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CASES OF GUNSHOT WOUNDS OF THE CHEST.

By JAMES BELL, M.D.,

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(Read before the Medico-Chirurgical Society of Montreal.)

CASE I.—*Penetrating Wound of Lung; Gangrene; Recovery.*

Corporal J. E. L., 90th Battalion, aged 24, was wounded at the Fish Creek fight on the 24th of April, 1885. He was shot in the chest while lying facing the ravine in which the enemy were concealed, at a distance of about one hundred yards from him. The bullet passed through the second left costal cartilage, beneath the sternum, downwards and outwards towards the right side, making its exit through the 7th rib in the mid-axillary line. Before being removed from the field he also received a flesh wound over the right trochanter major, which, although not in itself serious, added greatly to his sufferings on the journey to Saskatoon and subsequently. He, with the other wounded from Fish Creek, arrived in Saskatoon on the 2nd of May, having been driven forty-five miles in a lumber waggon over the "trail." The period of seven or eight days intervening between the time of his injury and his arrival at Saskatoon was one of very great hardship to a man in his condition. The weather was cold, especially at night, and windy, and a considerable part of the time wet; their only shelter was the ordinary "bell" tent, and there were neither the materials nor the facilities for making warm and soothing applications to the chest, nor was there any

suitable invalid diet. On arrival at Saskatoon, his condition was very bad indeed. The greater part of the right lung was consolidated, and his breathing painful and rapid. There was also high fever and troublesome diarrhoea. Empyema followed, and on the 8th of May Deputy-Surgeon-General Roddick enlarged the wound in the right axillary region, evacuating a quantity of pus which was very foetid. The pleural cavity was then washed out daily with antiseptic solutions (carbolic, alcoholic and boracic at different periods); and from time to time portions of gangrenous lung tissue presented at the wound and were removed. In spite of these precautions, however, he continued to suffer from high fever, perspirations, foetid discharge, and great weakness. On the 23rd of May, with the advice and assistance of Dr. Roddick, I attempted to make a dependent opening. The patient was etherized and an incision made in the eighth intercostal space, posteriorly. On reaching the pleura, however, the lung was found to be firmly adherent to the chest wall at this point. The wound was therefore closed and the original axillary wound enlarged, and the cavity explored with the finger and long probes. A considerable amount of sloughy tissue was found lying unattached in the cavity, and was removed. The cavity was then emptied as well as possible, and washed out with weak carbolic lotion. On introducing the finger into the cavity, it was found to be as large as a large-sized orange, and surrounded on all sides by pulmonary tissue. It was an intra-pulmonary cavity, and not, as we had supposed, a localized pleural sac. As he recovered from the ether, he was seized with a severe and prolonged fit of coughing, in which he expectorated pus and fluid from the pleural cavity which had a distinct carbolic odor, and caused unmistakable tingling in his mouth. From this time forward the pus was expectorated constantly and freely, and in a day or two was free from smell. The wounds healed up rapidly. All his symptoms subsided, and from this time his recovery was uninterrupted. In a few days he was able to be taken out into the air and sunlight, and in a couple of weeks was convalescent. He was one of the last remaining patients at Saskatoon, and embarked on the hospital barge on the 4th of

July, and was discharged when he reached Winnipeg on the 15th of the same month. He has since enjoyed the best of health, and at the present time writes that he is quite well and strong. I have no doubt but that the thorough exploration of the cavity and the removal of sloughy tissue on the 23rd of May opened communication with a bronchial tube of considerable size, and that henceforth the cavity was kept freely evacuated by expectoration. This, I think, was the starting point on the road to his recovery, which progressed with marvellous rapidity from that time.

CASE II.—*Penetrating Wound of Chest.*

Private H. H. M., 10th R.G., aged 19, was wounded at Batoche on the 12th of May, 1885. When brought into the zareba he was suffering from dyspnoea and painful inspiration. He had also coughed up a little blood soon after receiving the wound. On examination, a bullet wound was found about an inch to the right of the vertebral column, opposite the fifth dorsal vertebra. The track of the bullet could be traced as far as the vertebral column, passing deeply through the muscles of the back, and the bullet itself (a round one) was felt beneath the skin at the angle of the left scapula. It was immediately removed, and the wounds cleansed and dressed with iodoform. There were no marked chest symptoms until after his removal to Saskatoon, where he arrived on the 15th. The wound was then suppurating freely, and he suffered from considerable pain and uneasiness in the side and high fever. A few days later the left chest was found to be gradually filling with fluid; a hypodermic needle was introduced, and half a drachm of odorless sero-pus withdrawn. The chest filled rapidly, and the patient suffered from chills and fever. The pleural cavity soon became filled to the apex, and displaced the heart slightly. The flow of pus from the wounds now became greatly increased, and pus was forced out from both wounds, but especially from the posterior one (the wound of entrance of the bullet), on coughing. I then administered ether, and made a free opening through the 7th intercostal space and in the existing wound, and evacuated

a large quantity of pus having a slightly foetid odor. Through this opening also came, at this time, pieces of red cloth from his tunic and pieces of his shirt and undershirt. On examination while the patient was under ether, a long probe passed directly into the pleural cavity from the original wound. The bullet was found to have passed between the spines of the 5th and 6th dorsal vertebræ, close to the bodies of the bones, and to have roughened the edges of both spines. The opening of the cavity and the insertion of a large drainage-tube gave great relief, and all the active symptoms subsided promptly, although the discharge continued for a long time. His recovery was slow. The pleural cavity was washed out with antiseptic solutions from time to time, and nourishing food and stimulants were administered, and the patient was soon able to leave his bed and go out into the fresh air and sunlight in daytime. He was brought down to Winnipeg on the hospital barge, still very weak, and placed in the General Hospital there on the 15th of July, under care of Dr. Kerr. He remained there for some time, and reached his home in Toronto, I believe, about the end of September. He is now perfectly well. There was great retraction of the chest wall during convalescence.

In this connection I wish to mention briefly two other cases which did not come under my observation at the time their injuries were received, but which I saw later on :

Pvte. L., 65th Batt., was wounded on the 28th of May at Frenchman's Butte. He was struck on the posterior wall of the right chest, the bullet making its exit in front at a point nearly opposite. He suffered from severe respiratory symptoms and spat up some blood, and a penetrating wound of the chest was diagnosed. He recovered rapidly, however, and when I saw him on the 12th of July, his wounds being then perfectly healed, there were no chest symptoms, no alteration in the conformation of the chest, and no physical signs to indicate that the pleural cavity or its contents had ever been disturbed in any way.

A similar case was that of Sergt. F., N.W.M.P., who was wounded about a week later, in Steele's engagement at Loon Lake. He also had very severe symptoms of pulmonary injury,

dyspnoea, bloody expectoration, hurried breathing, etc., but recovered rapidly and perfectly without any serious pleural or pulmonary inflammation. I saw him on the 18th of July, on his return to Calgary to report for duty. He was then apparently in perfect health.

In gunshot wounds of the chest, the important point in prognosis is, of course, whether the bullet has penetrated the chest walls or not. In the surgical history of the American Rebellion, the mortality in a group of over 8000 cases of penetrating wounds is given at 62.5 per cent., while in a similar group of non-penetrating wounds the mortality is 2 per cent. The four cases which I have reported show the difficulty of making an exact diagnosis, unless the patient can be kept under the observation of the same surgeon throughout his illness; and as our knowledge of such wounds must be mainly derived from military surgery, this is, of course, nearly always impossible.

Case II of this series was not thought to be a penetrating wound when treated on the field. Cases III and IV were so diagnosed, and yet, I think, the subsequent histories show that Case II was undoubtedly a penetrating wound, and that the others were not. One could hardly help making such a diagnosis, however, with the symptoms shown by these men at the time of receiving the wound—cough, distressed and hurried breathing, and bloody expectoration. The fact that the symptoms did not persist beyond a few days, and that there was no evidence of pleural or pulmonary inflammation, or of the results of such inflammation, makes it quite clear, I think, that these were only wounds of the soft parts of the chest wall, external to the pleura, and the blood expectorated at the time of the wound may be explained by the contusion produced by the bullet. I consider Case I an extraordinary recovery, under all the circumstances, and considering the nature of the injury and its termination in gangrene, which destroyed a large portion of the lung. Empyema followed as a matter of course, but, fortunately, the axillary wound was favorably situated for the evacuation of the pus and the removal of the necrosed pulmonary tissue.

PNEUMONIA.

BY J. T. GILLIES, M.D., TEESWATER, ONT.

(Read before the Ontario Medical Association.)

In presenting this subject to the Association, it is not with the object of offering anything new regarding this very common and fatal disease, but for the purpose of arriving at some definite conclusions as to its nature and treatment, that we may be the better enabled to combat it when brought face to face with it.

The report of the Registrar-General for the Province of Ontario shows that it usually stands third or fourth in the list of the ten most fatal diseases. In 1874 it stood second, or next to consumption. In that year, of the 943 who died of this disease, 538 were males and 405 were females, or nearly 33 per cent. more males than females. In 1880 it stood fourth; in 1881, fifth; in 1882, fourth; in 1883, fourth; in 1884, fourth. In my humble opinion, a disease fraught with such great danger to human life demands not only the earnest consideration of every medical practitioner, but of this Association.

There are several varieties of pneumonia, the two principal ones being the croupous and catarrhal. It is upon the former that I intend briefly to offer a few remarks on this occasion.

The specific cause of croupous pneumonia, according to pathologists, is as yet undetermined, and the existence of such a cause is still a matter of doubt. Among the predisposing causes age ranks high. It is met with most frequently between the age of 20 and 40; less so from 40 to 60; very frequently after 60, when it appears to be one of the most fatal of all acute diseases that we have to do with after that period of life.

Pneumonia is a widespread disease. It is to be found in almost every country and clime, but it is far more prevalent in those places that are subject to sudden and varied changes of temperature than where there are extreme degrees of heat or cold. There are certain seasons of the year in which it would appear to be more prevalent than others. Of twenty-four cases that I have taken notes from, six occurred during the month of March, five in April, four in December, three in February, two

in May, two in June, and two in November, so that from this report by far the larger number occur between the months of November and May. Men are more liable to the disease than women, due, no doubt, to the fact that they are more exposed to causes which produce pneumonia.

Everything that depresses the vital powers seems to act as a predisposing cause, as, for instance, unfavorable hygienic surroundings, overcrowding, debilitating habits, drunkenness, poverty, etc. Diphtheria, erysipelas, measles and smallpox act in a similar manner. Uræmia, pyæmia, septicæmia, and all that class of disease which depend on the retention of excrementitious matters in the blood, are also powerful predisposing causes. Difficult dentition in children also acts as a predisposing cause. One attack predisposes to another; every practitioner must find it an occasional occurrence to meet with it more than once in the same individual.

Of the direct exciting causes of pneumonia, a chill appears to be the most common, as, for instance, going into a damp cellar whilst the body is overheated, sleeping on the damp grass, or exposing one's self to cold draughts of air whilst the body is very warm. In all my cases of acute primary pneumonia, I was able to trace their origin to a chill. There are two theories advanced as to the nature or origin of croupous pneumonia.

1. That pneumonia is a "specific" fever, of which the disease in the lung is only a local effect.

2. That it is a purely local disease, of which the pyrexial and other phenomena observed are only the immediate consequences.

From the following facts, the second hypothesis can scarcely be maintained: Experiments with the inhalation of hot air, moist warm air, icy-cold air, vapors of various noxious acids and gases, the tracheal injection of caustic ammonia and mercury, and traumatism, have all failed to produce croupous, but have caused catarrhal, pneumonia. The symptoms of croupous pneumonia seem to be opposed to its being a local disorder. I have seen cases where a very small portion of lung from physical signs would appear to be affected, attended with severe constitutional disturbance, as delirium, and a temperature as high as 106°.

In local inflammations, there is a direct ratio between the amount of surface involved and the constitutional disturbance which attends the same. The arguments in favor of the first hypothesis are the comparative rarity of ascertainable causes for its origin and the suddenness of the crisis while the inflammation is at its height. According to Dr. Loomis, in his article on pneumonia, the points of resemblance between croupous pneumonia and the acute general diseases are the following:

“It has an initiatory chill, an orderly pyrexia, and a somewhat typical course, inasmuch as in many cases there is a day of abrupt crisis and a definite duration. The countenance resembles that of typhus and typhoid fever, very frequently there are herpetic eruptions, and the kidneys are more frequently affected than can be considered as accidental. The head symptoms very much resemble the condition that accompanies the exanthems. It appears at times like an epidemic. Last spring, I had no fewer than seven cases under observation at the same time, two in the one house, brother and sister.” Dr. Loomis also states in the same article that the resemblance of pneumonia to the acute general diseases is to be found, for the most part, in its nervous phenomena, and that the complications which render pneumonia dangerous are those which interfere directly with the muscular power of the heart or diminish its nerve supply.

Dr. Wilson Fox says the most probable hypothesis to explain the origin of pneumonia is that of altered composition of, or the existence of some morbid material in, the blood.

Sturges places pneumonia in a middle place between the specific fevers, so-called, and the local inflammations, and adds that it has something in common with both.

The late Dr. Austin Flint of New York was of the opinion that it is essentially a fever, of which the pneumonia is the anatomical characteristic. “Pneumonic fever is as appropriate as the term enteric applied to typhoid fever.”

From the collective investigation report upon pneumonia, as given by the *British Medical Journal* for December 13th, 1884, the abstract is, to a certain extent, in favor of the opinion that pneumonia is a disease of a peculiar nature, including other elements than simple inflammation of the lungs.

