerves. He is impotent, and has difficulty in voiding both urine and fæces. He complains of "lightning pains" in his lower extremities. There is numbness of the feet and in the little fingers. There is no ataxia. The patellar reflex is *increased*. He has been under Weiss's care during the last two years, and is steadily growing worse. There can be no doubt about the nature of this case, despite the absence of ataxia and the presence of an increased patellar reflex.

Unilateral Paralysis of Nine Cranial Nerves.—The following remarkable case has been shown by Weiss during his present course. It has also been demonstrated before the Medical Society of this city by Prof. Bamberger. The patient is a married woman, aged 53. She has had several children. Four years ago her menses ceased. Previous and family history good. The first symptoms of her present trouble commenced in the spring of 1880, with pain in the right parietal region, extending backwards to the occiput and forwards to the temporal region of the same side. The pain, which was continuous, was worse at night. The removal of four decayed teeth from the right lower jaw was not followed by any relief. She is still troubled, although not so severely as formerly, with this pain. In the fall of 1880, paresis of the right facial and the right abducens nerves was noticed. In 1881, she had inflammation of the eye, followed by ulcers on the cornea. She first came under observation in the hospital shortly afterwards. Her present state is as follows: Examination of the thoracic and abdominal organs is negative. The motor and sensory innervation of the extremities and sphincters is normal. She is well nourished. There is complete paralysis of the right facial nerve. The reaction of degeneration which was previously present has disappeared, on account of the nerve being completely destroyed. Over the whole of the right half of the tongue there is loss of taste and common sensation, showing that the chorda tympani and glosso-

pharyngeal are likewise affected. There is complete immobility of the right eye-ball, with ptosis, proving that the third, fourth, and sixth nerves are likewise implicated. The right cornea is thickened, turbid, and adherent to the iris. The conjunctiva is injected. In spite of the turbidity of the media, she is able to count fingers, which proves that the optic nerve has escaped. An accurate ophthalmoscopic examination is not possible. The right corneal reflex is destroyed. There is diminished sensation of the right side of the face. The temporal and masseter muscles of the right side are much wasted. A tuning-fork or watch placed over the right parietal bone is heard much less distinctly than when placed in a corresponding position on the other side of the head. She, however, hears a watch placed close to the right ear better than when placed near the left ear. In spite of the latter fact, Bamberger considers that the acoustic nerve is involved. He explains the better hearing of the watch on the right side by attributing it to an extreme tension of the tympanum, brought about by the unopposed action of the tensor tympani, its antagonistic, the stapedius (a branch of the facial) being paralyzed. The right trapezius and sterno-mastoid muscles are atrophied, but not paralyzed. There is loss of sensation and motion in the right half of the larynx, showing paralysis of both the superior and inferior laryngeal nerves. These two nerves are properly branches of the spinal accessory and not of the vagus. At least this is the view now held by several eminent physicians. This case itself goes a long way to prove that this view is the correct one, seeing that the vagus otherwise is not affected. The right half of the tongue is atrophied, and the seat of fibrillary twitchings. In this case, then, it is seen that the following nine of the twelve cranial nerves are paralyzed in a greater or less degree. The third, fourth, sixth and facial are completely paralyzed. The spinal accessory and the trigeminus (sensory and motor portions) are in a high degree paretic. The glosso-pharyngeal, hypoglossus and acoustic are only slightly paretic. The olfactory, optic and vagus have escaped. As it is impossible for the morbid process in this case to have either a peripheral or cortical origin, its seat must be either in the base

or in the medulla itself. There are several reasons why the latter situation should be considered the seat of the affection. 1. A unilateral affection of the meninges at the base covering such a large area as would be necessary to involve all the nerves affected here is extremely unlikely. 2. The fact that the trophic branches of the spinal accessory have suffered, and the motor have remained free, is almost sufficient of itself to prove that the process is seated in the medulla. As to the nature of their change, Bamberger and Weiss are both of the opinion that it is similar to what takes place in bulbar paralysis.

The Tubercle Bacillus.—The interest in the tubercle bacillus question, which was lately beginning to wane, has been suddenly revived by the publication of a pamphlet in this city, having for its title "*Studien über Tuberculose.*" The author is Dr. Spina, one of the assistants in Prof. Stricker's Institute. Spina maintains that he is able to color other bacterial forms, besides those of tubercle and lepra, blue by means of Koch's or Ehrlich's method. This statement is in direct contradiction to Koch's, who says that by his method there are no known bacteria which are colored blue, except those of tubercle and lepra. Spina says that by treating putrefactive serum and blood by Koch's coloring method he has discovered bacteria which retain a blue color, and which resemble those found in the sputa of tuberculous patients so much that it is impossible to distinguish the one from the other. Spina further maintains that there is no constancy in the size of Koch's tubercle bacillus, as is maintained by the latter. He says that in a tuberculous nodule you find bacteria of different colors and sizes, and he asks, How is one to tell the pure bacillus among all these? He contends that the most careful examination of tuberculous sputa is often negative. He says that it is extremely hard to find bacilli in the tuberculous nodule of serous membranes when examined immediately after the cavity is opened, but easy when it has been exposed to the air for some hours. He concludes his work by giving an account of a few experiments where he has inoculated animals with a cultivated fluid prepared after Koch's method, and where there was no tuberculosis induced. If Spina's statements are correct, it, of course, follows

that there is nothing distinctive in the bacilli found in tuberculous sputa and infiltrations. His methods of coloring are very unfavorably criticised here. His pamphlet had not been three days issued before a paper was read in one of the medical societies by Dr. Frisch, who endeavored to show that his work was valueless. The leading pathologists do not speak very highly of it either, some of them even saying that they feel ashamed of it as a Vienna production. This week Koch himself has replied to Spina, and not in very complimentary terms either. After referring to some of his American critics (Cutter, Formad and others) in a rather contemptuous way, he says that Spina knows nothing about bacterial pathology, and that his *Studien über Tuberculose* will have no influence, one way or another, over the tubercle bacillus question. "It's only effect will be to damage the reputation of the author and the Institute where he works." Koch, in his letter, adduces no additional facts in support of the existence of a special bacillus for tubercle. He considers none are necessary. Neither has he repeated his former experiments. Among many physicians, however, there is a feeling that Koch is far from being all right and Spina all wrong. Koch, in his letter, goes out of his way to cast a slur on Professor Stricker, because such a work was issued from his Institute, and because he does not know more about bacterial pathology. Prof. Stricker, a few days after the appearance of Spina's pamphlet, publicly stated that he had nothing to do with it either directly or indirectly. He devotes all his energy to the nervous system, and lays no claim whatever to being acquainted with the modern methods of detecting bacilli.

VALEDICTORY ADDRESS TO THE GRADUATING CLASS, 1883.

BY G. P. GIRDWOOD, M.D., M.R.C.S., ENG.

Professor of Chemistry and Practical Chemistry, McGill University.

GENTLEMEN GRADUATES,—We are assembled here to-day to confer on you the degree of Doctor in Medicine and Master in Surgery, the degree to which you are entitled by the industry you have displayed in following out the curriculum laid down

by the authorities of this university for your pursuance, and the satisfactory manner in which you have acquitted yourselves in the closing exercise thereof, the examinations of the past fortnight. The medical faculty, your teachers, congratulate you on the measure of success you have achieved : a success which they hope will be only a prelude to that greater success you will obtain in years to come in the practice of the profession of your choice.

It is customary on occasions like the present to offer a few words of advice, which it is hoped may guide you in the performance of the arduous duties you now assume. The degree which has just been conferred on you is an honorable one. It derives its honor first from the profession to the practice of which it is the gateway ; for what occupation can a man find more honorable than that which has for its object the alleviation of the distress of his fellow men, the assuaging of their pain, and the restitution of their tortured bodies to health and vigor—an occupation wherein the Great Physician himself took infinite pleasure, and left an undying example for you to follow. And secondly, the degree you have just now obtained is honorable from the position of respect it holds. Throughout the world wherever a graduate hailing from McGill University presents himself he is received with respect, and his views listened to with attention. This position has only been obtained by the unwearied exertions of the professors of the different chairs keeping ever in the van, and by the conduct and labors of the graduates who have preceded you, who have performed their duty, always laboring for the good of their *Alma Mater* during the half century of her existence of which the present is the closing day. Thus in assuming this degree, and in taking its obligation you have just now sworn to, you have taken upon yourselves new and serious duties. To uphold the high position of distinction which has been acquired for the degree of your *Alma Mater* by the fifty classes of graduates who have gone forth from these halls of learning before you, and to practice your profession *caute, caste, et probe* ; in the performance of these duties you will meet with dangers, difficulties and tempta-

tions. The medical adviser is generally the friend of the family, and oftentimes family secrets are confided to his keeping, and his advice sought upon matters not simply professional. In all such cases you must be ready to listen, to give advice; it is often a great relief to tell a tale of woe to some sympathizing ear, to relieve the over-burdened breast by a confession, and no one is so often called upon to receive such confidences as the physician, and you must most sacredly respect the confidence thus bestowed upon you.

Your motto must be, "*semper paratus*," ever ready by night or day to attend the summons of the sick, for if not ready those who trust themselves to your care may lose their lives by your neglect or ignorance, and such an occurrence, the loss of a life valuable to others even indirectly caused by you, would entail upon you a life-long regret. The what to do and how to do it must be a knowledge ever present to your mind. There is no time to consult books or authorities; now, now is the golden opportunity with you, a few minutes hence the chance of doing is gone, the patient is dead. You have passed through the curriculum and examinations which the law claims from you; but that by no means ends your career of studentship, in fact you are but beginning it; you now know how to study, what to observe, and how to record it for future benefit. You must cultivate all your senses to the finest appreciation of all the points that present themselves. It is by cultivation that plants are improved, and the wild varieties made to yield the beautiful flowers we delight to see, and that plants poisonous in themselves are improved so as to yield food not injurious to man. So by cultivating your senses, you will be the better enabled to grapple with the cases committed to you by cultivating your sight; you will be able to detect new beauties in objects every day presented to your observation, to recognize substances when you see them, and determine the novelty of something you have not been accustomed to. The practice of the use of the microscope will reveal to you many facts previously hidden from your view. Your sense of smell, if cultivated, will be of great service to you; enabling you perhaps to detect some

poison that may have been taken, or the indulgence of some forbidden habit. By a refined and cultivated touch you will be able to perform the necessary examinations of a broken or diseased structure so gently as to give only the minimum of necessary suffering. You will in your practice meet with patients who whilst intending to give a truthful account of their ailments, and to tell you the whole truth about themselves, nevertheless deceive themselves and thus deceive you; or, again, you will meet with others who wilfully deceive themselves and those around them, and even try to do the same to the physician in attendance, to the formation of whose opinion of their case the truth on their part is absolutely necessary, as otherwise an opinion founded on false premises, and therefore itself erroneous, will be given; or if the patient be perfectly truthful you will find, perhaps, interested persons who surround your patient, purposely trying to throw dust in your eyes by misleading statements; you must be prepared to sift all these statements and verify them or prove their falsity, so that you may have a really sure foundation on which to base your opinion. Therefore you will find a cultivation of your powers of observation invaluable to you for finding out the physical signs of health and aberrations therefrom. Your success in life financially will depend to a large extent not simply on your talent or the correctness of your judgment, but upon the good opinion formed of you by your patients. The visit of the physician is often times looked upon by the patient as the single oasis in the miserable day desert of his sickness; your advent will be watched for with eager expectancy, and your departure be the signal for a return of the miseries of a hypochondriac. By a genial manner, a gentle voice, and a demeanor expressive of sympathy with their sufferings, real or imaginary, and oftentimes the imaginary are more serious to the patient than the real, you will win their confidence, and when they pass from your care, you will receive their thanks as well as their remuneration for your services. Too often you will find thanks your only recompense, and not unfrequently you will find both remuneration or thanks not tendered, or if given, given grudgingly.

ingly, and with such a bad grace it were almost as well not given at all. And even after doing your best, and that best all that any other man could do, you will find dissatisfaction expressed, and attempts to extort money from you as damages for malpraxis, because the results of your labors have not been attended with such success as your exacting patient required. Such patients you must regard as the hard task master Pharoah, and pity them that their hearts had not been fashioned in a gentler mould. By attention to your business, to the needs of your patients, and a careful scrutiny of your conduct, you can not fail to succeed. The prizes in the profession are few; but the best of all is within the reach of every member: A clear conscience, void of self-condemnation. If you so conduct yourselves throughout your career that in years to come, in the decline of life, you can look back and find no case wherein you can condemn yourselves for any failure in your duty, then will you appreciate the motto: "*Olim meminisse juvabit*," which doubtless expresses your present hope.

You now leave these halls of learning and for a time sever the friendships you have formed during the past four years. Friendships with your teachers which we trust may be strengthened by many years of intercourse to come, for we shall be glad at all times to hear from you all, of your prospects and successes in life, and be assured we shall at all times be ready to assist you by advice or otherwise. The friendly rivalry which has existed between you as fellow students will be continued in after life, and strive in these relations to be in charity with all men. If you differ in opinion with a professional brother, and become entangled in a dispute with him, be careful how you assert your own opinion, yield due deference to your opponents views, do not claim for yourself what you will not freely grant to him; but rather argue quietly the subject of disagreement, and be prepared to yield your own opinion if proved wrong as freely as you would demand his recognition of your view if his be proved erroneous, remembering always that absolute truth regardless of consequences is the object of our search.

