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A SERIES OF CASES OF CALCULOUS OBSTRUCTION OF
THE COMMON BILE DUCT, TREATED BY INCISION
AND REMOVAL OF THE CALCULI.¹

BY

JAMES BELL, M.D.,

Professor of Clinical Surgery, McGill University, Surgeon to the Royal Victoria
Hospital and Consulting Surgeon to the Montreal General Hospital.

It is safe to say that in no department of surgery has greater progress been made in recent years than in the treatment of gall-stone disease by operation upon the gall-bladder and ducts. Lives are now saved and health restored by operations which are followed by a very low death rate, and which have this advantage over many other valuable surgical procedures, that they restore the health completely and leave the patient free from deformity or loss of function. The first successful cholecystotomy was done by Mr. Lawson Tait, in August, 1879, and the first attempt to remove stones from the common duct was made, (also by Mr. Tait), by crushing in July, 1884.² Later Mr. Knowsley Thornton operated by breaking up the stones with a needle passed through the walls of the duct ("needling"), and forcing the fragments out into the duodenum. The first successful choledochotomy was performed by Curvoisier in January, 1891.³ Today cholecystostomy is a common operation, frequently performed and generally with the most satisfactory results, and in ordinary cases the procedure is almost devoid of danger. Incision of the common duct for the removal of calculi, which has now almost entirely superseded the cruder operation of "crushing" and "needling," is, of course, a much more difficult and serious operation, and is generally called for

¹ Read at the meeting of the Canadian Medical Association, Quebec, August, 1898.

² *Lancet*, Vol. II., 1885.

³ A. W. Mayo Robson Hunterian Lectures, 1897.

in conditions of the patient which are much more unfavourable for operation. Nevertheless, the mortality rate is low, and the results in the successful cases are brilliant. I have purposely refrained from using in the title of this communication the uncouth and cumbrous terms by which these operations are described, (choledochotomy, choledocholithotomy, choledochoduodenotomy, choledochoduodenolithotomy, etc.), as no one of them could be properly used for all of the six cases which form the subject matter of the paper. Of these six cases five were females, each of whom had borne a large number of children. The ages of the patients ranged from 33 to 61 years. In two there was but a solitary stone, in three there were stones in the gall-bladder, as well as in the common duct, in four, there was obliteration of the cystic duct and a contracted gall-bladder, which contained no bile, and in two, a large stone was impacted in the ampulla of the duct within the duodenum, (diverticulum of Vater), and was removed through an incision in the duodenum (choledochoduodenotomy). There was but one death in the six cases, from pneumonia on the sixth day after operation, and one patient was submitted to a second operation upon the duct, five and one-half months after the first operation.

CASE I.—E. B., a gentleman, *æt.* 52, had his first attack of pain in the right side of the abdomen while travelling by rail in the summer of 1892. It was severe, lasted all evening and was followed by jaundice, which passed off in a day or two. Three similar attacks followed, one in three months, another in the winter of 1893, and the third in February, 1894, with intervals of good health. On the 25th of January, 1895, the fifth attack began, more insidiously than any of the previous ones. From this time there were frequent attacks with persistent and steadily increasing jaundice, drowsiness, anorexia, itching of the skin, and loss of weight, from 225 lbs. to 140 lbs. in eleven months and a half,—(from January 25th, 1895, till he came under my observation, January, 13th, 1896). Operation was performed on the 14th of January, 1896. There was much adhesion of the colon, duodenum and omentum to the liver. The gall-bladder was contracted and empty. A stone, about the size of a playing marble, was discovered impacted in the ampulla of the duct, within the duodenum. It was removed through an incision made along the line of the duct and obliquely across the duodenum at its posterior border—choledochoduodenotomy. The wound in the duodenum was closed by fine silk sutures, two or three carried through all the coats of the bowel, and then a double row of Lembert sutures. A rubber drainage tube was carried down to the bottom of the cavity and surrounded by iodoform gauze packing. There was no escape of bile or duodenal contents,

and the patient made an excellent recovery. Within a few weeks he had regained the 80 lbs. which he had lost in the year preceding the operation, and he is still, I believe, in the enjoyment of perfect health.