The treatment of pneumonia has given rise to more earnest discussions, probably, than almost any other subject in modern medicine. It has been made a very battle-ground between the advocates of "heroic" measures, on the one side, and the supporters of a "rational" and expectant treatment on the other. A little common sense brought to bear on the subject will assist very much in removing the difficulty. No special plan of treatment can be adopted in pneumonia, so great are the differences in constitution that no two examples will admit of precisely the same method of treatment. The true course, I think, has been indicated by Hufeland—namely, to generalize the disease and individualize the patient. Thus, one group of cases will demand an antiphlogistic course of treatment, a second stimulation and support, whilst a third will be most benefited by little or no treatment beyond a well regulated diet and rest. At one time large bleedings were practised, regardless of the age, constitution or stage of the disease. Dr. Hughes-Bennett of Edinburgh and Dr. Todd showed that the treatment by bleeding is not only injurious, but unnecessary in a large proportion of cases. I might say the same conclusions are generally adopted by the profession at the present day. Antimony is another remedy that was very much used at one time in the treatment of pneumonia. That it is a remedy of undoubted value when given in suitable cases for the purpose of reducing the pulse and breathing, and in many cases checking the inflammation, I have had many opportunities of testing its efficacy. It should never be administered in adynamic cases, neither in the pneumonia of the aged nor in most cases of children. Veratrum viride and aconite are arterial sedatives of much value in pneumonia when given in appropriate cases. The alkaline diaphoretic salines are also valuable remedies to promote secretion and to keep the mucous and cutaneous surfaces at work. Calomel was at one time very much in vogue in the treatment of pneumonia, but it is now almost discarded.

In the *American Medical Digest* for April, 1886, Bartlett, and Moritz of St. Petersburg, speak in very high terms of the use of inunctions of mercurial ointment in the treatment of

croupous pneumonia. They say no matter whether the metal is supposed to reduce the excess of fibrin, diminish congestion of the lungs, and favor the resorption of the inflammatory exudate, or whether we mean to kill by its action the specific etiological factors of the disease, "Friedlander's pathogenetic microbes," the mercurial treatment is usually attended with good results. They say that for the last two years this has been the only medication employed in croupous pneumonia, and the mortality has been reduced by it from 31.4 per cent. to 6.2 per cent., which is certainly remarkable. Alongside these injunctions, the only thing used was the cold compress to the thorax and quinine and digitalis, according to the indications of the case.

Blistering, once so fashionable, should never be used in the early stages of the disease, neither in the latter stages if resolution is progressing favorably. They may, however, be sometimes used with advantage in the latter stages in cases of delayed resolution. That blood-letting is a very beneficial and appropriate remedy in some cases, I think, cannot be gainsaid; for instance, should we be called to see a young, robust patient of previously temperate habits, threatened with a severe attack of pneumonia, pulse full and rapid, temperature high, great dyspnoea, with sudden engorgement of the right side of the heart, and, if seen in the congestive stage, the proper thing to do is to bleed at once. This is done not so much for its curative powers, as for the purpose of giving immediate relief until the proper remedies administered will have time to take effect. Under these circumstances also, if the fever be high, tartar emetic may be given, combined with salines and small doses of paregoric if the cough is troublesome. The affected side should be enveloped in a warm linseed-meal poultice, over which a little oil may be smeared. I am also in the habit of adding a little mustard to each poultice, and thus they do not require to be changed more frequently than every five or six hours. As soon as the sputa become free and catarrhal, I stop the tartar emetic and give liquor ammoniæ acetatis with spirits of nitrous æther and paregoric and sometimes digitalis. To remove pain and procure rest, especially at night, I give opium, but in the event of its being

contraindicated, I give bromide of potassium in combination with chloral hydrate to produce sleep. In some cases I have used tr. aconite in combination with liquor ammoniæ acetatis, with very beneficial results. The above treatment applies to sthenic cases. Now, supposing we are called to attend an asthenic case in a feeble, broken-down constitution, we must adopt a stimulating plan of treatment. Opium is very serviceable in these cases, as in all cases of pneumonia in the early stages of the disease, fulfilling two purposes, namely, procuring rest and soothing the nervous system, which effects, if produced, render the system more tolerant of the disease, and the danger from exhaustion is diminished. Opium must not be given if there is cyanosis or much bronchial secretion; which condition, if present, ammonia, senega and digitalis ought to be administered. In this class, wine is necessary from the outset, and whiskey or brandy freely given is the only thing which will carry the patient over the crisis. Quinine can be given with advantage in these cases.

I am firmly convinced that a certain proportion of cases in pneumonia will recover without treatment. I have at times been told by young men that they have had a slight cold with cough, pain in the side, and spat up a little blood; when asked if they had done anything for it, would reply, done nothing, except remain in the house for few days—perhaps take a dose of physic, and not even that always. There are certain indications to be fulfilled in all cases of pneumonia. The bowels should be well attended to; the patient should be kept in bed and as quiet as possible, in a large, airy, well-ventilated room, and its temperature should range between 60° and 70°. The diet is an important item in the treatment of pneumonia. The food ought to be fluid or semi-fluid, and should consist of a plentiful supply of eggs, milk, broth and beef-tea. In all severe cases, there are two sources of danger—namely, heart failure and pyrexia, more especially the former. There is no doubt but that a large proportion of deaths are caused from heart failure, and as the pulse is the true index as to the strength of the heart, therefore it should be most carefully watched in all cases of pneumonia, and if at any time we find it becoming very rapid

and feeble, and especially dichrotous, alcoholic stimuli should be administered, as it is the best means we possess of sustaining the flagging heart. Ammonia, camphor, musk and digitalis may also be used, but they are inferior to alcohol.

The second indication is to lower the temperature, which may be done by cold compresses to the chest. I have had no experience myself with this form of treatment in this disease, and the profession seem divided as to its merits. I would not, however, think it suitable in the old or feeble, or in cases of organic heart disease, as it might produce too great a shock to the system, and the pneumonia, it is said, is more liable to extend from its use. Quinine is another remedy which is highly recommended for reducing excessive heat, but it must be given in large doses. During convalescence, the general strength should be maintained as much as possible by tonics and restoratives, such as quinine, iron, mineral acids, and strychnia. Cod-liver oil and change of air are also very beneficial in some cases. The different complications should receive their appropriate treatment.

TWO CASES OF PLACENTA PRÆVIA TREATED WITH TAMPONING AND TURNING.

BY J. CAMPBELL, M.D.C.M. (MCGILL UNIV.), L.R.C.P. (EDIN.),
SEAFORTH, ONT.

Read before the Ontario Medical Association, June 3rd, 1886.

CASE I.—Was called hastily on the morning of the 19th of January, 1876, to see Mrs. H., aged 32, the mother of three children. Found her in a pool of blood, pale and excited, with pulse 120, temperature normal. Hemorrhage had been sudden and profuse, but had stopped before I reached the house. She gave me the following history: Two weeks previous she had a sudden gush of blood from the vagina, which greatly alarmed her, as she had not reached her seventh month. A physician had been called in, and had given her some medicine to quiet her, but had not told her husband or herself what the matter was. On the present occasion there was a repetition of the same symptoms in an aggravated form. Made an examination and found the os but very slightly dilated; could with difficulty

pass the index finger. It was also somewhat rigid and undilatable. The internal os was nearly the size of a quarter dollar, and I could detect a cushion-like body, above which was the head that could be felt by palpation above the pubis. No blood was escaping. Gave an opiate, and told her to rest in bed and take cool drinks. Foetal heart could not be detected, and she had not felt the motions of the child for several days. Told her husband that there were breakers ahead, and when flooding returned he must call a medical man immediately. He told me that he wanted me to attend to her. Said I would consult my partner, Dr. Burgess, and agree upon our future course. We resolved to temporize for the present and act energetically when next flooding took place. Saw her the same evening; everything quiet, with no return of the hemorrhage. Got a sudden call on the 24th, and with Dr. Burgess hastened to the house. Found her blanched from loss of blood and on the verge of syncope. On this account we made no efforts to dilate the os and complete the delivery. The os was dilated to the size of a fifty cent piece and dilatable, and the placenta could be distinctly felt presenting at the internal os and attached all round it. Through the placenta a firm, round body could be felt pressing down. Labor had evidently set in. We tamponed the vagina carefully, and gave ergot and brandy. The flooding was arrested. The labor went on. At the expiration of two hours we removed the tampon, and found the os dilated fully two inches in diameter and dilatable. The cervix was soft, and a spongy body was dipping down into the cervical canal. Some blood had escaped in spite of the tampon, and as sudden gushes were now taking place in the intervals between each pain, we resolved to turn and deliver at once. Dr. B. gave some ergot and brandy, and prepared to control the uterus. Preparing my right hand on account of having more command of it, I passed it up to the os, which I entered, and detaching the placenta on left side of the patient, passed the hand between it and the uterine wall until I reached the membranes, which I ruptured. Found a leg without difficulty, turned, and delivered, Dr. Burgess pressing firmly on the uterus all the time. I then passed the hand into

the uterus and delivered the placenta. We both remained with the woman for nearly three hours, giving, at intervals, ergot, stimulants, and liquid nourishment. The child had been dead some time. A mild form of septicæmia set in, with moderate elevation of temperature, which yielded to the proper treatment. The patient was under our care for eight days in all. She made a good recovery.

CASE II.—Received a summons at 1 A.M. on the 1st of Aug., 1881, to go with all speed to see Mrs. C., aged 30, pregnant for the fourth time. Found that she had been taken with sudden flooding, which greatly alarmed her. Was about her seventh month. Upon examination, satisfied myself that the head was presenting, but found the os undilated and the cervix rigid. Plugged the vagina, gave brandy and opium, and remained with her three hours, when I renewed the tampon, and left, the hemorrhage having entirely ceased. In four hours removed the plug and ordered absolute rest in bed, with cold acidulated drinks.

Aug. 2nd.—Visited her to-day, morning and evening. No return of flooding. Patient recovering her strength. Warned her husband that there was danger ahead, and that he must call medical aid immediately when hemorrhage returned, as undoubtedly it would. Expected that he would call the late Dr. Vercoe, the family physician, as I had merely been called in his absence.

Aug. 3rd, 1 A.M.—Was again called in haste, the flooding having returned. Found the patient weak and pale, and the bed saturated with blood. Examined, and found the os dilating and the woman in labor, but every pain pumping blood. There was complete placenta prævia. Sent the husband for Dr. Vercoe, while I proceeded to employ the tampon as before, at the same time giving ergot and brandy. The doctor arrived in due time, and we watched the case as the labor went on. We removed the plug and made a hasty examination at the end of two hours. Finding the os sufficiently dilated and dilatable, and hemorrhage now worse than ever, we agreed to turn and deliver. A good dose of ergot and brandy having been given, Dr. Vercoe

proceeded to compress the uterus, while I prepared my right hand for the operation, as in the case already reported. We succeeded nicely, detaching the placenta on the left side and reaching the membranes above, rupturing the same, seizing a foot, and turning without much difficulty. When the leg was brought down, the hemorrhage stopped. Using steady traction, however, we delivered, my assistant following down and compressing the womb in good style. The after-birth was afterwards removed without trouble. We both remained nearly three hours with our patient, using stimulants and liquid nourishment, with occasional doses of ergot. We kept up compression on the uterus for a full hour. Saw her twice next day, after which I handed her over to the care of Dr. Vercoe, who attended her through a mild attack of puerperal fever. She made a good recovery, and has borne children since.

Remarks.—It is not with the intention of throwing any light upon this particular subject that I present these reports, but for the purpose of provoking discussion and getting valuable suggestions from experienced obstetricians who may be present. In these cases, nature makes a grand mistake—worse than a mistake—she commits a blunder—and we ought to be prepared to be prepared to remedy her mistakes and correct her blunders. In peace, we ought to be prepared for war, as we know not how soon hostilities may begin. In looking back upon our treatment of those cases, I would say that we temporized too much in both. Such conduct might have been fatal. Our reasons are the following: 1st, The treatment of such cases has changed for the better since 1876 and even since 1881. 2nd, Both cases occurred in the families of other medical men, who, I thought, would be called subsequently to treat them when the critical moment had arrived. However, “all’s well that ends well.” Both mothers were saved. As for the children, they were dead long before our operations began. Those trying cases have taught me a lesson, and ever since, this subject has had peculiar interest for me; hence I have endeavored to keep abreast of the times. By way of conclusion, we cannot do better than sum-

marize the advanced treatment of the present day. The following would be my treatment of such cases :—

1. After the first pronounced hemorrhage, we would induce premature labor ; next flooding might be fatal. We should have a clear idea of what is required in a case of this kind. (a) We must have expansion of the cervix, and the cervix cannot expand without detachment of the placenta ; hence we have hemorrhage which will require treatment and careful watching. The method of dilatation which will shorten labor at the same time will be the best—such as sponge tents and Barnes' bags. When called to such a case, we ought, mentally, to ask ourselves the following questions : Has labor begun or has it to be brought on ? Have we placenta prævia complete or not ? Are the pains good or not ? Are the membranes ruptured or not ? What about the length and dilatibility of the cervix ? If cervix long, narrow and rigid, and membranes entire, we could insert a sponge-tent and keep it in place with a tampon. The plug will strengthen the pains and compress the uterine vessels, producing coagulation of the blood. If symptoms were not urgent, we would dilate completely ; if they were urgent, we could deliver, if the external os was the size of a fifty-cent piece, as by that time the internal os would be completely dilated.