Keep notes of cases occurring under your care ; they will be useful for reference, and will afford you material for future thought, and enable you to compare your own practice with that of others under similar circumstances ; be careful in noting the exact circumstances surrounding your case, often the most timid affords a clue to the explanation of some difficulty. Keep up your knowledge, what you have now learned will be only a basis to start upon ; you will find that what you now know in every branch of your studies will suffer loss by time and the multitudinous occupations of the practice of your profession ; it will therefore be necessary for you to read the current journals so as to keep posted with the latest views of others. This whole world is one of change, although in the cycles of years similar conditions may arise, although similar, they are never the same ; and as the diameter of a circle is a third and a fraction of the circumference, so you will find that the circle never comes back exactly to the same point, but that there is always a slight divergence.

I would press upon you the development of your chemical knowledge, and in doing so I may be thought egotistical ; but at the risk of such a charge I would still urge a devotion to that branch of your study, as I know of no branch which will give you more information or a more general opportunity of enlarging your minds. The laws of chemical union are definite under certain conditions, and it is the conditions under which chemical changes take place that require your special attention, and by close observation of the surrounding conditions you will eventually be led to a just diagnosis.

Devote a portion of your time to original research. The field of enquiry is ever expanding, and like the kaleidoscope, whose infinite changes are the result of a re-arrangement of a few particles, so we find in the world the mutation of elementary principles few in number as regards their surroundings, ever producing new developments, and as we recognize new departures from pre-conceived ideas, we gradually change our ideas to meet the requirements of the newly observed facts. The late experiments of Pasteur and the evidence he has

brought forward, show that the theories of physicians of fifty years ago were true; those physicians reasoning from analogy were correct, but they lacked the necessary experimental philosophy to prove their theories. We have vaccination as a preventive against small pox, who shall say how soon we may have a similar process as a preventive against other diseases, which a new condition of surroundings may make more common amongst us. I only indicate one line in which your original research may be continued, there are many others, from which each may select the one that best suits his taste.

And now having given you these few words of advice on behalf of your teachers, I bid you go forth on your business of life with its struggles and cares, and may the God of your fathers prosper you in all your undertakings.

ON THE TREATMENT OF PUERPERAL SEPTICÆMIA BY A NEW METHOD—INTRA-UTERINE SUPPOSITORIES OF IODOFORM.*

By T. JOHNSON ALLOWAY, M.D., L.R.C.S. & P., EDIN.

Consulting Physician Montreal Dispensary; Attending Physician Department for Diseases of Women, West End Free Dispensary, Montreal.

[These Suppositories are made up with cocoa butter, holding finely powdered Iodoform together, in any strength required. They have been prepared for me by Mr. McGale, Druggist, St. Joseph Street, and Mr. John Lewis, of Victoria Square.]

The main object of this paper is to place before the profession a record of three cases of puerperal septicæmia, treated with iodoform, which have occurred to me in private practice within the last twelve months. I may say that I have been unable to find this plan of treatment previously recorded in the literature within my reach. The practice I advocate is the introduction within the uterus of suppositories, containing from ten to twenty grains of iodoform, night and morning, the idea being to replace the *frequent and often unsatisfactory intra-uterine injections of antiseptic fluids*. Iodoform as an antiseptic and cleanser of foul wounds on the surface of the body, has won for itself an

* Abstract of a paper read before the Medico-Chirurgical Society of Montreal.

honoured place in general surgery, and it occurred to me that it might also prove of value in lesions of the parturient tract. The site of the separated placenta has been compared to the stump of a limb after amputation. The lacerations of the cervix and following soft parts are but lacerated and contused wounds from a surgical point of view. And if iodoform has proved of signal value in these conditions in surgery, it is quite reasonable to suppose that it would also do so under similar circumstances in obstetrics. Feeling this view of reasoning to be logical, and that some good might come from it, I treated my cases in the following way :

CASE I.—A. B., aged 23. Attended her 20th June, 1882. Fœtus dead some time and in an advanced state of decomposition. Amniotic fluid, dark and very offensive. In this case I washed out the uterus with a three per cent. solution of carbolic acid directly after delivery, and ordered nurse to use carbolized vaginal injections every two hours. All went well until June 23d (3d day), when patient had a severe chill. She became very restless towards evening. Temp. 104.5° F. ; pulse, 130 ; flushed face. No pain complained of. Examination with Sims' Speculum showed passage quite clean, with very faintly offensive odour. By aid of forehead reflector I introduced a 15 grain suppository of iodoform, pushed to near the fundus with an ordinary stilette sponge tent introducer. Prescribed plenty of ice for her to suck.

June 24th, Morning.—Temp., 101° F. ; pulse, 110. She had had a good night ; no more chills. Washed out uterus with plain warm water, and introduced another suppository in the same way. At nine that evening temp. 102° F. ; pulse, 115. Feels well ; no chill. Introduced another suppository. Odor of Iodoform very strong, and powder covering thickly the external parts.

June 25th, Morning.—Temp., 99° F. ; pulse, 86. Feels well ; bowels acted freely during last night. Another suppository of 10 grains. *Evening.*—Temp., 100° F. ; pulse, 100. Another suppository of 10 grains.

June 26th.—Convalescent.

CASE II.—C. D., aged 30, fourth pregnancy. Attended Sept. 24th, 1882. Easy labor; all well.

Sept. 26th.—Found patient suffering intense perimetritic pain. Had had a severe chill some hours before. Temp., 103.5° F.; pulse, 126. Much excited; exclaiming she would surely die this time. Administered hypodermic of Battley, applied turpentine to hypogastrium, followed by linseed poultices. Washed out uterus with three per cent. sol. of carbolic acid as discharges were very offensive, and passed up 10 grain suppository of iodoform. *Evening.*—Much more quiet; temp., 104° F.; pulse, 130; passed up 10 grain suppository.

Sept. 27th, Morning.—Had a good night, no more pain. Temp., 100° F.; pulse, normal. Washed out uterus with plain warm water, and passed up suppository 10 grains. *Evening.*—Not so well; temp., 102° F.; pulse, 110; restless. Washed out uterus again with plain warm water, and passed up two 10 grain suppositories.

Sept. 28th, Morning.—Feels well; washed out uterus with warm water, and passed 15 grain suppository. External parts now thickly covered with Iodoform. *Evening.*—Temp., 101° F.; pulse, 100; 15 grain suppository.

Sept. 29th.—Same.

Sept. 30th.—Convalescent.

CASE III.—E. F., aged 25. Third pregnancy. Attended her Dec. 13th 1882. Had given birth to twins at sixth month. Both foetuses were quite fresh, and one was said to have moved at birth. Placenta was expelled and seemed entire. The condition of patient was peculiar. She seemed bordering on a state of delirium. Her skin was of a bright yellow color. Countenance had a wild expression. Temp., 105.6°; pulse, 160. Had had a series of recurrent chills ever since yesterday morning. She was at the moment suffering from an intense rigor. Examined uterus and found a piece of placenta, size of half an orange, firmly adherent to side of uterus near internal os. This I removed with curette and forceps; washed out uterus with three per cent. solution carbolic acid. Had no iodo-

form with me, and fearing the septic storm might prove too much for her, gave gr. xx quinine. She had been vomiting violently for the last eighteen hours, so that I do not think she retained much of the quinine. Had no peri-uterine pain whatever throughout.

Dec. 14th.—Much more quiet. Slept very little; temp., 103° F.; pulse still running high (140). Washed out uterus again with carbol sol.; discharge very offensive; introduced two 10 grain suppositories of iodoform. *No more quinine* nor medicine of any kind. *Evening.*—Temp., 100° F.; pulse, 120. No tenderness whatever over uterus, even on forced pressure. No more vomiting.

Dec. 15th.—Fair condition. Temp., 100° F.; pulse, 112. Bowels very loose during night. Skin and conjunctivæ still very yellow; some tympanites. Washed out uterus with plain warm water; introduced one 15 grain suppository. *Evening.*—Not so well; temp., 102° F.; pulse, 120; *no more suppositories at hand.* Washed out uterus with acid carbol sol.

Dec. 16th.—Very bad night. Diarrhœa again set in, also vomiting. Temp., 103.5° F.; discharge fœtid; pulse 124. washed out uterus with plain water, and passed up two 10 grain suppositories of iodoform. *Evening.*—Feels better. Did not wash out uterus, but introduced one 10 grain suppository; parts now covered with iodoform powder. Temp., 102° F.; pulse, 110.

Dec. 17th.—Temp., 100° F.; pulse, 110. No more chills nor vomiting; bowels quiet. From this date until the 21st she remained about the same, and had received one 10 grain suppository night and morning.

Dec. 22nd.—Quite convalescent.

Remarks.—A peculiar feature in the above cases consists in the fact that each of these occurred within a few days of three months of each other; and that although I had attended other patients but a few hours after each case, I did not convey the disease. This we must accept as strong evidence in favor of the good to be obtained by thorough disinfection before examining each new case of parturition.

In the first case it is evident the immediate cause was auto-infection. In the second case I found the nurse had been using an imperfect syringe (no valves), and instead of carbolized water she had been throwing a stream of air loaded with bacteria from a badly ventilated room against the lacerated internal parts. This no doubt was the cause of the trouble.

In the third case the patient had been suffering from septic infection eighteen hours prior to my attendance. At a previous confinement the perineum, sphincter ani and septum were lacerated. The uterus was in the second stage of prolapse, thus exposing the os constantly to the external air, a condition favorable to the entrance of germs. Under such circumstances it can be easily understood that when partial separation of the placenta took place, and blood became effused into and around the seat of lesion, it was an easy matter for germs to find in this blood a suitable soil for their destructive work. Here we have a case of undoubted severity. All the symptoms at the outset of the disease indicating rapid and extensive absorption of virus, notwithstanding which, the marked influence of iodoform in arresting further absorption was most evident. The single dose of quinine the patient had taken on the first evening would have lost its influence at the expiration of twenty-four hours; and the washings, chiefly with plain water, were repeated only at intervals of twelve hours apart; and the only occasion upon which the iodoform was omitted, was followed by symptoms of severe sepsis.

Iodoform as a parasiticide is well known to be one of low power. This I have proved by direct experiment with animal matter outside of the body; but as an antiseptic in such cases as I have recorded, its chief virtue rests in the slow and continuous giving-off of its vapor, so that once the endometrium becomes thoroughly coated over with the powder, and there are occasional simple washings practiced, say night and morning, the uterus becomes an aseptic chamber.

Bacteria are of themselves, we know, harmless in the blood and tissues, probably on account of a catalytic action of the latter. But when they are provided with fluids in or out of the body

which have lost their catalytic action, they, as the yeast plant in the presence of grape sugar, set up fermentation, the result of which is a *virus*, which, when it finds its way into the blood, gives rise to septicæmia. Now we know that iodoform, quinine, and other agents (Bintz) have the power of paralyzing and preventing the migration of leucocytes; and these agents may also have the power of paralyzing germs, and arresting the process of animal fermentation—so to speak—and thus prevent or modify the production of infective virus within the cavity of an organ like the uterus. It is not often material for experience in this terrible disease presents itself to us, nor are we anxious to seek it; but in the limited experience I have had with the above cases, I am convinced of the *unequalled* value of iodoform. And I most conscientiously say that in future I shall not feel that very unpleasant anxiety, so difficult to put aside from us in treating these cases, as I have felt in the past.

In conclusion I may say that in carrying out this treatment by suppositories of iodoform, I place the patient on her left side, retract the perineum with Sims' speculum, and when the os and cervix have come well into sight, I irrigate the uterus for a few minutes with a No. 3 Goodyear rubber fountain syringe; any fluid according to choice can be used. Then I pass a suppository of iodoform on an ordinary stilette sponge tent introducer, to the center of cavity of uterus and withdraw the instrument. At most it is only necessary to repeat the operation night and morning, and the irrigation only for the first two or three days, to thoroughly cleanse the uterine cavity, after which the iodoform will keep it sweet.

CASE I.—A. B.—(Treated by Iodoform Suppositories and *no* Quinine.)

23rd June—Temperature.....	M., ———	E., 104°F.
24th “ “	M., 101°F.	E., 102.2°F.
25th “ “	M., 99°F.	E., 100°F.
26th “ “	M., 98.4°F.	E., 98.4°F.

CASE II.—C. D.—(Treated by Iodoform, *no* Quinine.)

26th Sept.—Temperature.....	M., 103.4°F.	E., 104°F.
27th “ “	M., 99.8°F.	E., 102°F.
28th “ “	M., 98.4°F.	E., 100.8°F.
29th “ “	M., 98.4°F.	E., 98.4°F.
30th “ “	Normal.	

CASE III.—E. F.—(Treated by Iodoform and one dose, gr. xx, of Quinine.)

13th Dec'r—Temperature.....	M., 105.8°F.	E., ———
14th “ “	M., 103.6°F.	E., 101°F.
15th “ “	M., 100°F.	E., 101.8°F.
16th “ “	M., 103.4°F.	E., 101.4°F.
17th “ “	M., 100.8°F.	E., 101.4°F.
18th “ “	M., 100°F.	E., 102°F.
19th “ “	M., 99°F.	E., 100.4°F.
20th “ “	M., 99.2°F.	E., 100°F.
21st “ “	M., 98.4°F.	E., 99.8°F.
22nd “ “	Normal.	

ON A CASE OF LEUCOCYTHÆMIA.

BY G. TILLERIE ROSS, M.D., MONTREAL.

[Read before the Medico-Chirurgical Society of Montreal.]

J. S., aged 24, married, a native of Quebec, was, in January, 1882, suffering from an attack of jaundice, for which I was called to attend.

Previous history.—When seven years of age he removed from Quebec to Altona, near Hamburg, North Germany, where he resided 14 years. This district is said not to be malarial. Returning to Quebec, he remained there 1½ years, since when he has continued to reside in Montreal. While in Germany he had both scarlatina and pertussis. Shortly after recovering from these diseases, he received an accident which injured his bladder and necessitated his confinement to bed during some four months. Till that time, with exception of the diseases referred to, his health was claimed to have been vigorous, but subsequently he never regained the same robust health. Some two years ago he noticed a swollen gland in left inguinal region, which was said to have appeared after a great strain in lifting a stove. This was lanced, but it is said that only blood issued from it. Four months thereafter he was married, and neither the wife, nor the child subsequently born to them, have, up to the present time, given any evidence of specific disease. The patient now began for the first time to notice himself subject to attacks of epistaxis, occurring once or twice a week, sometimes varying to the same number per month. In January, 1881, severe headaches would trouble him frequently, with loss of appetite and strength. About

June, '81, he noticed his abdomen becoming larger. No history of ague. Habits were always temperate.

Family history.—Both parents said to have had good health. His mother still lives; father died at 49 years. Has one brother, whose health is good. No history of any tendency to epistaxis in the family, malaria, or syphilis.

Present condition.—A man of ordinary height and of spare build; chest concave under clavicles and walls so thin that heart's pulsations are distinctly seen. Cardiac impulse increased, and apex beat nearly in line with left nipple. From 3rd costal cartilage to 5th interspace the pulsations are distinct. Second sound has increased intensity over pulmonary cartilage. No murmur present. Abdomen greatly enlarged, being in marked contrast to the sunken, shallow chest. Distension of abdomen uniform, and walls tense. A solid mass is felt on left side, giving a sense of resistance on palpation; it is firm, hard, and reaches below level of crest of ilium, extending beyond median line. At a point two inches below zyphoid cartilage the abdomen measures $32\frac{1}{2}$ inches. A distinct notch can be felt in the well-defined edge of tumor. No evidence of fluid to be made out. Hepatic dullness does not extend below margin of ribs. Glands of axillary, inguinal and cervical regions sensibly enlarged. No dropsy of feet or limbs. Cutaneous circulation very prominent. The skin and conjunctivæ are deeply tinged with bile. Has been jaundiced for some days past. No appetite. Temperature normal. Urine dark; no albumen. Under treatment the jaundice disappeared in some eight days, and being of economical disposition, the patient did not desire further attention, as he felt well enough again to resume his business. To take Ol. Morrhuæ and an iron tonic mixture.

July 20th, '82.—Called to see patient, who complained of great pain across abdomen; said it was persistent and unbearable. Breathing hurried. Temperature, 102; pulse, 118; respirations, 32. Abdomen measures 33 inches at same level as previous measurement, showing increased circumference of half an inch since January last. Marked tenderness on pressure over sternum, extending from 3rd costal articulation two inches down-

wards. Great weakness complained of. Cervical, axillary and inguinal glands can be felt, but not conspicuously enlarged. Since his recovery from jaundice six months ago, patient says his health has been pretty good, not interfering with his business, although never free from a sense of weakness, with occasional severe headaches and recurring epistaxis. He is not markedly anæmic; lips and mucous membranes have good color. Expression is listless and apathetic. No dropsy present. Ordered hot linseed poultice to abdomen, sprinkled with laudanum, and to have quinine and iron internally. The following day he was relieved of pain, with temperature 99°F ., pulse 85, and respirations 25. A day or two afterwards, Dr. R. P. Howard saw the case in consultation. He gave an unfavorable prognosis, advising that iron and arsenic should be administered. Blood examined under microscope showed a great increase of white corpuscles, but the proportion to red was not ascertained till later.

Aug. 26th.—Increased hepatic dullness was evident, but no return of jaundice, nor any tenderness over liver; no marked change in patient's condition. Weakness chiefly complained of, and shortness of breath on exertion. Appetite good; temperature, 99°F . Attends his shop pretty regularly, although the headaches persist as before, and sometimes their severity compels him to remain in bed. Tenderness over sternum reaches from 2nd costo-sternal articulation to ziphoid cartilage.

Aug. 29th.—Complains of pain at a point one inch below sternum, in median line, which is aggravated on his changing his position. Examination of blood showed red corpuscles in cubic millimetre = 3,450,000; per hæmic unit, 69; ratio white to red, 1 to $6\frac{1}{2}$. The microscopic character of red corpuscles showed uniformity, and lacked the microcytes common to pernicious anæmia. Other examinations of blood were made, but the variations from above result were not striking, the last being made about the 7th January. Unfortunately, the memo of exact figures was mislaid. The measurement of abdomen gives no increase or diminution from last.

Dec. 20th.—During the past few months the patient was not under observation, having been out of the city. The nose-bleed-

ing and headaches have continued at intervals, but otherwise he has been sufficiently well to give partial attention to business. Abdominal measurement has increased $\frac{1}{4}$ to $\frac{3}{8}$ of an inch; liver dullness also increased. Had another attack of jaundice since I saw him. No dropsy or decided anæmia. Chest and limbs assuming emaciated appearance. Cutaneous veins of chest and abdomen very prominent. Says that now he is too weak, and must give up business. Appetite fairly good and bowels regular. Dyspnœa on exertion is more distressing than before. Temperature and pulse normal. Urine pale straw-color, contains urates, no albumen. Ordered port-wine to be taken with meals, and to have Fer. and Phos. pills.

Jan. 7th, '83.—Attacked with bleeding from one of lower incisor teeth, which was arrested after considerable difficulty. Recently his appetite has been unusually good, and his wife says he indulged it freely. Is too weak to walk about, and leaves bed only to lie upon the sofa. Abdominal distension is such that it is a burden for him to stand upright. Sleeps a great deal and desires to be free from disturbance of any kind. Complains of constant dizziness. When changing his position, increased vertigo ensues. Arsenic and iron continued.

Jan. 10th.—Another attack of bleeding from gums. Patient continues now in bed owing to his weakness. Appetite good; takes large meals; digestion good; temperature normal.

Jan. 15th.—Diarrhœa set in last night, and great weakness now complained of. Temperature, 99°F.; pulse, 85; respirations, 30. To-day he finds continuous noises and buzzing in his ears, so much so as to materially lessen his hearing. All medicine stopped, except diarrhœa astringent powders.

Jan. 18th.—Noises in ears have continued up to the present, and to-day are greatly aggravated, hearing being now impossible. Questions require to be written, and these are read with difficulty. Eyes were not examined, as patient objects to being disturbed. Diarrhœa is less frequent, but not entirely arrested.

Jan. 22nd.—Very severe headache; marked intolerance of light; same return of nose-bleeding. Diarrhœa persists; lies apathetic and drowsy; questions written and held before him

are disregarded. He places hand over hypogastric region and says it is painful; find tenderness on pressure here. Urine now passed in bed prevents its being tested. An attempt to pass catheter caused intense pain. Hot fomentations, demulcent drinks, and opiates ordered. Temperature, 101°F.; pulse, 120; respirations, 30.

Jan. 23rd.—Lies almost comatose; can be roused, but quite deaf; labored and distressed breathing; strength quickly failing. To-day there is decided divergent strabismus of left eye, the pupil of which is dilated. Complains of pain over both eyes. No urine obtainable, excepting by catheter, which brought away a small quantity of ammoniacal urine. Great tenderness on pressure continues over bladder and abdomen generally. Some diarrhoea still; temperature, 99°F.; pulse 76, and weak; respirations, 34. To have stimulants every hour, with opiates. 10 *p.m.*—Gives evidence of suffering, but is insensible to surroundings; weakness of pulse more marked; no nourishment taken to-day; no increase of temperature; respirations, 35.

Jan. 24th, a.m.—Continues comatose; abdominal tenderness great; passes urine and fæces involuntarily. Some bleeding from nose last night; pulse very feeble. Died at 5 *p.m.*, after what the friends present described as a hard struggle, gasping for breath.

Autopsy 30 hours after death.—Body emaciated, skin livid, abdomen distended, no dropsy. In abdomen, omental veins much distended; in peritoneum, uniformly injected. Spleen greatly enlarged, reaching below anterior superior spine of ilium. *Thorax*—A few adhesions, but no fluid in pleuræ. Pericardium distended by an enormous heart; contains a couple of ounces of clear serum. Heart very large; all chambers greatly distended, with tolerably firm chocolate-colored coagula; weight of clots in chambers alone, not including veins, is 620 grms.; valves normal, substance pale; arteries and veins leading from the heart distended with brownish clots. Lungs crepitant, a little congested at bases; vessels very full. Mediastinal lymph glands enlarged. *Spleen*—No adhesions whatever; before excising, the portal system was carefully dissected out; vessels all enor-

mously distended with clot; circumference of portal vein, just above junction of the branches, is 11 centimetres. Splenic vein very large, joined by four or five large branches leaving the spleen, and joined by other greatly distended veins from the stomach. Spleen weighed $7\frac{1}{2}$ lbs., and measured 13 by $8\frac{1}{2}$ inches. Shape is preserved. No special thickening of capsule. Fibrous stroma not specially evident. Malpighian bodies not enlarged; no localized lymphoid growths; under microscope, shows simple hyperplasia of normal spleen elements, cells of the pulp and red blood corpuscles form chief elements of structure. In bits examined, only one or two nucleated red blood-corpuscles are seen. *Liver* fully twice normal size, smooth, somewhat soft, veins distended. The microscope shows an increase of colorless blood corpuscles mingled with liver cells. *Stomach* shows no special change. *Small intestines*—Veins distended; no enlargement of Peyer's patches; solitary follicles are uniformly enlarged. Blood altered in upper part of intestine, and general catarrhal state of both small and large bowel. *Kidneys* enlarged, dark color; veins deeply congested; cortex swollen. *Bladder* contains dark, ammoniacal urine; mucous membrane intensely inflamed and covered with a small amount of exudation. Mesenteric and retroperitoneal lymph glands enlarged, soft and red in color. *Marrow of sternum* and of ribs looks like thick greyish, bloody pus; under the microscope, shows numerous marrow cells, very few myeloplques and nucleated red blood-corpuscles; the latter less than in many specimens of normal red marrow. Small lymphoid elements not specially numerous. *Brain*—Extreme degree of engorgement; arteries at base full of clots. Veins greatly distended, and, on section, puncta vasculosa are unusually numerous. Choroid plexus and velum are engorged. Substance of brain is somewhat soft, but presents no special morbid change. *Eyes*—Both retinæ presented extensive leukæmic changes in the form of opaque white spots, surrounded by congested and hemorrhagic areas. The discs were not swollen.

REMARKS.

Up to the present time, it is a disputed question as to who was the discoverer of this uncommon disease, for Hughes Bennett

lays claim to that honor, having described a case in March, 1845, saying that the blood contained "globules of purulent matter and lymph," where there was an entire absence of phlebitis, abscess, or purulent collection to which the state of the blood might be attributable. Then six weeks afterwards, Prof. Virchow published the history of another case, and called it *Leukæmia*. This author, in later observations, separated two forms of leukæmia, viz., *splenic* and *lymphatic*; but the most frequent cases coming under observation are the mixed variety, where both spleen and lymphatics are affected, and to the latter the present case belongs. While this authority asserts that leukæmia first begins by the hyperplasia of a lymphatic organ, Kattman and others say that primarily an increase of the blood-cells takes place, occurring in the blood itself, and that what are called the blood-forming organs subsequently become hyperplastic. To-day the former view appears to be generally accepted. Cases are recorded where all the phenomena of leukæmia were present, excepting the important one of increase in white corpuscles, these cases being termed *Pseudo-Leukæmia*, *Lymphadenoma*, or *Hodgkins' disease*, making it appear likely, in the opinion of some authors, that the increase of these bodies was more incidental to the disease than that it constituted the disease itself. According to Huss, there must be an increase of white corpuscles in proportion of 1-20 red in order to pronounce the disease leukæmia.

Wherever lymphatic glands are the seat of irritation, an increase in white corpuscles occurs, as in typhoid, cancer, and malignant erysipelas, but the proportion is never so great as in the disease under consideration. In this case no notable augmentation was observed of the small lymphoid elements, such as are said to specially characterize the so-called lymphatic variety, although the autopsy showed considerable enlargement of the lymphatic glands. No definite origin for the disease can be traced in the facts before us. This coincides with most of the cases observed, for there is acknowledged obscurity regarding the causes of this disorder. Special enquiries regarding malaria were carefully instituted, with no satisfactory result. On asking

the patient when his attention was first directed to the growth in abdomen, he replied that as long as he could remember it was always hard. His wife's evidence is more reliable here, for she remarked the peculiarity from the date of their marriage, over two years ago, so that during this time at least the growth existed in sufficient proportions to cause attention to its more evident result, viz., tenseness of the abdominal walls. What little evidence we have here does not differ from the general rule in leucæmia—that its course is an insidious one. The course was lingering and continuous; complaints were frequent of dullness and headache, dyspnœa, pressure and fullness of abdomen. Neither age, sex, nor social position is free from liability to leucæmia. The greater number of cases recorded have been in the male sex. Amongst its causes are given excessive mental or bodily exertion and continued excitement, chronic intestinal catarrh, leading to hyperplasia of the solitary glands and Peyer's patches, syphilis, long-continued and obstinate intermittent fever, and the influence of the nervous system in depressed states of the mind, are all known to have given rise to the malady. Yet, notwithstanding the most careful inquiry, no direct cause can in some cases be found for this mysterious disease. Another cause, which, however, is regarded as problematical by some, is that of traumatism; a few cases are mentioned by Velpeau and Wallace, where a blow in the splenic region was the direct antecedent. In our present case, we know only of severe injury being sustained by the bladder many years ago, after which, however, the patient averred his standard of health was unquestionably lowered.