2. If the cervix was prepared, I would rupture the membranes. If the placenta had a lateral or marginal attachment, the pains strong and regular, the pelvis normal, the head presenting, and no serious flooding, we would leave the rest to nature—merely fixing the head by using compression from above, giving ergot occasionally, and having the forceps ready to use if required. If patient was anæmic, the head moveable, and hemorrhage persistent, version and rapid delivery would undoubtedly be the course to pursue. When there is complete attachment, we must not be content with half-way measures, though it is often necessary to use the tampon on account of the length and rigidity of the os, by way of preparing the parts for the final operation. Where it can be accomplished, turning by the bi-polar method should always be the one adopted. If it fails, the hand can be pushed boldly on, and the old system

used. The method of partial separation of the placenta, as recommended by Barnes, should always be adopted when the cervical tissues are softened and when dilatation has begun. By this means we remove an obstacle to the expansion of the cervix, for the adherent placenta acts as an impediment to this process. The effect usually is that retraction of the cervix takes place and hemorrhage ceases. After this would follow Barnes' dilators to expand cervix rapidly, and version by the bi-polar method and extraction. Pressure on the uterus should be kept up for some time, and ergot given for days, as post-partum hemorrhage is apt to occur. If there was a constant draining after the measures mentioned had been used, a speculum could be passed and the bleeding points swabbed with cotton soaked in a styptic preparation of iron. The utmost cleanliness should afterwards be used with disinfectant vaginal or uterine douches, as the lochia flowing over the placental site is apt to produce septi-cæmia, which occurred in both my cases.

THE RELATION OF MICRO-ORGANISMS TO THE PUERPERA AND THE WAY TO MANAGE THEM.

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[Continued from April No., page 531.]

The part of the post-partum treatment of these patients which treats of the prevention of septic phenomena is found in the history of antiseptics generally as applied to general surgery. Our endeavor should be to inhibit the function of germs, and in this way obtain a total extinction of the disease in question. To say that we possess, according to our present knowledge, germicides applicable to such cases is untrue.* Antiseptic measures we can institute and carry out. Germs we will have settling in and infesting parturient wounds, no matter under what circumstances or how careful we are in endeavoring to exclude them. Ogston proved that nine hours after delivery the lochial discharge con-

* *Vide* Klein, *Micro-organisms and Disease*, page 188. Cheyne, *Antiseptic Treatment of Wounds*, page 25.

tained putrefactive organisms in abundance. This fact I have proved to my own satisfaction in *every* case, the discharges of which I have examined. It only requires the necessary time for these organisms, present from the beginning, to bring about definite vital phenomena, characterized by the change of proteids into soluble peptones, and these into leucin and tyrosin: these, in their turn, into very low compounds, which ultimately yield certain alkaloids having toxic effects when absorbed into the blood. And it is interesting to know that these very changes are brought about by *abstraction* of materials which are necessary for the growth and multiplication of these organisms. We constantly hear of the all-soothing and healing properties of this perfectly harmless fluid, which nature in her great wisdom gave woman as a sort of Balm of Gilead in their function of race-production; that it is, we are told, a crime to wash it away or interfere with it in any way whatsoever; that such a course of treatment is in direct contravention of the laws of nature, and that woman in her wild state requires no such refinement of treatment in labors. But it is here forgotten that woman in her wild state is not surrounded by the conditions, too numerous to mention, which her sister of the unhealthy and crowded city is, and that it is not true that they are altogether exempt from puerperal fever. Dr. Engelmann has long since proved this, and I myself have been informed by a trustworthy missionary's wife, many years a resident with the Oka Indians of Canada, that the septic micrococcus runs a high and mighty career amongst the lying-in squaws of that settlement, occasionally sweeping many of them away in the form of an epidemic. As regard the harmlessness of the so-called healthy lochial fluid when at rest in the passages in contact with necrosed tissue, from what we have learned we can only regard it as a veritable culture fluid of a fairly complex nature; that the passages in which this fluid rests form an excellent incubator, and that the necessary physical properties for the incubation and growth of bacterial life—heat, moisture and rest—are all here and constant. To me there is but one conclusion to be arrived at—namely, that we must break up these conditions, and by changing that of *rest* into one of motion or

running stream, we render the resident organisms harmless. Upon this principal is based the whole value of the so-called antiseptic irrigation, and in my experience it matters very little, in uncomplicated cases, whether we use as a prophylactic powerful antiseptics or boiled water. And that it is not necessary to use irrigation to flush the bacterial stream more often than once every twenty-four hours in simple cases, and every twelve hours in more serious cases. The reason for this is obvious. The organisms cannot make a start at growth in their incubator under several hours of undisturbed existence, and consequently no poison is generated in sufficient quantity to produce a general systemic effect.

For the past five years I have most strictly followed out the plan of antiseptic irrigation in *every case of parturition*. I have obtained, as is well known, the most gratifying results to my patients and comfort to myself. I have also had some amusement in carrying out the treatment in the presence of those women who have nursed patients for a quarter of a century, and felt quite disturbed at innovations of this kind.

I remember attending a young married lady in her first confinement. About the sixth or seventh day she said to me, "Doctor, when I left home my mother told me, if I should ever be ill in this way, not to be alarmed if on the third day I would feel very sick, have a bad headache, and feel feverish; it would be the 'Weid,' and quite natural."

I remember a case which bears somewhat upon *septic* midwifery, which was interesting to me at the time. The patient was about 30 years of age, in her third confinement. I ordered an irrigator as usual, but through some neglect on the part of the nurse (I think intentional), it was always being forgotten. On the morning of the fourth day I was sent for hurriedly. I found this patient suffering from intense headache, high temperature, and some pain in the pelvis. On close examination, I found a small laceration, just within the posterior commissure of the vulva, granulating. My finger went directly downwards into a pouch full of very foetid discharge. The infective material in this case may possibly have been absorbed from the

vulvar tear. It might also have been taken up by the slightly lacerated cervix. Here was a case where the vagina was converted into a most excellent incubator, and it only wanted the necessary time for the organisms of putrefaction present to establish the chemical changes before alluded to.

Another case of an interesting nature was a young married lady in her first confinement. The husband had confided to me the fact that he was suffering from an attack of gonorrhœa, and that he felt sure he had conveyed the disease to his wife. I used all precautions before the confinement. After the birth, the irrigator was used twice daily up to the tenth day, and thinking all was right, as far as the probability of specific infection was concerned, I omitted it from this date. All went well until the fifteenth day, when she was seized with violent chills, high fever, intense headache, and severe pain in pelvic region. Uterus was irrigated morning and evening with sublimate solution, etc. On the twentieth day the symptoms abated. Here was a case where the specific gonorrhœal poison was being washed away, and the action of the micro-organisms inhibited for ten days. The discharge was then left with the coccus; it began to develop, and produced the poison in sufficient quantity and virulence to induce, in four days, a violent toxæmia.

About a year ago I was asked to see in consultation a young French primipara, who had been confined some six or seven days previously. I found her intensely septicæmic. The air of the room was very foetid, discharge extremely so, and matters generally in a bad state. I noticed, also, that the husband of this patient had his hand in a sling, as if wounded. On nearing him I got a distinct odor of iodoform. The physician in charge said this man had sustained a severe injury requiring amputation of two of his fingers; that he had dressed the wounds antiseptically, and that the injured parts were nearly well. This was an excellent illustration of the strange views held in regard to the treatment of puerperal wounds. If a man gets his fingers injured, the wounds are carefully washed from all foreign particles, edges nicely brought together with sutures and iodoform and other antiseptic dressings carefully applied.

The wounds are re-dressed every day or so until recovery takes place. When, however, an unfortunate young wife suffers much more severe injury to her genital tract, the student is told on no account to touch those parts, they are sacred, nature will do everything; should she fail, however, he is told to do *then* what he should have done at the outset under the principles of *prophylaxis*. In fact, to pursue the very course the well-cultured surgeon had taught him in the case of the injured husband. I cannot refrain here from commenting upon the inconsistency of these expectant physicians. They recommend for the *cure* of the disease that which they strongly denounced for its *prevention*.

We will now pass on to the subject of antiseptics, and I will only consider those which are applicable to the cases we have under consideration. In using the terms *antiseptic* and *germicide* we must be definite and clear upon the correctness of their application. As used at present in current literature, their signification is somewhat misapplied. Their application would lead us to suppose that in them we had substances which would kill *outright* bacteric organisms, and that we need no longer fear germinal activity on the part of these organisms. To be brief, we have no such substance. Klein has shown us some very interesting experimental results. By exposing micro-organisms in nourishing media at proper temperatures, and adding carbolic acid or corrosive sublimate in very strong solution, he found that their growth was retarded or altogether inhibited, but on removing these organisms, and placing them in fresh nourishing media, they grew and multiplied as if nothing had happened to them. And, further, if the spores of anthrax, treated in this way, are inoculated into guineapigs, the animals die of typical anthrax. But be it understood that, although the spores [of the bacilli remain unaffected by such powerful agents, the bacilli are killed, this being the cause in all probability of the inhibition of their vital functions while in the antiseptic medium. Of all the antiseptics with which Koch experimented, he found the bichloride of mercury the most effectual; 1 in 600,000 parts is capable of impeding, and 1 in 300,000 of completely checking

the germination of spores. These spores can withstand, *uninjured*, the effects of boiling water for a few minutes; it, however, destroys them outright in a short time. Let us now consider in detail the characteristics of a few of the favored so-called antiseptics, or, more properly speaking, micro-bacterial inhibitors, and the technique of their application.

Carbolic Acid.—Notwithstanding that carbolic acid has its advocates, and that the most respected of surgeons, Dr. James B. Hunter of New York, declares it to be superior, or equal, to the mercuric perchloride, I think the majority of surgeons have not found it by any means satisfactory. As a proof of this, we find them using carbolic acid wherever instruments are in danger of being injured by the bichloride, but directly the instruments are no longer required, the carbolic acid is put aside and the bichloride substituted. I have found that carbolic acid solution in obstetric cases requires frequent repetition of application to obtain that action which insures safety. If we use five per cent. solution frequently, it is likely to abrade the tissues, and that in very weak solutions it has no material effect whatever over boiled water. On account of the necessity for its frequent repetition, it is doubtful whether the unavoidable disturbance of the patient does not counterbalance in injury the good intended to be obtained by its use. Also, it is left in care of nurses, which has many times resulted in very disastrous consequences. I have therefore given up its use entirely in obstetric cases for some years past.

Iodoform.—Is not generally used as a prophylactic in obstetric cases. It does not, in small quantities, seem to have a very powerful effect in inhibiting the vital phenomena of micro-organisms. I have seen them, notably the bacterium termo, quite active in a well-impregnated solution of beef on the third day, the odor of the iodoform, however, covering up that of putrid decomposition. Binz found that iodoform retarded the migration of leucocytes through the vessel walls. Its odor is peculiar, and has made it in the majority of cases objectionable to the lying-in patient. As a slight digression from the subject I might say here that I have used iodoform in the form of supposi-

tories in cases of puerperal metritis. These suppositories (gr. x each combined with boric acid) are introduced into the enlarged and œdematous uterus after each irrigation night and morning, and the cavity was in this way rendered aseptic until the affection had subsided. Its undoubted service in these cases is now, I may say, universally acknowledged, and to such I think its application in obstetrics will be limited.

Boracic Acid is a good antiseptic in obstetric cases after the sublimate solution has been discontinued. It is non-poisonous and non-irritating. A large teaspoonful of the powder dissolved in a quart of hot water can be used as an irrigation once or twice daily, beginning on the eighth or tenth day and continued for a period of two or three weeks. It removes any purulent discharge which may have collected in the vagina at this period of convalescence, and aids involution of the vaginal walls and cervical glands, the latter of which are so enormously enlarged during pregnancy. Boracic acid is also a much better antiseptic than it usually gets credit for. I have at present a beef infusion treated to saturation with boracic acid one month ago, and it is still perfectly sweet and free from micro-organisms.

Naphthalin is not suitable for obstetric purposes, chiefly on account of its insolubility in water. Placed in beef infusion, it does not prevent the development of micro-organisms and putrefaction taking place longer than eight days.

Eucalyptus Oil is a very good antiseptic. Bucholtz found it to be three times as powerful as carbolic acid in this respect.

Bichloride of Mercury is the most recent and effectual inhibitor of bacterial growth. A solution of this salt so dilute as 1 in 300,000 will render the spores absolutely incapable of germinating, and will, of course, kill the organisms outright. This result is, however, not confined to mercuric solutions, as the presence of carbolic acid, phenol, thymol, salicylic acid, and even weak vinegar, if in sufficient quantity, will prevent the spores germinating in any nourishing medium. But apart from this, it is believed that the bichloride solution has a specific action on the injured and swollen tissues which no other so-called antiseptic has in the same degree. I have seen most extensive

swelling of the walls of the vagina and vulva resulting from prolonged forceps operations disappear, under irrigation night and morning of a very hot bichloride solution, in 36 hours. Pain and tenderness also disappear, leaving no further necessity for the use of the catheter. In just such cases I have experienced disappointment during the use of carbolic acid, Condy's fluid, and such like solutions, in being compelled to resort to the use of the catheter for several days. Regarding this antiphlogistic property of the bichloride, it is somewhat difficult to give a definite opinion upon. Ogston however, has shown that acute inflammation may be produced by micro-organisms. If corrosive sublimate is here capable of destroying more effectually than any other agent these resident micro-organisms, we can understand this certainly very valuable clinical fact. It is not due to astringency, as no other mineral astringent will act in the same prompt way. A very remarkable relation obtains between vaginal irrigation with the bichloride solution and the non-occurrence of acute suppurative mastitis. Ogston has drawn our attention to the occurrence of mammary abscess at a puerperal period, which coincides with the lowered vitality observed in unduly stimulated and congested mammæ and foetid poisonous lochia. That cocci obtain an entrance into the circulation in some protected condition, and though powerless to effect a lodgment in stronger organs, they become welcome guests and colonize in the weakened and congested breasts. Be this as it may, I have not seen, in a single instance, a mammary abscess occur in practice since I began the mercuric irrigation; and it was certainly not an uncommon occurrence to me when treating these cases upon the expectant plan.

Kuestner (Jena) found that after carbolic irrigations of the uterus, the prompt disappearance of the cocci could *not* be demonstrated, but they vanished very promptly after the sublimate irrigation.

Fränkel (Breslau) found that during very extensive experimental investigation with all known germicides, the cocci disappeared from the uterine secretions most rapidly under the sublimate treatment.