According to Hughes-Bennett, the complications of epistaxis and diarrhœa are the most common, the former of which stands out as a prominent symptom in the present instance. Here no hereditary tendency to bleeding existed, yet hemorrhage recurred with persistence throughout the course of the affection. Although this exhausting condition recurred from time to time, it was not until within a couple of months from his death that he was obliged to refrain from physical exertion; but this may be accounted for by the fact that the end was hastened through the onset of a

new complication, viz., acute cystitis, and the aggravation of existing ones. There was never profound anæmia present. This case would not support the theory, therefore, that leukæmia was developed from pre-existing anæmia. It is well-known, however, that the hemorrhagic diathesis has frequently preceded enlargement of the spleen and subsequent leucocythæmia. The red corpuscular richness did not vary much, it having been, at first count, 69 per hæmic unit. This would explain the lack of anæmic appearance in the patient, for anæmia does not so much depend upon the increased quantity of white corpuscles as upon the decreased quantity of red. Would improvement in the condition of the blood, when under treatment, indicate improvement or arrest of the disease? Clinical experience shows that it would not, and it is established that improvement in the blood of splenic leukæmia is no evidence that the constitutional symptoms shall cease, or that the patient will recover. While the red corpuscles are diminished, the water and fibrin are increased. This condition was evidenced at the autopsy. The chocolate-colored blood of leukæmia was presented, but different from what is usual, since all the chambers of the heart were greatly engorged, as if the action of the organ had been suddenly arrested. Perhaps this was the most remarkable feature noticed in this uncommon case, for the condition of the circulation greatly resembled the state found in death by apnoea, with the exception, that instead of the left chambers of the heart being empty, all the chambers were engorged with enormous clots, the weight of which has been stated. The brain, heart, lungs, portal system, kidneys, omentum—in fact, all the viscera—were engorged to a remarkable degree. Sir Joseph Fayrer, in the last January *Lancet*, called attention to the fibrinous condition of blood in diseases of the spleen, and alluded to the liability of thrombus forming in the vessels. He also spoke of the tendency of the fibrin to precipitate and form ante-mortem coagula, particularly in splenic disease resulting from malarial poisoning, by this means frequently causing sudden death through obstruction in the pulmonary vessels leading to the lungs. In the case before us, there was neither sudden death nor deposit of fibrin,

yet would this be sufficient to exclude the condition of hyperinosis described by the authority named, when every other evidence of well-developed leukæmia was present?

Under the symptom of hemorrhage, I will refer to a very uncommon lesion which complicated this case, viz., *Retinitis*. The indications of eye trouble did not present themselves until a very late stage in the course of the disease, at a time, indeed, when examination was not feasible; but the autopsy revealed inflammation of the retinae of both eyes through hemorrhage into their substance, and the exudation of white cells. The acute disorders which supervened, viz., diarrhœa and cystitis, undoubtedly hastened death. The former was persistent, and only yielded temporarily to remedies. It consisted of an intestinal catarrh, for what passed the bowels was chiefly mucus. I could not discover the origin of the cystitis, for there was no mechanical irritation to occasion it, nor inflammation in the bowel or any adjacent organ which might extend and give rise to it. The only conclusion was that through some unwise exposure of the body a chill had set up the complication. The congested condition of the venous circulation may, perhaps, be sufficient to explain the constant headaches from which the patient suffered. Jaccoud, in his "Pathologie Interne," says that persons who succumb to leucocythæmia not infrequently have several hemorrhages. These, he states, occur oftenest in the brain, caused by an accumulation of leucocytes blocking up some small vessel, which, acted upon by the blood-pressure, tends to rupture.

In the transactions of the London pathological Society, the condition of the vessels is referred to in connection with cases of lymphadenoma. It was very conspicuous in many sections of affected organs, numbers of the vessels being seen mapped out and tightly packed with masses of colorless corpuscles. In a few cases only of this last-named disease was the condition absent. In some cases the degree of leucocytosis deserved the name of leucocythæmia, the proportion of white cells to colored being greater than 1-20. Where these conditions so closely approximate each other, what is there to constitute absolute proof that the invasion of adenoid growth in any gland may not

go on to the disease we are considering. The gradual development of leukæmia which has been noticed in certain cases of splenic enlargement in children surely indicates that it is a disease secondary in some cases, and the fact that leucocytosis is found under different conditions points to the possibility that the rarer appearance of leukæmia may be merely the result of certain states which tend to produce an increase in the white elements. Leukæmia is not the rule in lymphadenoma, and even in its extreme forms, with the spleen affected, leukæmia may be absent. A patient has been known to die rapidly of apparently malignant disease, when the only lesion post-mortem was found to be slight enlargement of a few glands and a leukæmic condition of the blood. This is what is termed Virchow's lymphatic variety, but the cases are extremely rare, and the cause of death would be difficult to explain, were it not for the evidence given by the blood, because growths of the same nature occur in lymphadenoma, affecting not only the lymphatics, but invading important organs, and still the patient survives for many years. In these cases, during the active growth of the glands, the most marked symptoms are high temperature and diarrhoea. In cases where the glandular growths were limited, and leukæmia present, it would support the view that leukæmia was not so much due to these growths as to want of power in lymph and white corpuscles to form red ones, or, as referred to before, from some disease of the blood the white corpuscles acquire a definite power to magnify and increase themselves.

In reference to the bone marrow, it was shown by Neumann that the pathological changes favor the theory of importation of lymph corpuscles into the blood from the marrow. Their passage he explains by the morbid changes in the marrow, where the blood corpuscles, before reaching maturity and full development in the bones, pass into the circulation. He places this change in the marrow of leukæmia as the only one of constant appearance, and that the affection of the spleen and glands are only incidental thereto. This is known as the myelogenous form of leukæmia, and Jaccoud says it should to-day be placed side by side with those forms better known and recognized. On the other

hand, Waideyer relates a case of leukæmia where the change in the marrow was not so marked in comparison to the size of the spleen and glands as to warrant the belief that the marrow hyperplasia could be called the primary affection. In his cases illustrating diseases of the lymphatic system, Dr. Goodhart says: "In regard to medullary leukæmia, I can readily conceive that the disease might as well start at times from the bones or from other lymphatic organs as from the spleen or glands, but the proof must come, not from the mixed cases such as those published by Neumann, Mosler and others, but from the side of diffused cancers, or soft lymphomas of bone, spreading throughout the whole osseous system. That all cases of chronic enlargements, from whatever source, may become, though not necessarily, leucocythemic," and he also thinks "that some of the chronic splenic enlargements of childhood may eventually, in adult life, in leukæmia."

The liver is often diseased in leukæmia, generally from hyperplastic increase of the cells and colorless corpuscles, which was found in this case. Mosler observed a case occurring with jaundice where cirrhosis was found, and inferred that the change took place by a proliferation beginning in the connective tissue.

The kidneys are usually normal, but here they were swollen, enlarged, and congested.

The treatment I have not given in detail, but may state generally it was palliative and symptomatic, as the indications arose, combining tonics, nutrients and stimulants to support the vital powers. The question arises in cases of lymphadenoma, if they are infective and local at the outset, as it is asserted they are by competent authorities, why not remove the cause rather than permit them to remain infecting the system and generating leukæmia eventually. Previous failures in this direction have been most discouraging, one successful case only being known; but it should not prevent the repetition of attempts in suitable cases, for though a symptom has been removed, the cause itself has not been discovered, and therefore has not been eradicated. In the meantime, while searching for the cause, we must treat the symptoms.

CASES OF CEREBRO-SPINAL MENINGITIS.

By G. A. ARMSTRONG, M.D.,

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The report of the two following cases of cerebro-spinal meningitis may prove of interest from the rarity of its occurrence in Montreal and the severity of the symptoms :—

CASE I.—A little girl, aged 6 years ; seen January 9th, '83. Was told that she had been a little feverish for two or three days, but complained only of headache. She lay in her mother's arms in a semi-unconscious state ; eyes open, pupils dilated, breathing rapid, no cough, and vomiting occasionally. Any attempt to examine her, even to count her pulse, provoked a tonic contraction of the muscles of the back and neck. Her pulse could not be counted with any certainty on account of the contraction of the tendons of the wrist. Her temperature was 104°F. ; respiration normal over both lungs, with the exception of a few large bronchial râles. There were no petechiæ or herpes. The hyperæsthesia was very great. The next day, the condition of opisthotonos was marked and persistent ; the child was comatose. Died the following morning. Duration of illness, about 72 hours. The treatment consisted in the free administration of potass. iod. and counter irritation to nape of neck and spine, followed by ice.

CASE II.—A little boy, aged 4 years, strong, fat and active. When a year old, had measles, following in a few weeks by whooping cough. At three years of age, had a convulsion, supposed to be due to a worm which was passed at that time after the administration of worm lozenges. On Saturday, 31st March, the boy was quite well and playing out of doors all day. Got his feet damp. In the morning he ran out for half an hour bare-headed. The next morning, April 1st, he got up as usual, but took no breakfast. At 2 p.m. I found him in a semi-unconscious state ; would pay no attention to any one ; would not answer when spoken to. He seemed agitated, his arms always moving ; extremities cold ; eyes open, balls turned up ; pupils nearly normal ; right eye turned inwards and upwards ; breathing very

rapid. Mucous and submucous râles heard over back and front of chest. No dullness on percussion; no blowing breathing. Pulse, 120; temperature, 103°F. Ordered mustard to nape of neck, calves of legs and soles of feet, and a mixture containing potass. bromid. 9 *p.m.*—Pulse 160; temperature 106.5°F. Is generally in the same condition as at 2 *p.m.*, with rapid and continuous convulsive twitchings of hands and arms. Ordered a strip of mustard an inch wide to be placed along each side of the middle of the back, an inch from the spines of the vertebræ, and to extend from neck to lumbar region, to be followed by ice to head and along the back, over the spine.

April 2nd.—Pulse, 176; temperature, 101.6°F. Hyperæsthesia very great. Is vomiting a black fluid, streaked with blood. Small petechial spots, about twenty in number, seen over chest and side of face. No herpes. Large purple discolorations over the thighs. Ordered Pot. Iod. grs. v; Pot. Brom. grs. v; Liq. Ergot, ℥ v; every two hours. 4.30 *p.m.*—Conjunctivæ congested; right pupil a little larger than left. No reaction of either pupil to light. Is completely comatose. Dr. Reddy saw him in consultation, and confirmed my diagnosis. He advised a hypodermic injection of morphia and atropia, which was given, and seemed to allay the spasmodic contractions of arms. Dr. Reddy thought the cold applications to spine might be changed for warm ones, which was done. No apparent benefit followed. Vomiting continues.

April 3rd.—Died at 1.45 a.m. Duration of illness, 42 hours.

The rapidly fatal course of these two cases, the severity of the symptoms, and the very high temperature of the second case (106.5°F.), are points of interest occurring in sporadic cases.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE
MONTREAL GENERAL HOSPITAL.

UNDER THE CARE OF DR. MOLSON.

CASE I.—*Extensive Warty Endocarditis in a case of Phthisis.*

M. R., aged 28, admitted to Hospital January 8th, 1883. Patient was sent to hospital on account of cough, but during the

night it was found she was quite maniacal. Previous history, so far as could be made out, was : Had been married 11 years ; had three children ; last confinement about middle of October, and made a good recovery. Was said to have been a healthy woman, but with occasional cough since marriage. For the last six weeks cough has been much worse, and has been losing flesh rapidly. First attack of mania about one month after confinement, and has been more or less out of her mind ever since.

On examination, consolidation of upper two-thirds of right lung found. Patient remained in hospital ; was maniacal for about four weeks, after which she appeared quite sensible. Had the usual signs and symptoms of a rapid phthisis—irregular fever, quick pulse, profuse night sweats, diarrhoea, and severe cough. Died March 27th. Before death, signs of extensive disease in both lungs and pleurisy of right side. Heart was examined on admission, but never after, as no suspicion was entertained of any acute trouble there.

Autopsy.—Liver pushed down. In right pleura, extensive adhesions above ; pyo-pneumothorax on diaphragmatic surface. Large communicating cavities at apex of right lung ; extensive tuberculous consolidation, with softening areas in middle lobe and upper part of lower. Recent inflammation in lower zone of pleura ; exudation purulent. On under surface of lower lobe, about $1\frac{1}{2}$ inches from anterior margin, there was a large circular perforation leading into a cavity the size of a walnut. In the left lung, numerous cavities at apex and in upper part of lower lobe. The heart was of average size ; right chamber full of clots. In left ventricle, auricular surface of mitral segments presented six or eight recent vegetations, ranging in size from a pin's head to a pea. Near the posterior papillary muscle a large, soft endocardial outgrowth was attached to the wall, and grew round and enclosed two of the chordæ tendinæ.

CASE II.—*Cerebro-Spinal Meningitis—Recovery.*

L. C., aged $2\frac{1}{2}$ years, admitted to Hospital Feb. 7th, 1883, in the following condition :—Child lies on either side, with head rigidly drawn back. No rigidity or paralysis of extremities.

Face dull and heavy ; eyes watery ; conjunctivæ injected ; teeth covered with sordes. Abdomen about natural fullness. Marked "tache cerebrale." Temperature, 98°F. ; pulse, 108, intermittent ; respirations, 30, with occasional sighing. Child is restless, moans continuously, but appears quite conscious. If moved about, or extremities handled, she cries out as if in pain. The mother states that on the morning of the 5th, two days before admission, the child was in her usual health. During the day, had a severe shivering fit, and soon became dull and heavy, complaining of great pain in back of neck and general soreness ; had frequent vomiting of a greenish fluid, and would cry out if moved. No headache. Child passed a restless night, moaning all the time ; frequent vomiting. The day before admission, retraction of head commenced ; great pain in back of neck ; general soreness, aggravated by movement ; frequent vomiting. Child quite rational. To have Pot. Iod., gr. iii, 3 q.h.

Feb. 8th.—Child heavy and apathetic if left quiet. Appears rational, though some delirium during the night. Marked hyperæsthesia ; retraction of head extreme ; pupils normal ; bowels moved naturally ; passes urine in bed ; temperature, 99°F. ; pulse, 138 ; respirations, 38.

Feb. 9th.—Child appears much worse. Pulse over 160 ; temperature, 104°F. ; respirations irregular and sighing. Retraction of head the same. No vomiting ; bowels moved naturally. Child is very apathetic to-day, but answers rationally. No complaint of pain.

Feb. 10th.—Not much change since yesterday, except child is weaker. Tongue getting dry and brown. Bowels move every day ; urine passed in bed. Pupils dilated. Some purulent secretions about eyes. Child lies on one side, with head rigidly drawn back. Temperature last night and this morning, 100.5°F. Pulse cannot be counted.

Feb. 11th.—General condition no worse. No vomiting ; some diarrhœa. Body and extremities covered with rose-color spots, quite distinct from each other ; a few small petechial spots.

Feb. 12th.—Patient much better ; pulse stronger ; temperature, 100°F. ; hyperæsthesia diminishing ; rash fading rapidly ; retraction the same.

Feb. 17th.—Eruption almost gone; retraction of head unchanged. Passes urine and fæces in bed, but child is much brighter. Pulse improving, and down to 130; respirations, 30. Takes nourishment well, sleeps well at night, and has now no increased sensibility of skin.

Feb. 21st.—Child getting stronger. Temperature goes up as high as 101°F. occasionally. Some retraction of head; occasional vomiting. *28th.*—Retraction of head almost gone; no vomiting, temperature normal; appears somewhat dull yet.

March 15th.—Child quite better; is now bright and intelligent; a little weak, but gaining flesh, and taking nourishment well.

UNDER THE CARE OF DR. GEORGE ROSS.

CASE III.—*Cerebral Hæmorrhage—Sub-conjunctival Ecchymosis—Autopsy—Small Aneurism at base.*

F. E., aged 17, shoemaker, well-built, admitted to Hospital insensible on the evening of Dec. 18th. Patient lies in bed, eyes closed, pupils contracted, muscles of arms and forearms rigid and flexed, legs slightly rigid, but straight; respirations stertorous, 18 a minute; pulse small, 100; temperature normal. Said to have been healthy till one year ago. During past twelve months has had several very severe attacks of nose-bleeding; several times bled till faint. Three months ago is said to have had an epileptic fit, from which he recovered in ten minutes. For the past eight days has had severe headache; very bad for the last 48 hours. Two hours before admission, went out into the yard, where he was found insensible half an hour after. No suspicion of foul play.

Dec. 19th.—Still unconscious; general condition the same. Pupils normal and respond to light. Passes urine in bed; small quantity obtained with catheter, no albumen. 8 p.m.—During the day muscles not so rigid. Very few spasms now. Both eye-balls very prominent. Slight ecchymosis in right upper lid and under ocular conjunctivæ. Left pupil dilated; right about normal. Leeches applied behind ears, ice to head, and a purgative.

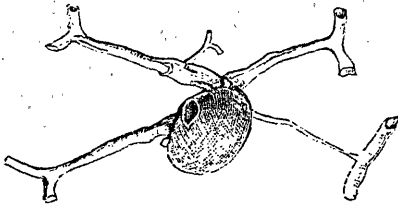
20th.—Unconscious ; arms rigid ; legs relaxed. Several attacks of clonic spasm in arms and down back. Cheyne-Stokes respiration. Ecchymosis deepening around right eye ; beginning around left. Left pupil still larger than right. Temperature going up ; skin warm and perspiring.

21st.—To-day limbs are quite relaxed ; opens eyes from time to time, but does not appear conscious. Examination shows optic disc engorged and veins full. Ecchymosis not increased. Temperature going up ; pulse 125, and very feeble and dicrotic.

22nd.—Profoundly unconscious ; limbs and sphincters relaxed ; pulse and temperature going up ; skin hot and perspiring freely.

23rd.—Pulse continued to increase in frequency ; temperature going up ; perspiring freely. Died this afternoon.

Autopsy.—Extensive hemorrhage at the base of the brain, involving the meninges, anterior to the optic chiasm, and extending into the longitudinal fissure, and over the anterior part of the corpus callosum. On separating the orbital surfaces of the frontal lobes, an aneurismal sac, the size of a large pea, was



seen springing from the anterior communicating artery and partially embedded in the contiguous brain substance, which was a little lacerated. When removed and washed, the sac was found to arise by a small orifice from the anterior communicating artery close to the right anterior cerebral. It was full of dark blood, and had ruptured at the lower surface, the rent being about two millimetres in length. The hemorrhage had extended along the sheaths of the optic nerves to the eyeballs. The other cerebral vessels were healthy. There was no heart disease.

Reviews and Notices of Books.

A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners.—By JAMES NEVINS HYDE, A.M., M.D., Professor of Skin and General Diseases, Rush Medical College, Chicago, Ill. 8vo., pp. 572. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

Truly it may be said that this is the age of hand-books and manuals, written for students and practitioners. These latter have now, when entering on the study of any subject, many works to select from. Five or ten years ago it was the "busy practitioner" for whom short treatises were written—this supposititious individual was evidently too "busy" to read books, and so wisely did not buy them. Now the student-practitioner is appealed to. Dr. Hyde has succeeded in writing a very useful and readable book, and has availed himself of the work of many writers on skin diseases, his indebtedness to whom he always properly acknowledges. The author dedicates his book to Prof. Kaposi, from which it will be readily inferred that he belongs to the Vienna School of Dermatologists, and is not one who believes much in the constitutional treatment of skin diseases. After an opening chapter on the anatomy and physiology of the skin, beautifully illustrated with cuts from Dr. Heitzmann's work on Microscopic Morphology, chapters on general symptomatology, general etiology, general diagnosis, prognosis and therapeutics follow. The author's classification is a slight modification of Hebra's, which is perhaps the best we have yet had. Dr. Hyde is a devout follower of Hebra, and with him scoffs at the idea of eczema ever being a constitutional disorder, and so altogether discourages constitutional treatment. The first thing he advises in its treatment is the *exclusion of all sources of irritation*. This necessitates, he goes on to say, the withholding of all internal medicaments which are harmful. We agree with much of what the author says (which is really only a repetition of Hebra); but we also believe that many cases of eczema are of constitutional origin. Why is it that

eczema in children is so frequently accompanied by constipation, and that local treatment does but little till this disorder is removed? The author wisely draws attention to the fact that in acute eczema the skin will rarely tolerate medicated ointments, and yet how almost universally these are prescribed. Dr. Hyde ranks the preparations of tar in the treatment of psoriasis above chrysophanic acid; certainly in our experience the chrysophanic acid cures much more rapidly and quite as surely as tar. He also believes that arsenic should only be given in this disease "after it fails to respond to other treatment." The work closes with a short account of the syphilo-dermas and parasitic diseases. When speaking of scabies, the author mentions that it is a rare disease in America, and that the cases seen are usually among the newly arrived immigrants. This agrees with our own experience. Lately we have seen but one or two cases in as many years; but formerly it was not uncommon among the French-Canadians. As the work is intended for a text book, of course there is no claim to great originality, and no new theories or ideas are advanced; but the various diseases of the skin are described in a systematic manner in good language. We can honestly recommend it to any one who wants a work on skin diseases, based on the principles of the great Vienna School of Dermatology, as created by Hebra. It is concisely and pleasantly written, and profusely illustrated with well executed wood cuts. The printing and the paper are of the best.

Early Aid in Injuries and Accidents.—By DR. FRIEDRICH ESMARCH, Professor of Surgery at the University of Kiel, etc. Translated from the German by H.R.H. Princess Christian. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

We here have published a little collection of lectures by Prof. Esmarch to the "Samaritan School" of Kiel; and they well deserve to be widely known and extensively circulated. The need for instruction to the general public in the elements of the principles to guide one in the commoner surgical emergencies has long been fully recognized. Attempts have in this city, as

elsewhere, been made to supply this knowledge by means of popular lectures and demonstrations upon these subjects. A short handbook of this kind will prove an excellent adjunct. Prepared by that best-known of Continental surgeons, Esmarch, (whose name has even been turned into a household *verb* in Hospitals), it furnishes exactly the information that will be sought for. After a short introduction concerning the structures of the body and their anatomy in a general way, separate chapters are devoted to injuries (contusions, wounds, etc.), fractures, dislocations, sprains, etc. Then frost bite, drowning, poisoning, etc., and lastly a lecture on transport. A number of figures are introduced for the better explanation of the text. All physicians will do well to bring this book to the notice of their clients to be perused, and to be referred to when occasion requires. The ladies will take a special interest in its circulation from the fact of the translation having been made by an illustrious lady who has shown such a noble example in all good works.

The Compend of Anatomy, for Use in the Dissecting Room, and in Preparing for Examinations.— By JOHN B. ROBERTS, A.M., M.D., Lecturer on Anatomy and on Operative Surgery, in the Philadelphia School of Anatomy, etc., etc. Third Edition. Philadelphia: C. C. Roberts & Co.

This small book of pocket size seems to be appreciated by those for whom it is intended, and we believe it is as good and complete as any of the others gotten up for similar purposes. We do not recommend the use of these abbreviated aids, for they chiefly assist the cramming process; but as some will have them, better they should be of good quality, such as the above.

The Laws of Life and their Relations to Diseases of the Skin.—By J. L. MILTON, Senior Surgeon to, and Lecturer at, St. John's Hospital for Diseases of the Skin. London: Chatto and Windus, Piccadilly.

This little book, which comes to us in cheap pamphlet form, consists of a series of lectures delivered by Mr. Milton at St.

John's Hospital. They are philosophical, and deal with the waste and repair of the human body from a scientific standpoint. The discussions on these all-important matters lead up to that on the bearing of these upon the nutrition and maintenance of healthy conditions in that valuable emunctory, the skin. The original manner in which the various subjects are treated of will claim attention and excite interest, even though every statement should not be accepted without question. A perusal of these lectures cannot fail to furnish food for thought, and to throw light upon some dark places in the pathology of the skin.

“*Braithwaite's Retrospect.*”—Vol. LXXXVI. July-Dec. 1882.

Comes to hand in the usual form. It is compiled just as carefully as ever, and contains all the new discoveries and all the most valuable papers of the latter half of the past year. Every one should be a subscriber to *Braithwaite*.

Manual of Gynecology.—By D. BERRY HART, M.D., F. R. C. P., Lecturer on Midwifery and Diseases of Women, School of Medicine, Edinburgh, etc., etc.; and A. H. BARBOUR, M.A., B.Sc., M.B., Assistant to the Professor of Midwifery, Univ. of Edinburgh, etc. Vol. I. With eight plates, and one hundred and ninety-two wood cuts. New York: Wm. Wood & Co.

The above forms the volume issued with Wood's Library for the month of January. This special branch, now rising so rapidly in the estimation of the profession at large, has been carefully attended to in the “Medical Library” series. The present work is an admirable addition thereto. Its principal feature is the prominent position given, and the extended space devoted to the physiology and pathology of the important female organs of generation. The most recent researches on the various points connected with these subjects are fully entered into and made the foundation of all the clinical teaching which follows. The matter has been compiled with great care and, whilst complete, yet conciseness is never lost sight of. Illustrations

tions are introduced in great profusion, the plates being very well executed, and the woodcuts of superior quality. Several of the figures are from actual sections—frozen and otherwise—which, for certain purposes, are indeed the only ones which can be accepted as reliable.

Books and Pamphlets Received.

EXPERIMENTAL PHARMACOLOGY: A HANDBOOK OF METHODS FOR STUDYING THE PHYSIOLOGICAL ACTION OF DRUGS. By L. Hermann. Translated by Robert Meade Smith, M.D. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

THE SYSTEMATIC TREATMENT OF NERVE-PROSTRATION AND HYSTERIA. By W. S. Playfair, M.D., F.R.C.S. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

STUDENT'S GUIDE TO THE DISEASES OF THE EYE. By Edward Nettleship, F.R.C.S. Second Edition. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

A SYSTEM OF HUMAN ANATOMY, INCLUDING ITS MEDICAL AND SURGICAL RELATIONS. By Harrison Allen, M.D. Section IV. Arteries, Veins and Lymphatics. Philadelphia: H. C. Lea's Son & Co. Montreal: Dawson Bros.

TRICHINÆ: THEIR MICROSCOPY, DEVELOPMENT, DEATH, AND THE DIAGNOSIS AND TREATMENT OF TRICHINOSIS. By W. C. W. Glazier, M.D. The Illustrated Medical Journal Company, Detroit, Mich.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, February 16th, 1883.

T. G. RODBICK, M.D., VICE-PRESIDENT, IN THE CHAIR.

Case of Aneurism of Anterior Communicating Artery.—Dr. George Ross narrated the case. (*See page 548.*) Dr. Ross remarked on the difficulty of diagnosing the case at first, and of the assistance rendered by the development of subconjunctival ecchymoses. In his experience this was a very rare occurrence in cerebral hemorrhage.

Dr. Osler called attention to the fact of the frequency of aneurism of the cerebral vessels, and to the fact that many cases of apoplexy in young persons were caused by them. This was the eighth instance which had come under his observation in the past few years, and all the specimens had been shown at the Society. Of these, four were of the middle cerebral artery,

two of the basilar, and two of the anterior communicating. In seven of them, death was caused by rupture of the sac. He remarked that in cases of fracture of the sphenoidal bone, or in instances such as this, where the hemorrhage occurred in the neighborhood of the optic nerves, the subconjunctival hemorrhages would be more common; but when the fracture was in the middle or anterior part of the orbital plate of the frontal, the hemorrhage was into the more superficial parts of the orbit, and more likely to produce ecchymosis of the lid.