Hegar (Freiburg) uses the sublimate irrigation, and has found it the most satisfactory of all germicides at the Freiburg Clinic.

Kehrer (Heidelberg) believes that in the puerperium the sublimate is indispensable. Only one-third of all parturients under his care with the sublimate solution showed any signs of fever, while before its introduction two-thirds of cases exhibited severe fever.

Paul Bar's remarkable statistics of mortality in the Paris Maternities before and after the introduction of antiseptics is simply marvellous. In fact, they speak so emphatically in favor of antiseptics that even the most obdurate of expectantists will not in future have a leg to stand on.

Auvaré (Paris), speaking of corrosive sublimate says: "It is still the antiseptic to which preference is accorded in the various obstetrical services of Paris. Its trifling cost, its powerful and certain action, and its almost entire harmlessness, gives it supremacy over all other antiseptics in use at present."

At a recent meeting of the Obstetrical Society of London, Dr. Mathews Duncan said that the subject of antiseptics was the greatest in the obstetric department, but it received very little attention. It was more important than the prevention of epidemics, for they only came occasionally, while puerperal deaths continually occurred. In the history of the subject, he said all measures had failed to reduce mortality until antiseptics were introduced. Dr. John Williams said: Taking the deaths in childbed at one per cent., the lowest mortality after the destruction of puerperal fever would be a quarter of one per cent. The object should be to reduce the mortality to this level, and he believed it might be attained by antiseptics. He and Dr. Champneys had used in the General Lying-in Hospital in succession carbolic acid, Condy's fluid, and corrosive sublimate as antiseptic agents. Since the last named had been employed there had been *no deaths* from puerperal fever, and scarcely any illness.

Closely connected with this subject is Dr. Max Schede's contribution to the literature of antiseptics in surgery and obstetrics

generally. (*Volkmann's Klinische Vorträge*, No. 251.) Previous to the time of Listerism by Schede's predecessor, the number of septic accidents and cases of erysipelas was very large. Under Listerism a marked improvement took place, but it did not accomplish enough to satisfy the new director. He first began a systematic attempt to organize a surgical service, and to teach all the attendants the need of absolute cleanliness and asepsis. Coming to Hamburg at the time of the iodoform era in surgery, Schede at once introduced the iodoform treatment in all its details, but he was much disappointed in its results. Although he had some brilliant successes, the iodoform treatment often failed to prevent septic complications, while erysipelas increased in the wards very rapidly. Schede does not say that iodoform causes erysipelas, but he is decidedly of opinion that it does not prevent it. The iodoform was therefore abandoned as a failure, and the corrosive sublimate was introduced in its stead. The results obtained, during now three years, have been most brilliant and satisfactory, and Schede comes forward as an enthusiastic advocate of the sublimate treatment of wounds. The technique of his method is briefly as follows: He has two sublimate solutions, one of the strength of 1-1000 and the other 1-5000. The first is used to disinfect hands, skin of patient, sponges, drainage-tubes, and all wounds which are to be closed (in obstetrics, lacerated perineum). The second is used for irrigating large wounds. The materials used for dressing are sand, glass wool, sublimate gauze, sublimate wadding, and sublimate catgut. Sublimate wadding and gauze are prepared by soaking in a solution of the strength of 1-190, with 10 parts of glycerine. They are wrung out and allowed to dry. The glass wool, of which Schede speaks in the highest terms, is prepared by soaking it in a one per cent. solution of sublimate. Wounds are covered with this prepared glass-wool, then with similarly prepared peat pads, and firmly compressed with gauze bandages. Schede thus concludes: 1st, The sublimate solutions are more efficacious and less dangerous than five per cent. carbolic acid solutions. 2nd, In severe wound infection, diphtheria, and gangrene, the sublimate solution can be used as strong as one per cent. with perfect safety.

Schede also discusses the dangers from sublimate absorption. He refers to the report of Fränkel, who found diphtheritic entero-colitis post-mortem in a number of cases, and attributed it to the mercury. To offset this, Schede reports four cases in which the same lesions were found after death, but in which the sublimate had not been used at all. He concludes that the diarrhoea and enteritis may be caused by sepsis. His cases certainly take away some of the force of Fränkel's observations. He believes that with proper precautions the sublimate wound-treatment is safer than any other.

In connection with the subject of the dangers of sublimate solutions in obstetric practice, it may be stated that Auvard, in *l'Union Medicale*, refers to two fatal cases from the intra-uterine use of sublimate solution. Hofmeier also refers to two cases of sublimate poisoning, one of which was fatal; and similar cases have been reported by Stadfeldt and Winter (*N. Y. Med. Rec.*, March 14th, 1885, pp. 291-2). One of the conclusions drawn by Auvard is, that the condition of the kidneys is a most important one to bear in mind, as a nephritis renders the patient more susceptible to the toxic effects of mercury.

It would be a very easy matter to continue producing clinical evidence of the value of the bichloride in the prophylactic treatment of the puerpera, but, at the same time, we must also look to what is said of it on the dark side. It is well known to be a powerful poison—first, in its therapeutic use as a lotion, and second, in its accidental administration by the mouth. It has, however, been evident to me that its ill effects, when used in no matter what way, have been brought about through want of care and the proper knowledge of the *technique* in its application. When these have been carefully observed I cannot but look upon the drug as a perfectly safe one, and from a varied experience in its use, I think I always shall. For instance, it is very horrifying to read of Stadfeldt's case, where some one had injected a post-partum uterus with a bichloridic solution (1-1500) four hundred cubic centimetres in quantity. Suddenly, collapse set in, followed by diarrhoea, bloody stools and death in ten days. An instructive accident of this nature occurred

to myself when giving a vaginal injection several days after an accouchement. The tube, an ordinary glass one, attached to a fountain irrigator, passed up through a large patulous cervix into the uterus. She complained of the fluid passing higher than usual into the abdomen, and before I could recognize what had occurred, she turned pale and passed into a very violent rigor and state of collapse. I withdrew the tube and rapidly passed two fingers into the uterus, and with the aid of my right hand over the uterus outside, allowed the fluid, to the quantity of over half a pint, to gush out into the vagina between my fingers. I satisfied myself that the uterus was completely emptied, and then gave her a hypodermic injection of ergot. This patient was a little restless the following night from disturbance of her circulation, but was quite well next morning, and continued to be so afterwards as if nothing had happened. The collapse here was simply shock produced by sudden over-distension of the uterus by a fluid, and had I allowed that fluid to have remained there, which, without interference it certainly would have done, I would have had a subject for an essay upon the death-dealing effects of the sublimate solution in obstetric practice. This accident was, of course, due to unpardonable carelessness on my part, and does not bear upon the general merits of the principal.

The moral this lesson teaches is: Do not inject, even *intentionally*, a uterus with a tube which does not provide for a rapid return of the stream. An interesting paper on this subject will be found in the *Obstetric Gazette*, August 1884, page 413, by Dr. Palmer, urging the propriety of vaginal injections, used with care, in every puerpera. An essay of this nature would not be complete without alluding to Dr. Garrigues' well known method of treating puerperal cases. It is briefly as follows:—

The patient is at first given a bath, then an enema. Her abdomen, genitals, buttocks and thighs are carefully washed with a warm solution of the bichloride, 1-2000. The vagina is then irrigated by means of a fountain irrigator with the same solution, two quarts in quantity being used. In protracted cases, this irrigation is repeated every three hours. At the beginning

of labor the physicians and nurses wash their hands, using nail brushes, in a solution of the same strength before touching the patient. No lubricant is used in ordinary cases. If necessary, glycerine with bichloride solution 1-2000 strength. As the head appears it is received in a piece of lint saturated in same solution, and the genitals are kept covered with a similar compress. The placenta is expressed by Credé's method and the vagina is washed out with the bichloride solution. Intra-uterine injections are only used when the hand or instruments have been introduced into the interior of the uterus, or in case of birth of a macerated foetus. Dr. Garrigues never allows any of the placenta or membranes to remain in the womb. With careful antiseptics the introduction of the hand into the uterus is in no way compared with the danger of hemorrhage and septicæmia by leaving any part of the secundines behind. In this case a large (two to six quarts) sublimate injection, intra-uterine, is given just as hot as the hand can bear it. After the expulsion of the placenta, the patient is washed and *the dressing applied*. It is (1) a piece of lint three inches wide, and double, saturated with the bichloride solution, (2) outside of that a piece of oiled muslin nine by four inches (3) outside of that a large pad of oakum, and (4) the whole is fastened by means of a piece of muslin to the binder, with pins, in front and behind. This dressing is put on with the same care as a wound is dressed after a capital operation, and renewed *four* times in the twenty-four hours. At each removal the genitals are washed. No vaginal injections are used unless the discharges become foetid. (This dressing need not be so complicated. A good-sized solid pad of sublimate jute made to fit well into the parts and secured to the binder in front and behind, makes a very effective antiseptic dressing.)

Dr. Garrigues has proved the bichloride to be much superior and more trustworthy than carbolic acid in such cases. His cases occurred in the University Hospital, New York, and it may have been not a difficult matter to carry out there under such able nursing. But even in Dr. G.'s hands, it has not prevented the lochia becoming offensive, which is evidence of putrefaction. And under such circumstances, I am strongly inclined to think

that it was due more to the constant washing and changing of dressing than his patients did not become septic than to any particular virtue in this complicated dressing. I have given it a fair trial in private practice, and found that without irrigation the lochia invariably became foetid just as without the dressing, and I therefore combine it with irrigation.

For several years I have, with the exception of one case related of septic fever, used vaginal irrigation of corrosive sublimate solution of strength varying from 1-2000 to 1-5000 once every morning at the usual visit. This was occasionally not begun until the second day after the delivery, and I think it is quite safe in private practice to begin irrigation at that time. I have also combined with the irrigation treatment that of applying after the injection a pad of antiseptic sublimated jute to the vulva and perineum, and pinning a strong napkin over this to the binder in front and behind. This pad is renewed night and morning only, and is chiefly intended to absorb discharge and support the perineum and pelvic floor generally. The patients have always expressed gratitude for the support experienced, and I am convinced of its benefit as a splint to the often much over-strained pelvic floor. This method has never allowed the discharge to become foetid, as the vagina is flushed with a *very hot* irrigation of the sublimate solution every morning up to the eighth or tenth day, and then I generally advise the patient to have the nurse continue once every morning a very hot injection of a solution of boric acid with the view of aiding involution of the parts. This may be continued for any length of time up to a month. The benefit derived from this latter additional advice to the patients will be seen in the properly involuted vaginal walls, and every physician knows what that means.

As regards our antepartum procedure, my views are essentially the same as those of Dr. Garrigues and other careful observers. It is most unpardonable in the conduct of a physician to examine his patient before he has washed his hands and arms to the elbows in at least an additional relay of fresh water, using nail-brush freely, and afterwards bathed them in a solution of corrosive sublimate. This solution, in a pint bowl, he should

carry with him from the washstand to some convenient place near the bed-side, and before each examination dip his hand freely in the solution. Should it become necessary, during after events, to introduce his hand into the cavity of the uterus, it may be done so with safety.

In conclusion I would say :

1. Post-partum vaginal irrigation as described with weak solutions of corrosive sublimate, is nothing more nor less than antiseptic treatment of wounds ; and the surgeon who practises the latter on other, and refuses to do so on puerperal wounds, cannot endeavor to reconcile his action without appearing *inconsistent*.

2. That this method of treatment is the one most reliable, by which foetid decomposition, and therefore micrococcus poisoning, can be prevented.

3. That the procedure is perfectly safe as regards mercurial poisoning, provided ordinary care is recognized by the physician himself, and that a nurse is never entrusted with the performance of the operation,*

4. That the water be as hot as can be borne, with the view of aiding involution, and that the antiseptic pad should be applied as described.

5. No solution should be used but that of the bichloride.

6. A perfectly new fountain irrigator should be used for each private patient ; better none than a second-hand one, no matter how apparently perfect.

7. See that the irrigator is playing before introduction of nozzle, to prevent entrance of air.

8. It is well to remember that one drachm of the salt added to one ounce of spirit, gives for each teaspoonful in one pint of water, 1 part in 1000. From this solution one of any strength can be prepared.

9. In a case where a macerated foetus has been born, the uterus should be irrigated with a sublimate solution (1-5000) once each day for from three to five days, according to circumstances. A macerated foetus need not of necessity be in a state

* In hospitals trained nurses under a house physician can be relied upon.

of putrid decomposition when expelled, but should it be so, it will be sure to infect the cervix as it passes through. Evidence of infection in such a case may not become manifest until the second, third or fourth day afterwards, when it would be too late to prevent serious damage, or perhaps to save life.

10. Napkins should not be placed against the vulva as a dressing, under any circumstances. The same napkins are often used at successive pregnancies throughout the whole child-bearing life of one woman, and may, for aught we know, have done service for neighbors as well. It is not difficult therefore to see what a serious source of infection they may constitute. A piece of unbleached cotton twenty-four inches long by six inches wide, or better, a similar sized piece of washed gauze, will fix the sublimated jute dressing firmly against the vulva and perineum by being pinned to the binder behind and in front.

11. Lubricants of any kind should not be used ; I do not know of any act more unnecessary at obstetric operations. The cervix at this period of pregnancy is at its height of glandular function, and secreting tenacious mucus in large quantities. I have seen a physician deliberately anoint his forceps and hands with stinking rancid lard and introduce them into the uterus. In cases where we have reason to suspect venereal disease of the patient we may use some clean unguent as a protection to the operator, but under no other circumstance.

12. Be sure before leaving your patient that the uterus contains no shreds of membrane adhering to the edge of placental site. I believe a neglect of this precaution is responsible for many of those cases of sepsis which puzzles us so much to account for, and which has been hitherto placed under the head of auto-infection. I regard the careful introduction of the PURELY ASEPTIC hand into the vagina, and of the fore and middle fingers into the uterus, for exploration after expulsion of the placenta, as a perfectly safe and justifiable procedure. And I am confident that as we gain in experience, we will come to admit on all sides the truth of this teaching. And the procedure will be proved to be much more harmless and rational than the introduction of unwashed fingers within the rima vulvæ of the puerpera for diagnostic purposes.