Ulcerative Endocarditis, simulating Typhoid (with specimen).

Dr. Geo. Ross related the case; that of a man, aged 26, admitted to the General Hospital on the 2nd in a state of delirium, with temperature 104°F., pulse 100, respiration 28. Though delirious, he would at times answer questions. Face was flushed, eyes bright, pupils small; expression nervous and anxious. Tongue dry, cracked, and brown; abdomen full; marked tenderness in right iliac fossa; no rose spots. - Examination of heart and lungs revealed nothing abnormal. The following history was obtained: Had never been very sound in mind, but has been healthy; was at work on January 29th, when he was taken with a severe chill, followed by headache, vomiting, and nausea. Went to bed that evening; became delirious, and has been feverish, with severe headache, ever since. There have been several loose stools each day. On the night of the 2nd he was very delirious, talking loudly, and getting out of bed. Passes fæces and urine involuntarily. On the 3rd the temperature was 102°; pulse 125, and weak. On the 4th, after a very bad night, the patient was much quieter, dull and stupid; face dusky; can get no reply to questions; temperature 103°, pulse very weak; passed stools in bed. Patient gradually sank, and died on the next day—the third after admission, and the eighth of his illness. The heart and kidneys were exhibited. The autopsy showed extensive ulcerative disease of the aortic valves, two of which had fused (congenital), and were sclerotic. The vegetations were soft and recent, and there was a small perforation of one segment. The mitral valve was unaffected. The spleen was about twice the normal size, but presented no infarctions. The kidneys were

enlarged, and showed six or eight recent infarctions. In the small intestine there were half a dozen spots of hemorrhagic infiltration of the submucosa, the centre of each occupied by a small white necrotic patch (infarctions). In the left occipital lobe there was a spot of recent red softening, the size of a small apple. No other foci in the brain.

Dr. Ross stated that he had thought the case one of typhoid fever from the mode of onset and the pronounced abdominal symptoms. The only suspicious features had been the bright eye and injected conjunctiva, and if a murmur had been heard a correct diagnosis might have been reached. The experience of a considerable number of cases had now made both physicians and attendants at the General Hospital tolerably alive to the subtleties of this disease, but in none of the previous ones with typhoid symptoms had the course of the disease been so rapid.

In reply to a question by a member, Dr. Ross remarked that the state of the valves was certainly such that a murmur might have been expected, but none was heard when he examined the patient the day after admission. The condition of the vegetations would almost prevent a regurgitant murmur.

Dr. Osler exhibited the characteristic micrococci of the vegetations, stained with aniline blue. In this instance there were a few bead-like chains such as had been noted by some writers. Their relation to the disease was still in dispute. They are found in the simple warty vegetations and in the outgrowths often met with in old sclerotic valves; indeed, they appear elements common to various endocardial processes which have very different symptoms and arise under different conditions. Valves which are malformed, as in this instance, appear specially prone to be attacked with this form of the disease.

Calcification of the Tooth-Pulp.—Dr. Osler showed, for Dr. Lovejoy, the section of a first molar with the pulp calcified. The tooth was large and not decayed, but was at times so painful that it was thought advisable to extract it. The cavity was filled with a mass of stony hardness, darker than the dentine, but having much the same appearance. A narrow space separated it from the wall of the cavity. In some animals the pulps become con-

verted into secondary dentine, and in old people progressive calcification is not uncommon. In this case the man was vigorous, middle-aged, with good teeth.

Chylous Ascites.—Dr. George Ross showed a bottle of milky-looking fluid which had been removed from the peritoneum of a lad under his care, who had albuminuric anasarca. The abdomen was much distended, and several pints of fluid were removed. There were no formed elements in the fluid.

Diseased Placenta.—Dr. Gardner exhibited a diseased placenta from a patient who last menstrated on the 12th of August, quickened two days before Christmas, and was delivered of a dead macerated fetus on the 7th of February. The specimen was much shrunken, measuring about eleven centimetres in diameter and one centimetre in thickness. In general the substance was much paler and firmer than that of the normal placenta. There were a number of firm nodules, evidently the result of placentitis or of extravasated, decolorized, and organized blood-clot, according to the views variously held by authorities on the subject. Interspersed between these nodules were a number of cavities, varying in size from a cherry to an almond, filled with recent blood-clot. The membranes were opaque and very friable, a large part remaining in the uterus and requiring introduction of the hand for its removal after the expulsion of the placenta. The patient is the mother of five children, all born at full term after normal pregnancies. During the pregnancy in question she had been oedematous to a slight extent, had suffered from a feeling of general weakness and craving appetite. When first seen by Dr. Gardner, four days before her delivery, she was suffering from violent headache of the frontal and vertical region, evidently of uræmic character, as there were distinct general anasarca and slightly albuminous scanty urine. For nearly three weeks the foetal movements had become gradually more feeble, and during the last three days had entirely ceased. At the same time that the movements ceased, the uterine tumor sank towards the pelvis, and had lost its normal elastic feel. Foetal heart-sounds were inaudible. The headache appeared at the same time as the cessation of foetal movements and collapse of the

uterus, with renal insufficiency. The fact seems to bear out the pressure theory of uræmia in pregnancy. The treatment before labour consisted in purgative doses of compound jalap powder, with full doses of bromide of potassium and chloral. As the latter gave no material relief to the headache, it was soon discontinued, and 15 minim doses of Battley's sedative solution of opium substituted, with marked success. After the uterus was emptied, the urine increased in quantity, the headache disappeared, and, with the exception of a slight attack of pleurisy, the patient made a good recovery.

Apoplexy into the Ventricles.—Dr. Armstrong mentioned the case; a man, aged 37, who had consulted him with severe headache, slight intolerance of light, and vomiting. Patient was under treatment for secondary syphilis. In a few days he felt better and was able to go out. On Saturday, the 3rd, he took supper in the evening, but vomited it, complained of great pain in the head, became comatose, and died at 11 o'clock. A *post-mortem* revealed extensive hemorrhage into the lateral ventricle, and the blood had also passed into the fourth. The walls of the lateral ventricle were unbroken, and the source of the hemorrhage undetected.

Puerperal Septicæmia treated by Iodoform Suppositories.—Dr. Alloway presented the records of six cases of puerperal septicæmia, three of which had been treated by a new method, viz., the introduction into the uterine cavity of iodoform suppositories. (See page 526.)

Discussion.—Dr. Trenholme thought the practice a reasonable one. He had had no experience with the remedy; indeed, he was one of those fortunate ones who have never had a case of puerperal septicæmia in private practice.

Dr. Gardner had used iodoform in lacerations of the vulva and perineum with advantage. The tenacity with which it adheres to raw surfaces, and even remains after injections, is a point in its favor. He had used it also in chronic endometritis, and, although it had diminished the pain, no permanent good resulted. He had been in the habit for some time of rendering sponge tents antiseptic with iodoform.

Dr. George Ross referred to diphtheria of the vagina after delivery, and remarked upon its insidious onset in a case which he had treated. He thought Dr. Alloway's suggestion very valuable, and could speak of the benefit he had seen follow in one extremely severe case of puerperal septicæmia. The fetor was removed, and a decided improvement manifested within 48 hours. He did not think there was any danger of toxic effects in the doses mentioned.

Dr. Cameron spoke of the great influence of iodoform in subduing pain, but believed the special advantages in this form of treatment were the constant presence of the antiseptic in the uterine cavity and the certainty that all parts would be subjected to its action. In the cases reported, some of the benefit might reasonably be attributed to the washings, which should not be neglected in any case.

Dr. Armstrong said he unfortunately had had a good deal of experience in these conditions, the treatment of which must in a great measure depend on our theory of their production. In the grouping together of actual facts, as observed by him, he had found them to harmonize very considerably with the division adopted by Matthews Duncan, namely, into cases of *simple sapræmia* and *true septicæmia*. In the former there is absorption of putrid ichor by the lymphatics, or its passage into the circulation through the uterine sinuses; the poison does not exist in the blood, much less grow and multiply in it, while in true septicæmia the poison is a germ which lives, grows and multiplies in the blood (the discharge in these cases may indeed be not foetid at all). In the treatment of simple sapræmia, and Dr. Armstrong took this to be the nature of the favorable cases described by Dr. Alloway, the object is to remove the cause as thoroughly as possible, and this can be accomplished by careful cleansing and disinfection of the parts by carbolic acid or other disinfectant; and it would seem that iodoform possesses advantages over carbolic acid for this purpose, being less troublesome and saving much valuable time to the practitioner, but as to its unfailing efficacy in cases of true septicæmia, Dr. Armstrong thought the reader of the paper was inclined very much to overestimate it.

Dr. F. W. Campbell said he thought the Society indebted to Dr. Alloway for the important cases which he had brought before them. The high mortality from puerperal septicæmia under existing methods of treatment would, in his opinion, warrant a trial of the method suggested by Dr. Alloway, which seemed to have been singularly successful. He thought there was a certain class of cases where it would be well to anticipate, as it were, a condition of septicæmia, as it often supervened. He alluded to cases where there was extensive adhesion of the placenta, and where its removal was attended with great difficulty. In such cases, he thought the introduction of iodoform would be found very useful, not alone in preventing putrefactive changes, but in healing torn surfaces.

Dr. Alloway stated that he had been induced to lay his limited experience before the Society, in the hope that other members would test the practice. For his own part, he felt much more confidence now in the treatment of these cases. In illustration of the antiseptic powers of iodoform, he showed two bottles of meat infusion which had been allowed to decompose; into one he had put a little iodoform, and the decomposition had been checked, the putrid odor was removed, and the solution rendered (as was very apparent) much clearer by the death and subsidence of the bacteria. In reply to Dr. Armstrong, he would say that the whole subject of septicæmia has been, until quite recently, in well-nigh hopeless confusion. It was, however, now almost universally acknowledged that septicæmia is due to the presence in the blood and tissues of a virus, which virus is *not* a germ or number of germs, but is a product generated by micro-organisms, by certain vital processes and under certain conditions of their surrounding media. These organisms do not arise spontaneously in the blood, but are introduced from without, and are incapable of multiplying in the living healthy tissues. Under certain circumstances they produce a simple uncomplicated paroxysm of fever, beginning with a rigor, followed by a rise of temperature and ending (if the dose be not too large) in defervescence and recovery. And it matters little what classification we use, whether we regard Dr. Matthews Duncan's of simple and true septicæmia, or any other division, they are but graded condi-

tions of one and the same disease, differing only in the degree of severity. If Dr. Duncan maintains that in so-called true septicæmia the poison is a germ, he stands alone in his theory, as widely published experiments prove the contrary; simple cases certainly do occur, and it is probably in this way: the site of the placenta receives infection from septic bacteria; if the discharges are retained in contact with the wound, decomposition sets in, pyrogen is produced, it is absorbed, a toxic effect follows, and septicæmia is established. If we now recognize and are fully alive to the beginning of a serious trouble we will cleanse the uterus of the already-formed virus, and protect the patient from its further formation and absorption. In a few days the patient gets well, and she is said to have had an attack of simple septicæmia. But let us not recognize the importance of arresting this toxæmia, and content ourselves with occasional antiseptic washings; there is continuous absorption, occasionally interrupted for a few minutes by the washings, the vitality of the system is progressively lowered, and especially the tissues bordering the wound, which become moribund or die right out. The germs invade and breed in them, more poison is produced and absorbed, the toxæmia becomes intense, embolic centres of inflammation are formed, and the end comes. This is probably Dr. Duncan's true septicæmia, but which is really the result of failure of the remedial agents used in the treatment, and on post-mortem section we find the channels and cavities of the body swarming with bacteria. It will be remembered that the fatal case Dr. Alloway mentioned in his report began in this simple way: there was an accumulation of discharge arrested in the inflamed womb (endometritis), germs found in this discharge a suitable soil for the generation of virus, and this not having been interfered with death took place. The second case treated by iodoform suppositories began in identically the same way (severe peri-uterine pain and chills), but was arrested in the way he had explained, through the agency of iodoform. The other two cases treated with iodoform were the result of dead children having been borne to them; and as the history of such cases, when sepsis sets in, is very often death under any circumstance, he does not think they deserve to be looked upon as

simple. Dr. Alloway concluded by saying that his remarks referred to septicæmia as met with in private practice, and not to those epidemics which have prevailed in large lying-in hospitals, or to those rare cases of intense poisoning where the cause of death is more shock than gradual poisoning with elevation of temperature.