13. Lacerations of the perineum, even to a slight degree, should be repaired at once by the "single silk suture" method.

14. Never, under any circumstance, allow your sublimate solution to leave your hands, nor prescribe the salt in the form of powder, as recommended by Dr. Garrigues. As a neglect of these precautions, I will briefly relate two instructive cases, both of which show also the enormous doses of the salt which can be taken by mouth with impunity :

A physician prescribed *quinia sulph.* gr. xx to be taken in a spoonful of water ; also *hydrarg. bichl.* gr. vii to be dissolved in a quart of hot water and used as directed. There were several of these latter powders to be compounded and sent to the patient. The nurse, by some stupid error, gave one of the sublimate powders in the spoonful of water instead of the quinine. The patient shortly afterwards became violently ill, and continued vomiting and purging for some time, but eventually recovered without any apparent after ill effects. - A notice of this case was published in one of our daily papers at the time, and I took some trouble to obtain a reliable history of the case, which satisfied me regarding its correctness. Shortly after the occurrence of the above case, I had occasion to irrigate a uterus after removing a decomposed decidua in a case of miscarriage. After making the required solution, I put the bottle down on a dark or shaded part of the table, and on leaving the house omitted to take it away with me. Next morning I had a message to say that my patient had taken some poisonous medicine by mistake and was dying. I found she had taken a large teaspoonful of the forgotten solution in some water, equal to about eight or ten grains of corrosive sublimate. (It was thought to have been some household remedy for neuralgic toothache.) The dose was taken at 10 o'clock the night previous, fifteen hours prior to my present visit. She had been vomiting nearly all night, and was now suffering most intense abdominal pain and purging violently. Pulse and temperature were, however, undisturbed. There was no history or appearance of collapse, simply an expression indicative of suffering. I at once administered a hypodermic of morphia, applied a sinapism, and after the pain had abated left her. On calling next morning, I found her, to my surprise, perfectly well, there being only slight tenderness on pressure over the hypogastrium. *Cavendo Tutus.*

Correspondence.

VIENNA, July 8th, 1886.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

DEAR SIR,—There is probably no name in the field of surgery better or more favorably known than that of Professor Billroth. There are few Canadian medical men who have not enjoyed reading his written works, and I could wish that as many had enjoyed the privilege of hearing him and, above all, seeing his work in surgery. Professor Billroth is a man rather below the medium height, and of that portly build so becoming to elderly gentlemen of vigorous health; he has a long, white, patriarchal beard, with here and there a shine of the original blonde, thin gray hair combed back over a broad head, a steady, searching eye, and a manner instinct with energy, through which shines the genial influence of a true gentleman's manly spirit. His kindness to strangers and lack of self-assertion are very attractive and praiseworthy.

Those who charge Professor Billroth with recklessness in his surgical boldness would be struck by the following feature in his lectures. In describing an operation, or generally discussing an operative procedure, he is most minute and emphatic in speaking of the possible sources of failure surrounding the undertaking, and in specially fortifying his hearers against these possibilities. To this alertness and constantly meeting danger more than half way we may probably attribute his marvellous success.

The class of surgical procedures with which the name of Billroth is specially associated is that of operations upon the alimentary canal. He was the first surgeon to suggest the feasibility of excision of the pylorus, and the first to perform the operation successfully. My wish to see this operation performed by him was, through the kindness of himself and his courteous assistants, gratified on the 20th June of this year. The patient was haggard and exhausted by the practical starvation necessarily associated with serious pyloric stricture; in spite of all, she went through the operation well, but, although she was a few days ago smilingly enjoying a dainty dinner of

fowl, it still remains a question whether nature's wasted powers can again fully establish nutritive activity.

On the 25th of May the professor removed from the ascending colon of a woman, about 45 years old, a tumor cancerous in nature, but fortunately confined to the bowel, and involving only a short portion of that. The operation necessitated the resection of about four or, perhaps, five inches of the above-mentioned viscus in its entire circumference; the severed ends were brought together and neatly united with fine carbolized silk sutures. The operation was exceedingly interesting to me, but involved no new principle or procedure; rigid attention to antiseptic details being, however, noticeable at all points. On the 24th of June the patient was in the hospital garden; a few days after that she went home, feeling well and enjoying good appetite and digestion.

The statistics of operations upon the stomach performed in Professor Billroth's klinik from the year 1880 to 1885, as given by Dr. Haeker in his interesting report, are briefly as follows. The number of cases operated upon is thirty-two:

Gastrotomy, for removal of foreign body.—One case; recovered.

Gastrorrhaphy.—Two cases; both fatal. One for spontaneous rupture of the stomach after a full meal and wine; operated upon ten hours after the accident. The other, a case of suicide by revolver shot, which was found on post-mortem to have penetrated the liver and aorta as well as stomach.

Gastrostomy.—The fistulous opening was made into the stomach in four cases on account of œsophageal stricture. Three strictures cancerous, one due to corrosive substance swallowed, resulting in three deaths and one recovery.

Gastreotomy.—(1) *Resection of pylorus for cancer*—Fifteen cases, giving seven recoveries and eight deaths. (2) *Resection of pylorus for stricture due to cicatrices*—Three cases; one recovery and two deaths. (3) *Removal of a wedge-shaped piece of pylorus*—One case, with fatal result.

Gastro-enterostomy.—In cases where removal of the pylorus was, owing to adhesions or extensive malignant-involvement, impossible, Winiwarter's operation of forming a fistulous opening

between the third portion of the duodenum and the great curvature of the stomach was performed. Eight cases; three improved by the operation and five deaths.

We have here thirty-two cases, with nineteen fatal results. A superficial glance would naturally lead us to the conclusion that these operations are too dangerous to be attempted. A fair look, however, places the matter in an altogether different light. The two cases of gastrorrhaphy cannot be regarded as deaths from the operation; the conditions in both cases previous to operation were such as almost to preclude the possibility of a successful issue. The condition of the remaining seventeen must also be remembered: among these, without exception, the powers of nature were wasted through starvation and, with few exceptions, vitiated by malignant influences. They were patients in which no major operation would be likely to succeed well; such patients as have in the past, as a rule, been hopelessly left to the melancholy death of starvation. When we remember that this was true not only of those who died, but also of the thirteen who recovered, we must look with hope and admiration upon the work of Vienna's great surgeon.

A more general preparedness than at present obtains among surgeons for such operations is a great want of the present day. Apart altogether from malignant cases and long-standing strictures, cases of intussusception and perforating wounds of the abdomen not unfrequently call for surgical interference. Then, perforations of the walls of the alimentary canal from ulcer comparatively frequently occur. They are treated with opium or morphia, and a prognosis of fatal result is given, while the cause of fatal peritonitis lies free in the abdomen capable of removal. Billroth has shown that even in the starving and diseased, operations on the stomach and bowels may be followed by good results. In the class of cases last mentioned, the general health of the patients is usually good. This being the case, why should prompt operation not be followed by many recoveries, thus avoiding the necessary result of non-interference, viz., the fulfilment of the prognosis.

Reviews and Notices of Books.

Practical Human Anatomy: A Working-guide for Students of Medicine and a Ready-reference for Surgeons and Physicians.—By FANEUIL D. WEISSE, M.D. New York: Wm. Wood & Co.

This handsome work adds another to the large number of text-books of practical anatomy which have been issued during the past few years. America has produced but few works on practical anatomy, reprints of English books, such as Holden, Heath, Ellis, &c., being very popular on this side of the Atlantic. The author of the work under consideration has had twenty years' experience as a teacher of anatomy, and appears thoroughly at home on his subject. The book is divided into a number of dissections (27), commencing with the perineum and ending with the brain. The method of dissecting the various parts is described in separate sections and in smaller print. The work is magnificently illustrated with no less than 222 full-page plates, and the text appears to be principally a description of the plates.

We do not think this book will ever be made much use of as a dissector's manual, as it is too large, and, besides, the plates would be of but little use in the dissecting-room; however, it will prove of the greatest value to both physicians and surgeons as a reference handbook, the illustrations being wonderfully correct and life-like. What is most refreshing in these days of illustrative plagiarism is that nearly all the plates are original and from actual dissections. We think the work would have been much improved had some plates of frozen sections, such as those of Braune, been included, such illustrations have now become a necessity to the proper understanding of the relations of organs especially. The work is singularly free from errors, both anatomical and typographical, and Dr. Weisse is to be much congratulated on the production of such a monument to his industry. We can heartily recommend this (might we call it) pictorial panorama of anatomical dissections to all those who have no opportunity of referring directly to the dead subject.

Fractures and Dislocations.—By T. PICKERING PICK,
F.R.C.S. Philadelphia: Lea Brothers & Co.

This little work is one of the series of clinical manuals published simultaneously in England and America. The author has not pretended to write an exhaustive manual on the subject, for the prescribed size of the book would not allow this, and as it in no way competes with the larger works, such as Hamilton, it should not be contrasted with them. Mr. Pick has endeavored to make the manual essentially clinical and practical, and has succeeded fairly well. For the student it will prove a very convenient book of reference, and from its handy size and moderate price we have no doubt will become popular. In one or two points, however, we think the author somewhat old-fashioned, rather inclined to favor the old-time English methods than to adopt much that is new. He is essentially conservative, and only adopts antiseptic methods doubtfully and half-heartedly. In speaking of the treatment of compound fractures, he does not impress upon the reader sufficiently the great importance of strict antisepticism according to modern methods, no particular directions are given, and iodoform and bichloride are not even mentioned in this connection. In his own practice, the author adopts Listerism, but is not a very ardent disciple. Now, if there is one thing more than another that has been revolutionized by the introduction of antiseptic surgery, it is the treatment of compound fractures, and teacher and author should speak and write words having no uncertain sound when instructing students and practitioners on this subject. In speaking of fractures of the thigh, the old method of treatment by Lister's splint is described, but treatment by extension is merely alluded to, and the only method of counter extension described is by the perineal band. The method of counter extension by raising the foot of the bed is not even alluded to, and the method of treatment by long splint, combined with Buck's extension, is not mentioned. By the way, Buck is always spoken of as Busk, a mistake which should be corrected in a new edition. Fracture of the patella is well described, but, again, the rules of treatment are not clearly laid down; a number of methods of treat-

ment are mentioned, but no one given in detail. We are glad to see that Mr. Pick does not advise indiscriminate wiring of the fragments in this fracture; here his conservatism stands him in good stead. The immediate application of plaster-of-paris bandages is not mentioned, though the application of some immovable apparatus is advised after the swelling goes down. In speaking of dislocation of the hip, too much space is taken up with describing and illustrating the obsolete methods of reduction by pulleys, etc. Colles' fracture is well described, and, as in all works on fractures, more space is devoted to it than it deserves, the treatment is shortly, though thoroughly, described. We have only spoken of a few of the points, we think, that might be improved upon, and these have been taken at random. The teaching of the book, as a whole, is such that the student will not be led far astray, and the descriptions of the various forms of dislocation and fractures are excellent. The work is well illustrated, and the typography good.

The Principles and Practice of Surgery.—By FRANK HASTINGS HAMILTON, A.M., M.D., LL.D., late Professor of the Practice of Surgery and of Clinical Surgery in Bellevue Hospital Medical College; Consulting Surgeon to Bellevue Hospital, &c., &c. Illustrated with 472 engravings on wood. Third edition, revised and corrected. New York: Wm. Wood & Co.

Among American and Canadian surgeons, no name on this continent is perhaps more familiar than that of Dr. Frank H. Hamilton, and few are held in higher esteem. He is better known, however, for his classical work on Fractures and Dislocations than as an authority on general surgery. The fact that the present work has gone through three editions is the best proof of its excellence, giving, as it does, the results of an experience extending over nearly half a century.

There is much in this book to commend it to the general practitioner as well as to the student of medicine, although we regret to find a spirit of dogmatism pervading it here and there, the author being very positive in the expression of his views,

and evidently loth to accept the experience of others where that fails to coincide with his own. Thus, for example, he reiterates the statement made many years ago in the work already referred to, namely, that shortening is inevitable after fracture of the shaft of the femur. In fact those who, like Gamgee, Hunt, Dorsey, and others, have been rash enough to record a contrary opinion, are characterised as "less distinguished, less observing and less honest surgeons, and are plainly informed that they "do not tell the truth." This may be a *frank* way of dealing with one's adversaries, but it is not gentlemanly. Why should a transverse fracture of a long bone, or even an oblique fracture, vigorously treated by extension, always result in shortening? Doubtless rash statements have been made on the subject by careless observers, but surely all the cases reported without shortening have not been fabrications.

So elsewhere statements are made which are not borne out by the experience of others equally able and illustrious. The gynæcologists especially are dealt with very summarily on two or three occasions. To give an instance—the author referring to "Alexander's Operation for Retroflexion," says, "It seems to me incredible that any person who has acquired even the rudiments of surgical science should perform an operation so unsound in theory and plainly so unsafe in practice." Now, we know that the most satisfactory results have followed the performance of this operation in the hands of Alexander himself and other surgeons, and it is not by any means proved that it is either unsound in theory or unsafe in practice.

We repeat there is much in Dr. Hamilton's *Surgery* to admire. The arrangement of the material is good, and the headings are clear and concise. The last chapter, which is supplementary, "On the Art of Primary Union," is well worthy of perusal, although we should like to have found so able a surgeon a more pronounced advocate of antiseptic measures.

A System of Practical Medicine by American Authors.—Edited by WM. PEPPER, M.D., LL.D., Provost and Professor of Theory and Practice of Medicine and Clinical Medicine in the University of Pennsylvania; assisted by LOUIS STARR, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Vols. IV and V. Philadelphia: Lea Brothers & Co.

Vol. IV: Diseases of the Genito-Urinary and Cutaneous Systems; Medical Ophthalmology and Otology.—The fourth volume, which forms an addition of 877 pages to this important standard work, contains many valuable articles. Those upon the affections of the kidney are contributed by Drs. Edes, Delafield and Tyson. The diseases of the female genital organs are treated of at considerable length, there being found amongst the contributors to this department the following well-known names: Drs. T. Gaillard Thomas, W. H. Byford, Wm. Goodell, Jenks, and Engelman. The diseases of the skin are treated of by Drs. Duhring and Stelwagon; medical ophthalmology by Dr. Morris, and medical otology by Dr. Strawbridge. The character of the articles is of a high grade, fully expressing the actual state of American teaching upon the various subjects. The volume maintains in every way the reputation gained by its predecessors, and with reference to it we can but repeat the strong expressions of very earnest admiration which we have already employed towards the earlier numbers of the series.

Vol. V: The Diseases of the Nervous System.—That department which is, in many respects, of all the most interesting—the nervous system—occupies the whole of the fifth and last volume. It occupies no less than 1326 pages, wherein the various portions of the nervous system are carefully divided and their various functional and organic derangements exhaustively treated. A large number of writers contribute separate articles; amongst them we may specially mention the following: Drs. E. C. Seguin, C. K. Mills, H. C. Woods, Wharton Sinkler, McLane Hamilton, Morris Lewis, J. C. Wilson, F. Minot, E. C. Spitzka and others. This concludes the most

complete American Practice of Medicine extant. It takes its place as the standard work of reference for that country, and is in every respect highly creditable to the various authors who have taken part, to the learned editor who has arranged and superintended its entire contents, and to the publishers who have so promptly placed the successive volumes in the hands of the subscribers. In conclusion, we would merely quote the following sentence from the editor's "valedictory," for the information of those who may not have seen the early prospectus. "The number of articles is 185, written by 99 authors, covering, with indexes, about 5000 pages, and throughout its whole extent the original purpose has been kept constantly in view, that the practical character of the work should adapt it specially to the needs of the general practitioner."

Diseases of the Stomach and Intestines. A Manual of Clinical Therapeutics. — By PROF. DUJARDIN-BEAUMETZ, Physician to the Cochin Hospital, Member of the Academy of Medicine, &c. Translated from the fourth French edition by E. P. HURD, M.D., President of the Essex District Medical Society, &c. With illustrations and chromo-lithograph. New York: Wm. Wood & Co.

The above is a very valuable and original work, being the product of one of the ablest minds in the profession. The author is well known by his numerous contributions to scientific medicine. He has been engaged in the publication of an important and exhaustive series of "Leçons de Clinique Thérapeutique," and the present volume is the third and last portion of the whole number. It is, as stated, a manual of clinical therapeutics; all the functional and organic diseases of the digestive organs being grouped together, and the special therapeutics of these being carefully considered. The subject is treated of in a masterly way, and one peculiarly his own. "I know," says the author, "of no study more fascinating than that of diseases of the digestive tube, and it is one to which I have directed particular attention." Certainly the study is one upon which considerable light has recently been thrown by re-

searches into physiological chemistry. We are called upon daily to treat these derangements of the primæ viæ, and our success will mainly depend upon the degree to which we have mastered the essential points in the conditions likely to disturb the normal processes taking place therein. The sphere of Dr. Dujardin-Beaumetz's book and its claims to attention are well expressed by the translator, who says: "In this, much that in ordinary text-books on *Materia Medica* and *Practice* is rather embarrassing than helpful to the practitioner is omitted, while the important data, set forth in strong light and grouped in a few masterly generalities, indicate to him where he can be truly useful, where his intervention is demanded, as well as the limits of that intervention."

Handbook of Practical Medicine.—By HERMANN EICHHORST, Professor of Special Pathology and Therapeutics, and Director of the University Medical Clinic in Zurich. Vol. I. Diseases of the Circulatory and Respiratory Apparatus. Illustrated. New York: Wm. Wood & Co.

A good handbook, written by one of the well-known German authors, which has been recently added to "Wood's Library." The various subjects coming under the separate chapters on pulmonary and cardiac disorders are treated of in a concise manner necessitated by the limits of the volume, and yet few important omissions will be found. Amongst the diseases of the circulatory system, we find very excellent chapters upon the neuroses of the heart, disorders which are not so carefully studied as the coarser and more obvious organic affections, and yet an acquaintance with which is fully as valuable to the practising physician. This section concludes with a short account of thoracic aneurism, and the other rarer conditions—stenosis, rupture, &c., of the aorta. The diseases of the larynx are carefully treated, and well illustrated. The trachea, bronchi, larynx, pleuræ, mediastinum, &c., all receive due attention. The book will be useful to all desirous of having at hand a reliable guide to the teaching of the German school on this important class of diseases.

Surgical Diseases of the Kidney.—By HENRY MORRIS, M.A., M.B., F.R.C.S., Surgeon to and Lecturer on Surgery at the Middlesex Hospital, London. With 6 chromolithographic plates and 40 engravings. Philadelphia: Lea Brothers & Co.

A very complete account of the various so-called surgical affections of the kidney and the structures immediately adjacent. The growing importance of the subject, in view of the frequency with which the operations of nephrotomy and nephrectomy are performed, and the brilliant results very often obtained, is sufficient to ensure a cordial reception to Mr. Henry Morris' book. Although such interesting matters as those concerning malformations, fusions, movable and floating kidney, &c., are discussed, yet the *pièce de resistance* consists in the account of pyo and hydronephrosis, scrofulous and calculous kidney, together with the means for their accurate diagnosis and successful treatment. The whole is ably handled, and forms an excellent addition to the "clinical manuals."

Books and Pamphlets Received.

THE RETROSPECT OF MEDICINE. A half-yearly journal containing a retrospective view of every discovery and practical improvement in the medical sciences. Edited by Jas. Braithwaite, M.D., Lond. Vol. XCIII, January-June, 1886. London, Simpkin, Marshall & Co.

ANALYSIS OF THE URINE, with special reference to the Diseases of the Genito-Urinary Organs. By K. B. Hofmann and R. Ultzman. Second edition; revised and enlarged. New York, D. Appleton & Co.

HANDBOOK OF PRACTICAL MEDICINE. By Dr. Hermann Eichhorst. Vol. II—Diseases of the Digestive, Urinary, and Sexual Apparatus. New York, Wm. Wood & Co.

THE GENUINE WORKS OF HIPPOCRATES. Translated from the Greek with a preliminary discourse and annotations by Francis Adams, LL.D. Vol. II. New York, Wm. Wood & Co.

BRIGHT'S DISEASE AND ALLIED AFFECTIONS OF THE KIDNEYS. By Charles W. Purdy, M.D. Philadelphia, Lea Brothers & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 14th, 1886.

J. C. CAMERON, M.D., 1ST VICE-PRESIDENT, IN THE CHAIR.

DR. A. L. SMITH, for the author, read a paper entitled

Notes on Phthiriasis.

By P. W. P. MATHEWS, LL.D., M.R.C.S.E., Etc.,
Dominion Coroner for the North-West Territories and Medical Officer of the Hudson
Bay Company, etc.
as follows :—

A case of somewhat unusual occurrence came under my notice here some short while since—one of phthiriasis. It is the second only that I have personally known, and I trust that it will be of sufficient interest to justify me in offering you a few notes, both in connection with the case itself and the disease.

George "Beardy," an Indian, aged 30, was admitted to the York Hospital suffering from capillary bronchitis. In ordinary cases, and in cases other than the one I am about to describe, it would be, or ought to be, unnecessary to touch upon cleanliness, both as regards the patient and his surroundings, even in an Indian cottage hospital; but the nature of the case requires my emphasizing the fact that every rational and judicious precaution was taken to ensure cleanliness, both in the washing of the patient and in the changing of the body and bed clothes. The condition of the patient varied for several days, and on the evening of the tenth, symptoms of pulmonary congestion set in. I was in attendance for the greater part of the night, and on again visiting him at about 10 o'clock in the morning, found him in a comatose condition. Giving a few directions, and re-covering his chest, which he kept constantly exposed, I left, and in two hours time was hastily called by the nurse, who stated that "he was being eaten up." Upon arriving, to my astonishment, and, I must say, to my interest, I found the man one literal mass of lice, creeping over the bed-clothes, crawling on the body—one slow-moving, disgusting mass, but a living, suggestive "precursor of the grave." He was as carefully cleansed as he

could be under the circumstances, and shifted to another bedstead, with clean bedding, etc., but all to no purpose, for within two hours the body was again simply infested by vermin, and so it was to the end, some six hours afterwards. Upon examination of the skin, I found a multitude of irritable-looking spots on many parts of the body, from which the nits could be detached by lateral pressure. The louse itself was the common body or clothes louse (*pediculi vestimenti*). In this connection I must note a few cases which I have collected from various works.

Dr. Whitehead relates a case which I shall here abbreviate: R. S., aged 43, a farmer, strong, of sanguine complexion, contracted a virulent form of syphilis in April 1840, for which he was chiefly treated with induretted sarsaparilla. Seven months afterwards he suffered severely from secondary symptoms, when he was placed on a course of mercurial medicine, and became salivated, with great relief to the disease. At the end of 1841 he again sought advice, stating that for several weeks past he had been annoyed by the presence of lice about his person, chiefly on the trunk. He was scrupulously clean in his habits, and had never before been troubled in a similar way. No lice were found about the head. What little hair he had was clean, fine, and silky. The vermin so increased in number, and produced such mental distress, that fears began to be entertained for the integrity of his intellect. Upon an examination of the skin, the nits were there found to be imbedded, and at this period the generation of the insects got so considerable that the flannel vest put on clean in the morning was crowded with them by the end of twenty-four hours. For some time remedies were unavailing: sulphur, oxymuriate of mercury, white precipitate, and hellebore were freely tried, with little or only temporary benefit. At length, by mere chance, a mixture of iodide of potassium and prussic acid in full doses was given; and in a few days, after taking sixteen or eighteen draughts, the cure was permanently completed.

There is another case in which the quick generation of the body louse was remarkable. The patient was a young lady, a

member of a most respectable family, in whose skin, mostly below the margin of the mammæ, the nit was found in a small pimple which gave exit to its contents like a pustule in acne. She had been troubled with these lice for several years. Mr. Bryant, of London, England, has reported a somewhat similar case: A patient, who had been a governess, and who was 30 years of age, was admitted into Guy's Hospital. The whole of her body was literally covered with lice; the irritation and scratching having given rise to excoriations and scabs. She was put into a warm bath, and all her clothes were taken away. Every precaution was adopted to remove all the insects, but two hours afterwards her body was again covered with them, although she lay in a clean bed. She was again thoroughly washed, but the vermin reappeared immediately. All the remedies employed proved useless. Bernard Valentin has also related the history of a man who suffered from intolerable itching on all parts of his body, while his skin was covered with tubercles. On incising these, each was found filled with lice. Bremser once met with a mass of lice in a tumor on the head. And Jules Choquet observed some thousands of these insects in a subcutaneous cavity. According to Erasmus Wilson, the explanation of these cases is simple; for he says that the pediculi creep from the outside of the skin into follicular tumors, when they feed on the contents, and are afterwards found as the sole occupants of these sacs.

As is well known, lice, under certain circumstances, become developed on the surface of the body, a fitting soil being supplied by filth and by the morbid secretions in skin affections, as well as by constitutional disease; but I wish the more particularly to refer to what appears to be an idiosyncrasy, or rather a condition of constitution, that in some cases appears to favor the development of pediculi, as is evidenced by the case under my own care, and those I have advanced as further illustrations, so that the statements of some old authors that divers persons "have come to their ends, being devoured by lice," are not so very improbable after all. But what appears so remarkable in this case of the Indian Beardy, is what I may, with some reason,

term the apparently spontaneous generation of the pediculi, their existence not having been noticed at an earlier stage. The man was carefully and watchfully tended from first to last, and, further, he insisted upon his chest being constantly exposed. At ten o'clock in the morning it was perfectly free from "bite" or "hæmorrhagic speck"; at twelve, it was one mass of eruption. Difficulties only become intensified upon a further examination of the case, for, in the first place, their period of incubation is six days, and, secondly, judging by their organization, it is perfectly clear that these pediculi are air-breathing animals; and that, consequently, they cannot exist as adult insects under the skin, where respiration would seem to be impossible.

Among the poorer classes in England (I do not know if the same holds good in Canada), any unwonted appearance of lice in connection with a sick person is invariably regarded as a precursor of death. Is it possible that the approaching dissolution is indicated or appreciable to the insect, by the lowering of the surface-temperature, etc., and its quittance of the body to the bed-clothes attributable to this instinct?

Remarks by DR. SMITH.—Such cases as this are rare in this part of the country, because it is difficult to find any one so dirty as to give the body-lice a chance to breed in such quantities. Cases of pediculus capitis and pediculus pubis are quite frequent at the Dispensary, but he has seen only a few cases of pediculus corporis, principally in neglected old men. Among the Indians of Lake Huron and Georgian Bay, and also among the shanty-men in the Upper Ottawa, the pediculi corporis were frequent guests, and by the way they were tolerated one might think that they were not altogether unwelcome; and as these persons often wear the same flannel shirt for six months or a year without washing it, it was easy to see that they would multiply continuously, as the eggs hatch in six to eight days, and one female may see the birth of five thousand descendants. The disease is easily cured by means of an ointment containing one part of the oil of delphinium staphisagria and seven parts of lard. I have also found the Ung. Hydrarg. Ammon. very effective.

DR. J. C. CAMERON said that coal oil was a good application for body lice, and if Balsam Peru be added to it, the odor was hardly objectionable. Chloroform he has found useful for crab lice.