Brains of Two Murderers.—Dr. Osler presented the brains of Richards, who murdered a comrade at Sweetsburg, Que., and of O'Rourke, who killed an old man and his daughter, at Milton, Ont. (*See p. 461, CAN. MED. AND SURG. JOURNAL.*)

Dr. Henry Howard said this was the second time in the space of thirteen months that this Society has been favored by Dr. Osler with a demonstration, at each time of two brains taken from the cadavers of criminals, who had been tried for, and found guilty of, murder. The brains before us appear to be of a low type; they may, or may not, be teratological, we cannot tell, because we do not know what constitutes a normal brain. There may be pathological defect in these brains, neither macroscopical nor microscopical but ascopical, we cannot tell. When we know the anatomy of the normal man, surgically and chemically, more particularly of the whole nervous system—which we do not now know; when we know the physiology of all the organs of the normal man, more particularly of the whole nervous system—which we do not now know; when we know the ætiology and pathology of what we call insanity, then, and not till then, will we be able to say what is the pathological defect which is the cause of mental derangement, which we call insanity—meaning thereby a state of mind the opposite to sanity. Under existing circumstances we have but little to guide us more than a man's conduct; and when we see a man an habitual criminal, and committing such terribly unnatural crimes as murder, we know that such a man is not as other men that are non-criminals, and we must assume that he is what he is in virtue either of teratological or pathological defect in his mental, which includes his intellectual, organization. We assume this for the following reasons: first, that we do not find men of normal minds, normal intelligence, guilty of these crimes; secondly, that as mind and its phenomena is one of the qualities or properties of matter with

which the Creator endowed it, and the higher the degree of organic, animal matter—matter in the concrete—the higher is mind and its phenomena developed. Therefore, when we find a man to be a murderer, we must assume that he is such in virtue of an abnormal state, teratological or pathological defect, of his mental organization. From the history of the two men whose brains are now before us, I come to the conclusion that the man Richards labored under teratological, and probably pathological, defect of his mental organization; and I consider it quite possible that the latter, being an inebriate, and having drunk a quantity of whiskey that day, committed the crime while in a somnambulistic, not drunken state, and afterwards, forgetting all about it, accused another of the crime.

Provincial Health Act.—Dr. Larocque, the Health Officer of the city, called the attention of the members to the Act now before the Legislature, and gave a sketch of the progress which had been made during the past few months. The Act provides for the establishment of a Board of Health for the Province, to be composed of three medical men, three commissioners, and one sanitary engineer. He urged the members to do all in their power to get the bill passed this session.

PROVINCIAL MEDICAL BOARD.—The semi-annual meeting of the Board of Governors of the College of Physicians and Surgeons of the Province of Quebec will be held on Wednesday, the 9th of May, at 10 A.M., in the Laval University, Montreal. Candidates for examination or for license must send their papers (including certificate of admission to the study of medicine), also the fee for the license, \$20, *at least ten days previous to the meeting*, to either of the secretaries, A. G. Belleau, M.D., Quebec, or F. W. Campbell, M.D., Montreal. Candidates for the license must be present and have their diploma with them.

PROVINCIAL MEDICAL BOARD.—The preliminary examination for admission to the study of medicine will be held on Thursday, the 3rd of May, at 10 A.M., at the Laval University, Montreal. Certificates of moral character and the examination fee, \$10, must be remitted *at least ten days previously* to one of the secretaries.

CANADA

Medical and Surgical Journal.

MONTREAL, APRIL, 1883.

THE NEW ANATOMY ACT.

On the 1st instant there came into force the Provincial Act "to amend and consolidate the various Acts respecting the study of Anatomy." It is a new departure in the way of legislation for the prevention of body snatching, and if faithfully carried out will, it is to be hoped, prove effectual. As it is very important that all members of the profession in this Province should be acquainted with the provisions of this Act, we shall draw attention to the various sections of which it is composed. The Province is first of all divided into two sections, the "Quebec Section" and the "Montreal Section," which shall comprise such judicial districts as may be specified by the Lieutenant-Governor. Then, the Lieutenant-Governor is to appoint an Inspector of Anatomy for each of these sections, and a Sub-inspector of Anatomy for each judicial district except those of Quebec and Montreal, at which places the Inspectors themselves act as such. The next section provides that every unclaimed body in institutions receiving Government aid shall be delivered, through the Inspectors, to the different schools of medicine. To prevent such action a claim for the corpse must be made inside of twenty-four hours of the person's death, by a relative within the degree of cousin-german. All superintendents or directors of institutions with public grants, and all coroners, are obliged to immediately notify the Inspector or Sub-inspector of their being an unclaimed corpse under their control. Provision is made that the Inspectors keep registers of all such notifications received; that they impartially distribute to the schools of medicine the corpses thus received, in proportion to the number of their students; and that they inspect

the dissecting rooms and order the decent interment of the remains. The Inspector is to receive \$10 for each body so supplied, in addition to cost of transport and burial. A fine of from \$100 to \$200 is imposed upon any superintendent of the above named institutions who fails to notify as provided in the Act; and a similar fine is laid upon any school of medicine which shall be found to have received and used for dissection any body not procured through the Inspector. The Inspector or Sub-inspector is bound to appear within eight days before the *curé*, or clergyman, of the parish wherein has occurred the death of any unclaimed person, and to make an entry on the death-register of the date of death, etc., and of the manner of disposition of the body. All previous Acts are repealed.

We believe this law will work well, will provide an ample supply of dissecting material to all the schools, and at the same time put a stop to the disgraceful desecrations of graveyards and vaults, which have of late become so common. The principal defect in all previous acts, and which we have had occasion several times to point out, has been the absence of any penal clause with reference to non-notification of the existence of unclaimed bodies in our public institutions. A very false feeling on this subject has long existed amongst the directors of several of these establishments; but we trust that now that their attention is strongly directed towards the necessity of their performing this public duty, they will loyally comply with the terms of this enactment. It only remains for the Government to make judicious appointments of the persons to fill the important post of Inspector, and we hope that these officials will at once enter vigorously upon the performance of their public functions, and with impartiality—without fear, favor or affection—see to it that the intentions of the law are carried out in every institution in the Province which gets a grant from the public purse. On the other hand let the schools of medicine accept cordially the legislation thus effected in their best interests; let them insist upon their rights as defined by the law, whilst at the same time refusing to countenance in any way the illicit traffic in bodies which has hitherto prevailed, only through the incompetency of officials and the refusal of responsible persons to furnish the

assistance they will now be obliged to give. Let both parties concerned in this matter unite to put this Act fairly into operation, and body-snatching will soon be numbered amongst the lost arts.

LAVAL VICTORIOUS.

There has been quite a stir in the medical circles here, and especially amongst our French-Canadian *confrères*, concerning the final decision in the long-standing dispute between the Laval and Victoria Universities. The Supreme Head of the Catholic Church has decided that Laval shall be supported, and calls upon the members of Victoria School, as well as all the faithful throughout the Province, to cease all opposition to that which must now be recognized as *the* Catholic University to be, and, instead, to give it all the assistance possible towards increasing its power and extending its influence. This, of course, applies to the *succursale* already established in the City of Montreal. Canadian Catholics are noted for their strict ecclesiastical obedience. Not a word of dissent, therefore, has been, or is likely to be, heard, now that the Head of the Church has spoken *ex cathedra*. The Faculty of Medicine of Victoria University, the latter being a Protestant Institution, must cease to exist. Its suicide must be cheerfully accomplished, not a murmur must betray unwillingness. Rumors as to what is to follow are numerous, but it is difficult to obtain reliable information. It is, however, generally believed that the body which has hitherto constituted the Faculty of Victoria will be re-organized as an independent teaching body, as under the charter of the old Montreal School of Medicine. Others have it that an affiliation is to be effected with the Catholic University of St. Joseph, at Ottawa. The papal decree would prevent all the teachers of Victoria College from holding appointments in the Hotel Dieu, which is the property of the nuns; but, no doubt, the severance of all connection with the objectionable Protestant establishment will allow of their continuing attendance as heretofore. It will be interesting to see whether the old school will submit to being thus wiped out, or whether they will fight any longer for a separate existence.

To persons unacquainted with the mediæval condition of this Province, as regards educational and many other matters, it must indeed seem strange that a single word from Rome is capable of instantly smothering all discussion, and deciding for the rising generation of doctors to whom they shall go for their medical education. It is now sinful for a Catholic student to attend a Protestant University.

MONTREAL GENERAL HOSPITAL.

The resignation of Dr. Wright leaves an important vacancy on the surgical staff of the Montreal General Hospital, which the Governors will be called upon to fill at the annual meeting in May. The division of the wards into medical and surgical, made two years ago, has already been productive of much good, securing to the patients a closer and more skilled attention, and to the students more systematic and thorough teaching. The choice of a man to occupy a position on the active surgical staff of the Hospital should receive the careful attention of every Governor; if judicious, it means an increase in the sphere of usefulness of the institution, the development of another surgeon to add lustre to the city, and the maintenance of the reputation of the Hospital as a teaching centre. Of the candidates for the position of whom we have heard, one we think has a record which should render him very acceptable to the Governors, viz., Dr. F. J. Shepherd. He has served for four years on the out-door staff, doing—by arrangement with his colleagues—surgical work alone, and is looked upon by the profession as one of the rising surgeons of the city. With a reputation as an anatomist, unequalled in the country, thoroughly versed in British and foreign surgical literature, and a skilful operator, he will be a real acquisition to the staff. We have not heard that any other members of the out-door staff are candidates. For the possible vacancy on the out-door board there are several competitors, Drs. R. L. MacDennell, A. D. Blackader, W. H. Burland and possibly others.

MEETINGS OF CONVOCATION.

MCGILL UNIVERSITY.

The annual meeting for conferring of degrees in the Faculty of Medicine was held in the William Molson Hall, on Saturday, 31st March, the room being crowded with students and friends of the University.

Professor Howard, Dean of the Faculty, read the following list in the Faculty of Medicine :

The total number of students enregistered in this Faculty during the past year was 188, of whom there were from Ontario, 93 ; Quebec, 44 ; Nova Scotia, 7 ; Manitoba, 3 ; New Brunswick, 15 ; Prince Edward Island, 9 ; Newfoundland, 2 ; West Indies, 2 ; United States, 13.

The following gentlemen, 42 in number, have passed their Primary Examination on the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, and Botany or Zoology :

Allan, J. H. B.	Landor, T. H.
Arthur, R. A.	Merritt, D. P., M.A. (McGill).
Baird, T. A. D.	McCormack, N.
Barrett, J. A.	McClure, W., B.A. (McGill).
Burrows, F. N.	McGannon, M. C.
Cassidy, G. A.	McKenzie, J. T.
Darey, J. H., B.A. (McGill).	McLellan, J. H.
Daly, W. D., B.A. (St. Mary's).	McMillan, D. L.
Eberts, D. W.	O'Brien, T.
Ferguson, W. A., B.A. (McGill).	Osborne, A. B.
Finley, F. G.	Park, James.
Groves, W.	Powell, F. H.
Hallett, E. O.	Robertson, A. M.
Hanna, A. E.	Ross, L. D.
Harkin, Fred.	Ruttan, R. F., B.A. (Toronto).
Hurdman, H. T.	Scott, J. M.
Hutchison, J. A.	Sharp, I. C.
Irvine, R. T.	Shibley, J. L., B.A. (Victoria).
Johnson, C. H.	Trapnell, H. E.
Johnson, H. D.	Wilson, J. A. K.
Joliffe, J. H., B.A. (Union).	Wood, Ed. G.
Klock, W. H.	

The following gentlemen, 30 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University. These exercises consist in examinations, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene, also Clinical Examinations in Medicine and Surgery, conducted at the bedside in the Hospital :

Allan, Clarence E.	Martel, Ovide.
Bowser, James C.	McLeod, Arch., B.A., (McGill).
Cameron, Chas. E.	MacNeil, Alex.
Carruthers, George.	MacLean, John W.
Dearden, George A.	McDonald, Alexander.
Gardner, John J.	Muckey, F. S.
Gray, James.	Phippen, Samuel S. C.
Hanvey, Chas. B. H.	Ross, Wm. K.
Harrison Henry J.	Rutledge, And. J.
Henry, Wm. G.	Scott, Walter McE.
Hopkins, Alf. J.	Shaver, Wm. H.
Johnson, Jonathan R.	Sihler, George A.
Lathern J. Simpson.	Stewart, Andrew.
Loring, J. Brown.	Struthers, Robt. B.
Maher, J. J. E.	Wood, Edward S.

MEDALS, PRIZES AND HONORS.

The Holmes Gold Medal for the best examination and final branches was awarded to C. E. Cameron, of Montreal.

The Prize for the best Final Examination was awarded to J. Brown Loring, of Sherbrooke, Q.

The Prize for the best Primary Examination was awarded to Edwin G. Wood, Londesboro, O. -

The Sutherland Gold Medal was awarded to R. F. Ruttan, B.A., Napanee, O.

The following gentlemen, arranged in the order of merit, deserve honorable mention :

In the Primary Examination Messrs. R. F. Ruttan, B.A., W. A. Ferguson, B.A., J. H. Darey, B.A., F. G. Finley, H. E. Trapnell, H. T. Hurdman, T. A. D. Baird, F. N. Burrows, M. C. McGannon, and Fred. M. Harkin.

In the Final Examination Messrs. Struthers, Lathern, Bowser, Gray, Carruthers, Gardner, Henry, Scott and J. R. Johnson.

PROFESSORS' PRIZES.

Botany.—Prize: Chas. W. Wilson, Cumberland, O., and J. A. Kinloch, Montreal.

For the best Collection of Plants.—H. E. Trapnell, Harbor Grace, Nfld.

Practical Anatomy.—Demonstrator's Prize: 2nd year, F. G. Finley, of Montreal; 1st year, A. L. Howey, Eden, O.

Morbid Anatomy.—James Gray, of Brucefield, Ont., and C. E. Gooding, of Barbadoes, W. I.

Dr. I. Brown Loring then delivered a very suitable valedictory on the part of the class, and Prof. Girdwood addressed the graduates on behalf of the Faculty. (See page 520.)

The Dean of the Faculty, briefly addressed the Convocation as follows :—It affords me much pleasure to state, for the information of the friends of medical education, that the efforts of the Faculty to raise a “Campbell Memorial Fund” are likely to be successful. Owing to the numerous calls upon our time during the winter session, my colleagues and myself have as yet seen but a portion of the many friends of our late highly esteemed Dean and of our Faculty, and they have been so generous that we confidently expect to collect the sum that we want with a view of commemorating the memory, and worth, and work of our late Dean, Dr. Geo. W. Campbell, in an appropriate way, and in some degree commensurate with the high qualities of the man. In the introductory lecture of this our fiftieth session, some of the many uses to which a very much larger amount could be most profitably put in the interests of medical education were mentioned, and I do not purpose to reproduce them now. It appears fitting, however, that we should inform our friends and the public generally that as a medical school we are steadily improving and extending our means of instructing and training students in both the science and art of medicine. The admirable system of bedside instruction, inaugurated a few years ago, is not only efficiently and zealously maintained by the Professors of Clinical Medicine and Surgery during the winter session, but is continued throughout the summer months by the Professors of Systematic Surgery and of the Institutes of Medicine. The method of teaching the classes is yearly becoming demonstrative where it formerly was largely or solely oral and pictorial, and practical instruction and demonstrations are given in Physiology, Histology, Morbid Anatomy, Chemistry, in Obstetrics and the Diseases of Women. The advantages of this method are shown by the steadily increasing number of students attending the classes and the interest they take in their work. The time devoted to systematic teaching was, eight years ago, extended to nine months annually by the establishment of a summer session of three months duration, during which short courses of lectures upon special departments or subjects of medicine and surgery are delivered; and clinical and practical instruction form prominent features of these sum-

mer sessions. The number of men attending them increases every year, and, although not compulsory, it is quite the exception for a student to proceed to his degree in medicine who has not attended one or several of these summer sessions. Within the present month a Demonstrator of Physiology and Histology in connection with the chair of Institutes has been appointed by the Governors, and the gentleman who has efficiently assisted the Professor of Physiology in doing that work for the last two years received the appointment, and has already gone for six months' additional preparation in the laboratories of Germany. These are some of the evidences that I would adduce to show that the Medical Department of our University is alive and active, and not disposed to rest satisfied with what has been done in the past by the able men who have retired or been taken away from their work. And it is with the view of enabling it to carry on the present work more efficiently, as well as to enlarge it in one or two important directions, upon which I should like to speak, were you not already overdosed with medicine, that the Medical Faculty is now appealing to its friends to found a "Campbell Memorial Fund" worthy of the man, of the work, and of the friends of both.

TRINITY MEDICAL SCHOOL, TORONTO.

First Class Honors.—First year scholarship: Stuart Scott. Second year scholarship: Robert Lucy; Angus Graham, James Johnston (equal); Charles M. Sandford, Clark Lapp and W. H. McKeague (equal); and John A. Symonds.

Second Class Honors.—J. McD. Cleminson, D. C. Throop, G. J. Dickson, E. M. Féré, W. V. Lynch, Woodhull, E. Hooper, Doolittle, N. Allen, J. E. Midgley, Stacey, Holmes, Charlesworth, Sodea, W. H. Hay, Baumann, H. W. Thompson, W. A. Williamson, Housberger, Roberts, Mackenzie, Darrell, Haultain, Mr. A. C. Woodley in anatomy and physiology.

Passmen.—A. B. Lang, O. Totten, F. McAllister, C. Abbott, J. G. Harper, L. Brock, Jonn Evans, J. A. McLeay, J. T. Bell, J. J. Cassidy, L. F. Cutten, F. Brown, A. B. Eadie, Robt. West, L. W. Thompson, J. C. McCabe, George Veitch, Thos. Wilson, W. S. Airth. Mr. A. Gillespie passes in botany, practical anatomy and physiology.

PRIMARY EXAMINATION.

First Class Honors.—Second year scholarship: J. R. Logan Wm. Brown, H. H. Hawley, S. H. Mott, C. F. Snellgrove, P. A. Dewar, S. A. McKeague and Robert Owens.

Second Class Honors.—G. A. Bingham, D. O. R. Jones, F. Campbell, W. H. Pebler, G. L. Airth, T. Owens, J. M. Cochran, W. E. Sprague, G. J. Paul, T. McCullough, A. B. Wilson, G. Fierheller, J. Lindsack, H. D. Leach, A. T. Little and R. J. Lochart.

Passmen.—P. H. Salter, J. S. McCullough, J. E. W. Anderson, T. M. Lawton, J. A. Couch, J. Park, C. J. McIntyre, J. C. Bell, J. Johnston, A. Gillespie, J. E. Brown, A. V. Delaporte, W. J. Chambers, D. W. Carmichael, A. E. Stuart, A. McKillop, C. Trow, J. G. White, R. C. Coatsworth, F. C. Hood, Duncan Gow, A. K. Sturgeon, P. M. Davey, J. D. Davidson, E. Frammer and S. M. Dorland passed on certain subjects.

FINAL EXAMINATION.

J. E. Jenner, Trinity School, gold medallist; B. H. Scott, first silver medallist; E. M. Hoople, second silver medallist; McConochie, T. H. Robinson, Backus, A. Hawke, certificates of honor.

The following gentlemen have passed: S. W. Lamoreaux, T. D. Meikle, R. Hislop, D. F. Rae, Dickson, J. H. McCullough, T. C. Cowan, C. E. B. Duncombe, R. M. Fairchild, J. A. Thompson and G. J. Charlesworth.

VICTORIA COLLEGE, MONTREAL.

Final Examination.—Messrs Omer, Allard, Alf. Archambault, J. A. Bigonnesse, Joseph Bastien, Aug. Brion, J. U. Brisbois, J. P. Chartrand, Sidney Craig, J. S. Chagnon, L. J. Camire, Jos. Chaiffers, Z. Etue, H. E. Langis, Anthime E. Leclair, G. H. Lacoursiere, H. Mathieu, L. A. Moil, Nap. Morencey, A. Quimet, Ed. A. Poitevin, J. G. Prevost, J. A. Pepin, G. Pelsdeau, Guil. F. Prevost, H. Roman, J. F. Rioux, M. J. A. Salvail, E. Simard, M. A. Seguin, Chas. Tessier, R. Vaillancourt and Geo. N. Wateir.

Primary Examination.—M. M. Lucien Belliveau, George Beaudoin, A. Barolet, F. Guil. Brosseau, Jos. Bastien, A. Brien, Fred. Daignault, F. Dubois, T. W. Fournier, A. P. deGrandpre, H. Gauthier, A. Leblanc, G. Peladeau and J. F. Rioux.

BISHOP'S COLLEGE.

Primary Examination.—The following candidates successfully completed and passed their primary examinations, consist-

ing of Anatomy, Physiology, Materia Medica and Hygiene : Ernest E. Bronstorff, winner of the David Scholarship ; R. C. Blackmer and C. B. Ball, first class honors ; E. O'B. Freligh, second class honors ; P. E. Minckler, W. Patterson. Passed in Medical Jurisprudence : F. B. Saunders, W. A. Mackay.

Final Examination.—The following candidates passed the final examinations, consisting of Practice of Medicine, Surgery, Obstetrics, Pathology, Medical Jurisprudence, Clinical Medicine and Clinical Surgery : J. A. Caswell, Wood Gold Medal ; E. Sirois, Chancellor's Prize ; P. E. Minckler.

Obituary.

DR. VANBUREN.—American surgery has lost one of its ablest and best known representatives in the death of W. H. Van Buren. He was born in 1833, of old Dutch stock, his great-grandfather, a physician, having emigrated from Holland in 1800. He was educated in Philadelphia and Paris, and for a time served as assistant-surgeon in the army. He married a daughter of Valentine Mott, and moved to New York in 1845. For many years he held the chair of anatomy in the University School, and in 1868 was appointed Professor of Surgery in Bellevue. His best known works are upon the *Diseases of the Rectum* and *Diseases of the Genito-Urinary System*. To many Canadian Surgeons he was very well known, and in difficult and obscure cases his advice was much sought after. He was a scholarly man, with a quiet dignified manner, which impressed strangers very favorably.

DR. KOLLMEYER.—The death of this gentleman took place on the 13th ult., after a long and painful illness. He was born in the city in 1832, and educated at the High School ; entered the medical faculty, McGill College, and graduated in 1856, his thesis being 'On the Syphilitic Virus.' While a student he was apothecary to the Hospital, and after graduation entered upon practice in the city, and enjoyed the reputation of a careful and skilled physician. For some years he lectured upon Botany and Materia Medica at the College of Pharmacy, and held the chair of Materia Medica at Bishop's College from its establishment. He had the reputation of being a very successful teacher, particularly in Chemistry and Materia Medica, and

for years conducted large "grinding" classes. He edited the Pharmaceutical department of the *Canada Medical Record*, and was an occasional contributor to the journals. In 1875 he published a useful little work, "Chemia Coarctata," which has had considerable sale among students.

DR. GASCOIGNE.—His death took place early in February at Jamaica, where he had been in practice for some years. He came to this country as Surgeon in the artillery, and while stationed in Montreal graduated at McGill, '61. He retired from the service and practiced for a time at Brockville, Ont.

VICTOR VON BRUNS.—This celebrated German Surgeon, Director of the clinic at Tübingen, died on the 19th, aged 71. He was a voluminous writer on surgical subjects, especially laryngology. In 1861 he first extirpated, with the aid of the laryngoscope, a laryngeal polypus from the throat of his brother.

—The deaths are also announced of Prof. Sigmund of Vienna, the celebrated syphilographer, and of Dr. Ranney of New York.

Personal.

Dr. Canniff has been appointed Health Officer for the City of Toronto.

Dr. H. Harkin sailed for England by the "Parisian" on the 7th.

Dr. Kennedy has been appointed Registrar of the Medical Faculty, Bishop's College.

Alexander McTaggart, M.D. (McGill '69), has resumed practice at London, Ont.

Dr. Wright has resigned from the active staff of the general Hospital after years of service.

We are glad to hear that Hon. Dr. Schultz has so far improved as to appear in the Senate.

J. A. Grant, Jr., M.D. (McGill '82), has returned from London. He enters practice with his father in Ottawa.

G. W. Nelson, M.D. (Bishop's '79), has been appointed Resident Surgeon to the Central Hospital, Panama.

As we go to press, we hear that Dr. Wright has resigned the chair of *Materia Medica* and *Therapeutics* in McGill College.

Ed. S. Wood, M.D. ('83), has gone to British Columbia as assistant on one of the sections of the Canadian Pacific Railway.

Dr. Field, Medical Superintendent of the Asylum at Barbadoes, who has been spending part of his leave of absence in Montreal, left for home on the 27th ult.

Dr. Chas. C. Cameron, the McGill Gold Medallist in Medicine for the year, left on the 7th for a two years' course of study in England and Germany.

Mr. William Saunders of London, Ont., Professor of Materia Medica in the Western University, has been elected a Fellow of the Royal Microscopical Society of London, Eng.

Henry P. Loomis, son of the well known physician, Dr. A. L. Loomis of New York, received the Prize of for the best Final Examination in the University of New York.

—We regret to see that Dr. J. E. Robertson, M.P., of Montague, P.E.I., has been unseated in consequence of his having omitted to resign his seat in the Local Legislature sufficiently early.

—The well known Surgeon, Prof. McLean of Ann Arbor, has been successful in his action for libel against the *Detroit Evening News*. Damages were placed at \$50,000, and the jury gave \$20,000.

The death is announced of Dr. Goring of St. Thomas, Ont., at the age of 72. He held the diploma of the R.C.S., Ireland, 1842, and the license of the College of Physicians and Surgeons of Lower Canada, in 1849.

W. R. Sutherland, M.D. (McGill '78), has been appointed one of the Assistant Demonstrators of Anatomy, in McGill College. He left on the 7th to spend six months in the anatomical schools of Paris and Berlin.

Dr. Scott, Prof. of Anatomy, McGill College, is, we regret to say, seriously indisposed, his physicians having detected signs of combined renal and cardiac disease. He has not been quite well all winter, but lectured with his usual vigor, and conducted the examinations on Anatomy at the close of the session.

R. F. Ruttan, B.A., who took the Sutherland Gold Medal and the Morrice Scholarship at the recent Primary Examination in McGill College, is the son of Dr. Ruttan of Napanee, Ont., a McGill alumnus of '52. Mr. Ruttan had a brilliant career at the University College, Toronto, and took the Gold Medal in Natural Sciences.

Dr. Wm. Gardner, Lecturer on Gynæcology in the summer session, McGill College, and physician to the University Dispensary for Diseases of Women, has given up general practice, and will hereafter devote himself exclusively to Diseases of Women.

Dr. Rosebrough of Toronto, the well known oculist, has for some years past devoted much attention to electricity, and there are in the pages of the *Canadian Journal* and *Canada Lancet* many valuable communications from his pen. In conjunction with Mr. Black he has taken out the patent for an exceedingly important invention, whereby telephonic and telegraphic messages can be simultaneously transmitted over the same wire. The practicability of the invention has been tested and its importance admitted.

Medical Items.

—It is reported that Dr. Jenny K. Trout of Toronto, has offered \$10,000 towards the establishment of a School of Medicine for women. This, if true, may make the venture possible; but we still maintain that as yet there is no need for such an institution in Canada.

—Dr. Lawrence Washington, a great nephew of Gen. Washington, who served in the late war on the Confederation side, died recently in England, leaving his family poor in money, but rich in relics of the great general. Among these possessions are several letters and interesting documents, the sabre he used in the revolution, and the silk rep suit he wore at his first inauguration.

—The Student's Journal has the following: "Well, madam, how's your husband to day?" "Doctor, he's no better" "Did you get the leeches?" "Yes, doctor, but he could only take three of them raw; I had to fry the rest."

—A busy doctor sent in a certificate of death the other day, and through accident, doubtless, inserted his name in the blank space for "Cause of Death." Thus do men sometimes blunder into truth.

—Dr. Albert G. Craig, Vevay, Indiana, suggests the substitution of linseed oil for olive oil in the composition of liniments. He has found it better, as well as much cheaper.