General Tuberculosis following a Nephritis.—DR. WYATT JOHNSTON exhibited the kidney, bladder and other organs, and DR. J. C. CAMERON related the case :

Patient, aged 26, had remote history of phthisis in one of his cousins. He had knocked around the world a good deal, exposing himself at times to great hardships, and drinking pretty freely. He always enjoyed good health till November 1884, when he had an attack of scarlet fever, followed by sharp nephritis. He came under Dr. Cameron's observation in Feb. 1885. Ten per cent. of albumen was then found in his urine, also some red blood-corpuscles and casts, chiefly hyaline. Under treatment his symptoms improved; the casts disappeared in about two months, but more or less blood and albumen remained all summer and autumn. The presence of urethral trouble was suspected, as an old gonorrhœa and gleet had persisted for a long time. No examination was made till Jan. 1886, when Dr. Roddick passed a No. 3 steel sound with some difficulty through a long, deep-seated stricture; a sharp attack of cystitis followed, which did not yield to internal treatment. When the acute symptoms had somewhat subsided, he was etherized, and an attempt made to pass a catheter and wash out the bladder, but nothing could be got past the stricture. His condition was becoming so serious, that perineal section was decided on. A careful examination of the lungs revealed nothing abnormal. The operation was performed on 17th Feby., and his immediate sufferings thereby relieved, but his symptoms did not markedly improve. High, irregular temperature, rapid pulse, profuse perspirations and gradual emaciation were the chief symptoms. About March 1st he spat up blood, and on examination, dullness was discovered at both apices; softening soon began, and went on rapidly, till, in six weeks, his lungs were completely riddled. His wound never healed. He died 23rd April. The diagnosis lay between a general tubercular condition underlying the renal

and vesical catarrh, probably fanned into flame by scarlatina, and pyæmia, due to retention of putrid matters in the bladder by a tight stricture. The rapidity of the lung break-up was particularly noticeable, repeated examinations failing to detect anything abnormal in lungs till about six weeks before death. The right kidney was made up of sacs of pus, the walls being infiltrated with tubercles. The ureter was dilated, and its walls thickened. The bladder showed evidences of the cystitis, and its walls near the exit of the ureter were also thickened with tubercular infiltration. The other abdominal organs were full of tubercles, with the exception of the left kidney, which was normal. Dr. Johnston found bacilli in the lungs, kidney, ureter and bladder.

DR. CAMPBELL said that though tubercular disease usually begins in the lungs, still it frequently attacks other organs first. In this case, most likely, it commenced in the bladder or kidney. Although it is said that no nurse ever contracted disease in the Brompton Consumption Hospital, yet he had several times seen the disease attack a husband who had a consumptive wife, and *vice versa*. He advised separation, where one had the disease. He believed strongly in the heredity of consumption.

Death following Abortion.—DR. ROWELL exhibited the uterus and DR. ARMSTRONG related the case. He said the cause of the abortion was uncertain; the patient, aged 23, had had several before. On his arrival he found the foetus, aged about six months, had come away, and he had no difficulty in getting away the placenta. Two days after, the woman became delirious, and had a very rapid pulse and fever. She continued suffering from apparent septicæmic poisoning till May 13th, when she died, having aborted April 5th. He was at a loss to account for the cause. The discharges were at no time offensive; she never had a chill, and never complained of abdominal pain. He washed the uterus out, using a return tube. Toward the end, vomiting set in. Dr. Rowell said that on opening the abdominal cavity he found the intestines matted together and covered with lymph and pus; the pelvis was filled with offensive purulent matter, and in the left iliac fossa was a collection of similar-looking pus,

enclosed in inflammatory adhesions. The mucous membrane of the uterus was thickened and covered with a thickish bloody discharge. On the right side of the body of the uterus was a small fibroid.

DR. TRENHOLME said that most likely she had had old pelvic adhesions, with pent-up inflammatory matters, and that the fresh trouble (abortion) again lighted up the mischief. It being painless may have been due to tolerance from repeated abdominal trouble.

DR. KENNEDY thought this case in many respects similar to one he attended some years ago. The woman had had five attacks of peritonitis. Deep pressure over the abdomen gave little or no distress. He diagnosed the case to be tubercular peritonitis. She died suddenly, and a post-mortem examination revealed a large pelvic abscess which had burst, the attacks previous no doubt being due to slight ruptures of the abscess. Ovariologists found they had better results follow operation where peritoneal adhesions existed, producing a tolerance to interference.

DR. SHEPHERD thought if the case could have been diagnosed, the proper thing would have been to open the abdomen and wash out the peritoneal cavity. Recovery had followed operations for inflammation produced by perforation of the appendix vermiformis.

DR. WILKINS said he had seen an absence of evidence of pain in some typhoid fever cases produced by the dulling effect of the typhoid poison. In one fatal case of perforation, there was no evidence of pain shown.

Stated Meeting, May 28, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Case of Hysterical Paralysis in a Boy.—DR. LAPHORN SMITH exhibited this case, and gave the following history:—

Joseph L., aged 11 years, was always a delicate child; never had scarlet fever nor measles. He has often had running at ears (otorrhœa), but never had any disease of his

eyes until this year. Family history good; father and mother very healthy, as also his grandparents. Has six brothers and sisters living, and none dead. There is no evidence of syphilis or tubercle in any of the family. Last June his mother first noticed that he dragged his left leg in walking, and though he was able to go about the house, he could not go out. He had no photophobia at this time. He dragged his leg for about a week, and then recovered without any treatment, returning to school, where he continued to attend until the vacation on the 1st August. From June to August, however, he complained of pain in the left knee, sometimes during the day and sometimes at night; but he did not drag his leg again until January of this year, when one day he became slightly deaf, and both external ears became exceedingly painful to the touch. Next day his eyes were red and swollen, especially the lids, and about two weeks later his legs became so weak that he was unable to stand. He could bend them easily, but could not keep them straight. One evening in March his left eye suddenly closed, and neither he nor any one else was able to open it again until a few days ago. Almost from the beginning of this attack, his legs, from the middle of the thighs to the toes, have been exquisitely painful to the touch, as also have been his external ears. This hyperæsthesia was real, for his mother several times, while he was asleep, touched him lightly on these over-sensitive parts, with the result that he suddenly awakened with a frightened scream. His father also tested his paralysis by setting fire to his clothes, but he was unable to get up. I tried several times to touch him gently on the affected parts, with his eyes blindfolded, but always with the effect of making him cry, although he would allow me to pinch him moderately in any other part of the body, even within half an inch of the sensitive parts. Neither was I able to expose his pupil. He had such a dread of the light reaching the retina of his left eye, that even when I forced the lids apart he rolled the cornea up out of sight. I examined his spine carefully, and there is no tender spot, and the patellar reflex is quite normal. I thought his case one of functional nervous disorder, and as he was pale.

and weakly, I placed him on a ferruginous treatment with syrup of iodide of iron. He had only taken this remedy for less than a week when his father returned from the country with some ferns and Dr. John's herb, which a friend recommended him to use on the boy's legs. He boiled them together, and rubbed the boy's legs with the decoction during ten minutes in spite of his cries, and afterwards made poultices of the leaves and bandaged them on to his legs. The next morning the boy walked with a little difficulty, but without assistance, into the kitchen. That morning the pain left his legs, but instead he complained of a feeling of pins and needles in his feet, and also in his left eye, which he was able to open three days later. He is now quite well.

Dr. Smith had met with somewhat similar cases in young females, but this was the first he had seen in a boy, and he thought it of sufficient interest to bring before the society.

DR. HENRY HOWARD said the temporary paralysis, whether it occurred in males or females, was always hysterical, and recovered without treatment, and that unfortunately the recovery was generally attributed to supernatural miracles.

Gunshot Wounds of the Chest.—DR. JAS. BELL then read a paper on this subject. (*See page 1.*)

DR. SHEPHERD congratulated Dr. Bell on the success of his cases—a success which would, before the days of antiseptic surgery, have been almost impossible. He thought that when empyema followed gunshot wounds that it should be treated as other empyemas—by free and dependent drainage. He deprecated the probing of gunshot wounds, and related a case of pistol wound of the lung which was in his wards at the General Hospital last summer, where the wound healed by first intention, and with the exception of spitting a little blood, and having a local area of dullness for a few days, no other symptoms were present, the patient recovering completely without the slightest fever. The treatment was altogether expectant, and no search for the bullet was made.

DR. HENRY HOWARD said that fifty years ago he took lectures on surgery, delivered in Dublin by Sir Philip Crampton, Sur-

geon-General, who said, speaking of wounds received in the battle of Waterloo, that recovery generally took place if the ball passed through the chest and came out, but death generally followed if the bullet remained in the chest cavity. Much of the success now seen in these cases was due to drainage.

DR. FENWICK said he regretted not being present when Dr. Bell read his paper. He spoke against being too anxious to remove bullets lodged anywhere. Too much probing often did great harm. If the bullet could not easily be reached, drain, and leave it. Nature generally encysts it, and so prevents its doing mischief.

SANITATION IN JAPAN.—We may ignoantly suppose that the civilisation of Japan does not come up to the Western standard. At any rate, the people believe in sanitation. The following extract is from the "*Sei-i-Kwai*" *Medical Journal*, published in Tokyo:—"In connection with the efforts of the sanitary authorities to combat disease and death, during 1885, we have, in Japan, no popular tumults to record, no mobbing or injury of health officers or physicians engaged in their work of mercy, no organised attempts to hamper and arrest the execution of the various measures enforced for the public benefit, even when most onerous or even apparently arbitrary and severe. On the contrary, we are glad to acknowledge the hearty and intelligent assistance received, not only from the officers of the different departments of the Government, both local and general, but from private organisations and individuals as well, while the people at large have readily acquiesced in the work of sanitation, occasionally rendering substantial aid to the authorities."

NUMBER OF PHYSICIANS, MIDWIVES, &C.—According to statistics recently published by the Central Sanitary Bureau of the Home Department, the total number of practitioners in Japan up to August, 1883, was 39,768, of which number 3,395 held licenses from the Home Department, and 36,373 held licenses from the prefectures. As compared with the total number of practitioners in 1881-2, there was an increase of 3,472, of which 531 held licenses from the Home Department, and 2,941 held licenses from the prefectures. This gives a ratio of one practitioner to 910.82 of the population. The total number of specialists was 1844, of which 191 were oralists, 701 oculists, 567 obstetricians, and 387 bone-setters. The total number of midwives was 19,035, or one to 49.18 child-births.—"*Sei-i-Kwai*" *Medical Journal*.

CANADA

Medical and Surgical Journal.

MONTREAL, AUG., 1886.

CHANGES IN OUR MEDICAL ACT.

The triennial meeting recently held has confirmed the greater part of the recommendations contained in the report of the committee which we published two months ago. The changes proposed are of a very radical nature, entirely altering as they will the power of the Universities to present their graduates directly for their license. The advisability of establishing a Central Examining Board has now been fully entertained both by the Governors of the College and also by the general meeting of the profession. It will, therefore, doubtless come into force as soon as the necessary legislation shall have been obtained. The proposed composition is such that all interests seem to be fairly represented. The total number will be twenty, more than would be required, except for the absolute necessity for a double set of examiners, English and French. In this way ten committees of two each (one English and one French) can be formed, which will probably be sufficient to carry out a complete programme of examinations upon all the subjects. Every candidate is to be examined chiefly by the member of the committee speaking the same language, but it is understood that his colleague shall be at liberty to take any part in the examination that the case may seem to call for. Provision is also made for the possibility of disagreement between any two examiners as to the merits of a candidate, by which the matter can be appealed to the whole Board, with whom then rests the final judgment. It is proposed that the Board shall consist of two representatives from each of the schools, and as many from the outside profession. This

seems a very fair and reasonable arrangement at first sight, but in our opinion the efficiency of such a body would have been greater if a larger proportion had been schoolmen. The examination of a candidate in a fair and impartial way, and yet with the necessary thoroughness, is an Art, and one which it requires considerable experience to acquire. It is admitted by everyone who understands the matter that those persons who have been engaged for some years in the regular work of teaching, are certainly the best fitted for conducting examinations. It is not that we at all doubt the existence of many outside the schools who are equally familiar with the entire range of certain branches of the curriculum, but that we fear that some of those not teachers will find it very difficult to become efficient and skillful examiners. We do not think that any change is possible in the direction we have indicated, but nevertheless it is well for all to express freely their opinion upon this important matter. There will, after the proposed amendments come into force, be but one meeting of the Board for the granting of licenses. It will be held in May, in time to receive the report of the Central Board.

Another important part of the business was the adoption of the proposed alteration in the method of conducting the triennial elections. The Committee recommended the election of representatives in each district mentioned in the Medical Act, but there seemed a strong feeling on the part of country members to still further decentralise, and hence the result was that the Committee's plan was finally accepted, with the exception that a representative is to be chosen from each *judicial* district. The plan seems quite feasible, and promises to give universal satisfaction.

The matter of the preliminary examination gave rise to much discussion. The Board of Governors decided that no change in the present requirements was desirable. The general meeting, however, rejected this part of the report, and passed a resolution adding a number of additional branches to the obligatory subject. Now, as a matter of fact, the preliminary examination in this Province is, in the opinion of a great many well-informed persons, quite high enough to ensure a reasonable education upon the part of any one who is admitted to the study. It is to be observed,

also, that a very large percentage of those presenting themselves for the first time are rejected and obliged to appear for examination at the end of another year. No complaint has been made of a low standard of marking, and, as we have just said, the proportion of failures under the existing requirements is very great. It is very hard, therefore, to see what good reasons there can possibly be for the addition of still more numerous subjects to a list which is already a pretty long one. There seemed, however, to be a determination to insist upon a number of branches which are taught at the principal French colleges throughout the Province with the view, it was urged, of inducing pupils to finish out what they call a *cours complet*. If this be finally adopted by the Governors—and we hope it may not be—it will result in those educated elsewhere than at the institutions named being obliged to secure private tuition to qualify themselves for the preliminary examination. The arguments showing the sufficiency of the examination as it now stands are unanswerable and guided the action of the Committee and of the late Board of Governors, and, although the general meeting has expressed an opinion otherwise, the new Board will have to come to a final decision, and we hope it will be in favor of the *status quo ante*.

COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

A special meeting of the Board of Governors was held July 13th, 1886. Present: Drs. Lemieux (President), Belleau, LaRue, Simard, Lachapelle, P. E. Mignault, R. P. Howard, Parke, Leprohon, Kennedy, Durocher, H. A. Mignault, Marmette, Guay, De St. George, Hart, Rodger, Lanctot, George Ross, Austin and Campbell.

Reports of Assessors from Laval and McGill Universities were read and adopted.

Drs. Delaney and John Howe, graduates of Laval, Quebec, on presentation of their diplomas, received their licenses.

The report of the preliminary examination in May last was read, showing that the following gentleman had passed: Messrs.

Arthur Bariboult, Redolphe Cheviner, J. A. Charette, Frs. Desrosier, Emile Dumont, W. S. England, Paul Gagnon, Chs. Gerard, John Hayes, Edmond Huot, Henri Lanciaux, Theodule L'Ecuyer, L. E. La Roche, G. E. Le Sage, L. de Martigny, Pierre Lussier, Frs. Marchand, J. L. G. Mason, C. D. Meikle, Oscar Mercier, G. L. McKee, C. E. Morin, L. A. Noel, J. O. Portras, Edmond Provencal, Euclide Rainville, Hector H. Roy, F. Serres, L. St. Germain, F. E. Thompson, L. V. Vezina, E. A. V. Villeneuve, Armand Bedard, T. Belanger, Ant. Brossard, L. M. F. Cypihot, Jules Danderand, Joseph Desy, A. U. Dorais, Henri Fortier, E. Laurin, F. Lavoie, A. Lecavalier Jos. Lemai, Chs. Lemaire, J. A. Mognan, Jos. A. Rene, F. Richard, L. Robillard, Edmond Savard, A. Taillefer, J. C. P. Tasse, Chs. Vezina, Jos. A. Bedard.

The Secretary then read the report of the committee as published. A minority report was then read, when it was decided to take up the original report, and discuss it clause by clause.

The College first decided in the affirmative that it was decided to have a Central Board of Examiners.

Clause 1 was amended to read as follows:—

The Board shall be known as the Central Board of Examiners, and shall consist of two (2) examiners on each subject. That the examination shall be made in the language of the candidate, provided that the two examiners shall have the right to examine alternately, and when they disagree, the examination on the subject shall be taken before the full committee.

Clause 2, so as to read, "The Central Board of Examiners shall consist of two representatives from each medical school, and an equal number not connected with any school."

Clause 3 was amended so as to correspond to the amendment in clause 2.

The remainder of the report was carried with the following alterations:—

1. The Central Board shall meet alternately in Quebec and Montreal.

2. The preliminary examination to be held once a year, on the first Wednesday in July, in Quebec and Montreal alternately.

3. Graduates in Arts not exempted from the preliminary examination.

4. The Board of Governors to meet annually on the second Wednesday in May, alternately in Quebec and Montreal.

The triennial meeting was held May 14, 1886. About 150 were present.

The minutes of last meeting were read and adopted. Dr. E. P. Lachapelle presented his annual statement.

Dr. Lemieux, president, addressed the College on the work done by their governors during the past three years.

Dr. Fortier objected to some items of expenditure, and moved, seconded by Dr. Laberge, that the secretaries prepare annually a statement of the work done by the college, and have it printed, and a copy sent to each member of the college. This was lost. The college at one p.m. adjourned till two p.m. At two p.m. the college again met, and the following gentlemen were named scrutineers—Drs. Kennedy, Beaudry, Faucher, Brunelle, W. Mount, L. Mignault, J. B. Gibson, S. Duval, C. S. Parke, Chartrand, Guay, Lanctot, L. LaRue and Hurtibise.

It was announced that the ballot would close at four p.m.

The Secretary for Montreal read the report adopted by the Board of Governors the previous day.

Dr. Cotton moved, seconded by Dr. Norman A. Smith, "That each judicial district be granted power to elect a governor of the C. P. and S. P. Q., and that each said judicial district elect its representative. Carried.

A motion of Dr. Marcil, seconded by Dr. Durocher, as follows, was carried :

"That the preliminary examination for the study of medicine comprise, in future, the subjects of physics, chemistry and philosophy. That this preliminary examination be held on the second Wednesday in July of each year."

Moved by Dr. Dagenais, seconded by Dr. Brosseau : "That the primary and final examinations shall be held on the second Wednesday in July in each year." *Carried.*

At ten minutes past six o'clock the scrutineers announced the result of the ballot to be as follows :—

City of Montreal.—Drs. T. A. Rodger and J. L. Leprohon.

District of Montreal.—Drs. H. A. Mignault, J. A. Duchesneau, J. B. Gibson, D. Marcil, F. D. Lafontaine, N. H. Ladouceur, A. Longpre, and J. E. Turcot.

City of Quebec.—Drs. A. G. Belleau, L. LaRue, R. Q. Rinfret, A. Watters, C. S. Parke, and E. A. de St. George.

District of Quebec.—M. Guay, F. Fortier, E. Rousseau, F. E. Grandbois, L. H. Labrecque, Hon. T. Robitaille, and A. Laferriere.

District of Three Rivers.—Drs. Hon. J. J. Ross, Badeaux, and Desaulnier.

District of St. Francis.—Drs. Austin, Paré, and Thomas La Rue.

The college then adjourned.

MEETING OF THE NEW BOARD OF GOVERNORS.

The new Board of Governors then met, and elected the following officers :—

President, Dr. W. H. Hingston (Montreal) ; Vice-President for Quebec, Hon. Dr. Ross, re-elected (Quebec) ; Vice-President for Montreal, Dr. J. L. Leprohon (Montreal) ; Treasurer, Dr. E. P. Lachapelle, re-elected (Montreal) ; Registrar, Dr. L. LaRue, re-elected (Quebec) ; Secretary for Quebec, Dr. A. G. Belleau, re-elected (Quebec) ; Secretary for Montreal, Dr. F. Wayland Campbell, re-elected (Montreal).

The following Assessors were named :—

McGill University—Hon. Dr. Church and Dr. P. E. Mignault.

University of Bishop's College—Drs. T. A. Rodger and H. A. Mignault.

Laval University, Quebec—Drs. Simard and Sewell.

Laval University, Montreal—Drs. Marcil and Gibson.

Victoria University—Drs. A. C. MacDonnell and O. Raymond.

A committee consisting of Drs. Lemieux, George Ross, Hingston, F. W. Campbell, E. P. Lachapelle, Rodger, Belleau, and

de St. George, were appointed to prepare amendments to the existing Medical Act, in accordance with the report adopted by the Governors at the special meeting on the 13th July and the resolutions passed at the Triennial Meeting.

CANADIAN MEDICAL ASSOCIATION.—The annual meeting, as already announced, will be held in Quebec on the 18th and 19th of the present month. Arrangements have been made with all the railway and steamboat companies for the usual reduction of fares. The old city of Quebec has always been an attractive point, and the unrivalled water-trip by which it is reached is a favorite holiday route. We trust that a great many will be induced to combine a short vacation with attendance at the meeting of our national association. Certificates of membership and other information can be obtained on application to Dr. Jas. Bell of Montreal, who is at present Acting-Secretary. We append a list of the papers promised so far, which will no doubt be largely added to before the meeting:—

1. Heart Clot Dr. Osler, Philadelphia.
2. The Medical Jurisprudence of Crime
and Responsibility.....Dr. D. Clarke, Toronto.
3. Diabetes Mellitus.....Dr. Dupuis, Kingston.
4. The Treatment of Biliary Calculi Dr. J. Ferguson, Toronto.
5. The Inhibition of the Heart in Diph-
theria Dr. Gardiner, London (Ont.)
6. Alexander's Operation, and the Treat-
ment of Displacements of the
Uterus Dr. A. L. Smith, Montreal.
7. Excision of the Elbow Joint.....Dr. Roddick, Montreal.
8. The Treatment of Tuberculous Glands
of the Neck.....
9. Myelo-Sarcoma of the Arm—Ampu-
tation at the Shoulder Joint } Dr. Fenwick, Montreal.
10. A Case of Pelvic Abscess.....Dr. Alloway, Montreal.
11. Tracheotomy in Membranous Laryn-
gitis.....Dr. Bell, Montreal.
12. On a case of "Ainlum".....Dr. Shepherd, Montreal.

Medical Items.

— Dr. R. P. Howard, having resigned the position of Vice-President of the International Medical Congress, to be held in Washington next year, Dr. J. A. Grant of Ottawa has been appointed to the same office by the Executive Committee.

— Dr. Oliver Wendell Holmes, called by the *Hospital Gazette* the “venerable and much bedoctored Breakfast Table Professor,” has received the following degrees during his recent visit to Great Britain: D.C.L., Oxon; Litt. Doc., Cantab.; LL.D., Edin., and LL.D., Dublin.

ARSENIC IN SKIN DISEASES.—The Editor of the *Journal of Cutaneous and Venereal Diseases* is desirous of ascertaining to what extent arsenic is used by American physicians in the treatment of skin diseases, and also the results of their experience as to its therapeutical value. Information upon the following points is requested of every physician who reads this:—

Are you in the habit of employing arsenic, generally, in the treatment of skin diseases?

In what diseases of the skin have you found arsenic of superior value to other remedies?

What ill effects, if any, have you observed from its use?

What preparation of the drug do you prefer, and in what doses do you employ it?

Address, Editor of *Journal of Cutaneous and Venereal Diseases*, 66 West 40th Street, New York.

ANOTHER HERMAPHRODITE.—Among the replies to an advertisement of a musical committee for “a candidate as organist, music-teacher, &c.” was the following one: “Gentlemen,—I noticed your advertisement for an organist and music-teacher, either lady or gentleman. Having been both for several years, I offer you my services.”

“THE OTHER SIDE OF COCAINE—THE BAD SIDE,” was the subject of a paper presented by Dr. A. W. Calhoun, of this city, to the State Medical Association, in Augusta, last week. The doctor argues strongly against the use of cocaine in cataract operations by extraction. He stated that before he began

the use of cocaine from ninety-five to ninety-seven per cent. of all cataract operations by extraction proved successful, and that in a large number in which cocaine had been used he had bad results. He has abandoned its use altogether in operations by extraction.—*Atlanta Medical and Surgical Journal*.

—Puffendorf tells the following: “A man who had sore eyes went to a horse doctor for relief. The doctor applied to his eyes an ointment he was accustomed to use on horses. The man became blind, and sued the doctor, but the judge acquitted the horse doctor, on the ground that if the man had not been an ass, he would never have applied for relief from a horse-doctor.”

A TROUBLESOME PATIENT.—An incident in professional life is reported from Vienna, in which a tailor, on being told by his physician, whom he had called to consult as to a disease from which he was suffering, that his recovery was impossible, forthwith shot the physician in two places, and then turned his arm—or rather arms, for there were several—against himself, with a fatal result as far as he was concerned. Nine shots in all were fired; and the number may, perhaps, be accounted for by the fact of this recalcitrant patient being a tailor; but it is to be hoped that a needless complication will not be introduced into professional life by such a practice becoming general. Medical men have already a good deal to put up with from patients; and, if further difficulties be introduced, the relations of doctor and patient may become strained. In any case, the medical man, if he must needs take lead, would probably prefer it in the shape of false coins to the more conical form of revolver bullets. We are glad to state that the physician was not much hurt, and will shortly be able to resume what may be considered an eventful career.—*British Medical Journal*.

—Upwards of eight of the rioters who broke open the Chicago drug store and regaled themselves with the wines which they found on the shelves—wine of colchicum among the rest—have crossed the bourne the returns from which are few and somewhat apocryphal. The despatch with which the crossing was effected, will encourage the authorities to insist on the

druggists laying in a full stock of this drug against future possible deployments under the red flag. As a remedy for anarchy it is S. S. S.—sure, speedy and sweet—much more pleasant than cannabis and plumbum, the agents heretofore mainly relied on.

— It was a sight to behold the late meeting of the American Medical Association from the rear. A larger proportion of bare vertex presentations was, probably, never before in attendance at any meeting. A rough estimate showed that at least one doctor in every four had shed the capillary from the dome of his brain pan. The sight was a striking illustration of the fact that while temperance, chastity, and mental industry are conducive to happiness, these virtues are not promotive, but, on the contrary, are rather destructive of the growth of hair.—*Medical Age.*

FARINACEOUS DIET.—In reference to the statement that chemical analysis of pop-corn shows it to contain more albuminoids than most of the other cereals, and that in certain parts of the West it is extensively used as a regular article of food, the *New York Medical Record* says that our Pilgrim Fathers made some personal experiments with pop-corn; the result being that they started a Day of Thanksgiving for not having to live on it any longer. Whereupon the *American Practitioner and News* adds: “In the light of the above chemical revelation, the logical fitness and poetic beauty of the following old rhymes are manifest:

‘And there they sat a-popping corn,
John Styles and Susan Cutter;
John was as strong as any ox,
And Susan fat as butter.’

That those Calvinistic ascetics known as the Pilgrim Fathers should cloy upon so rich a diet is no matter for surprise when one notes the fondness of their descendants for dry codfish, beans, and starved mackerel.”

“IT’S GERMAN, YOU KNOW.”—

“We consider a coccus the cause of the gleet,
That is German, you know; so German, you know!
We dress a cut finger in a hay-stack of peat,
That is German, so German, you know!

“We insert a gum larynx and celluoid tongue,
We take out the spleen and resect the lung,
We save at the spigot and leak at the bung,
For ’tis German, all German, you know!”