CASE II.—Mrs. S., æt. 56, the mother of a large family, was admitted to the Royal Victoria Hospital on the 16th February, 1897, deeply jaundiced and complaining of pain and tenderness in the epigastrium. A long series of attacks of crampy pain in the epigastrium (evidently biliary colic) had begun about twenty years prior to her admission to hospital and had continued for ten years with considerable frequency and steadily increasing severity. At the end of ten years a large, painful, tender tumour developed in the epigastrium, and she was confined to bed with chills, flushes, pain and weakness, (acute cholecystitis?) At the end of six months, the tumour began to diminish in size and gradually disappeared altogether, and at the same time she became deeply jaundiced. The jaundice lasted about six months. She remained fairly well then for four or five years, with the exception of frequent "weak turns." Then she had typhoid fever, after which she remained well again until one year before coming under observation, when the pain returned with swelling of the limbs, high-coloured urine, and general malaise, which lasted six weeks. Two months before admission, she was again seized with pain in the epigastrium. The attacks were frequent and severe, the urine became high-coloured and jaundice developed. Two weeks before admission the jaundice became very marked and steadily increased. She had also been losing flesh rapidly during the last two months. On admission there was extreme jaundice, with bile stained urine and colourless stools. The liver was not enlarged but there was a tender point midway between the xiphoid cartilage and the umbilicus and just to the right of the middle line. There was great prostration which was attributed to cholæmia. This patient was operated upon on the 23rd of February. On opening the abdomen there was much adhesion of the omentum to the lower surface of the liver. The gall-bladder was contracted and contained twelve small faceted stones which were removed with the finger through an incision made into the least prominent part. There was no bile. Two smallish stones were removed in fragments through an incision on the dilated common duct and a large one, about the size of a marble, which lay in the ampulla of the duct, within the duodenum was pushed backwards and removed through the same incision. The aggregate weight of the fifteen stones was 3.1 grammes. The incision in the common duct was closed by sutures as in the previous case, but it was found impossible to either completely close the wound in the gall-bladder or

bring it up to the parietal peritoneum. There was considerable escape of bile from the incision in the duct during the operation owing to the difficulty of dislodging the large stone from the ampulla of the duct. The bile was carefully mopped out and a large drainage tube carried down to the border of the cavity, and well-packed round with iodoform gauze. There was a moderate escape of bile from the tube, and the patient seemed to do fairly well for four days, when she developed a right-sided pneumonia and died on the first of March, six days after operation. There was no autopsy, but during the six days following operation there was neither abdominal pain nor distension nor any symptom to indicate local disturbance. This patient was cholæmic, weak and miserable at the time of operation and took ether badly, having the air passages full of mucus throughout, and to this I am inclined to attribute the pneumonia which was the cause of death.

CASE III.—Mrs. C., æt. 47, the mother of 11 children, the youngest six years of age, was admitted to the Royal Victoria Hospital on the 13th of August, 1897, deeply jaundiced and complaining of pain just to the right of the epigastrium. She had had her first attack of biliary colic in 1881, and from that date to 1894, she had had an attack about every two years. In 1894, she had a very severe attack, the pain lasting 12 days. In the next two years she had an attack each year. From the first, each attack was accompanied and followed by jaundice. From May, 1897, she had had several attacks and the jaundice had never entirely disappeared. During all this time she had colorless stools and very dark urine. The last attack began on the 26th of July, and lasted three days. From that time until the date of operation, August 17th, the jaundice had steadily increased. She had lost much flesh, and the rounded border of the liver could be distinctly felt through the flaccid abdominal wall. She was very deeply jaundiced and had a systolic apex heart murmur. The other organs were normal. At the operation, there were few adhesions, the gall-bladder was shrunken and empty, and a large stone was readily detected in the common duct about half an inch above the duodenum. It was fixed in this situation, or at least was not easily movable. An incision was made over the stone, which was removed, and the incision closed by fine silk sutures. Five sutures were inserted through all the coats and a double row of Lembert sutures was applied over this again. The stone weighed 4 grammes. A drainage tube was inserted down to the bottom of the cavity and packed around with iodoform gauze. There was no escape of bile and recovery was uneventful. A bile stained discharge appeared in the dressing, but I believe it to

have been simply bile stained serum. This patient was discharged on the 1st of October, perfectly well.

CASE IV.—Mrs. C., æt. 61, a stout woman, the mother of 14 children, was admitted to the Royal Victoria Hospital on the 13th of October, 1897, deeply jaundiced, and with two large carbuncles on the right side of the abdomen, on a line with the umbilicus. Her symptoms had begun in the winter of 1894, after a fall, in which she struck her right side against the edge of a barn door. Periodic attacks of pain and tenderness in the right epigastrium occurred about twice in the year, but they were not accompanied by jaundice, until August 10th, 1897, when the last attack began. This was attended with severe and continued pain, constant vomiting and a sense of fulness about the stomach, and jaundice, which grew gradually deeper and deeper until she came to hospital. The carbuncles were first attended to, on the 14th of October, and on the 4th of November, the abdomen was opened. The liver was enlarged, the gall-bladder was shrunken and contained five calculi, but no bile. The cystic duct was obliterated and the common duct was dilated and contained a fairly large stone which could be moved back and forth along the duct. The stone was removed through an incision in the middle third of the duct and the incision sutured in the usual way. This stone was faceted, as were the five others removed from the shrunken gall-bladder. The aggregate weight of the stones was 4.7 grammes. The cavity was drained by a tube passed down to the incision in the common duct, and surrounded by iodoform gauze packing. This patient made an uneventful recovery and was discharged on the 20th of December, with the wound perfectly healed.

[Within the past ten days I have heard of the patient through her son. His report is as follows: For some time after going home she remained quite well but in January she began to complain of pain in the abdomen. On the 7th of May, she became definitely insane with delusions on the subject of religion, etc. At no time has she had any jaundice, her color is good, and the stools and urine are normal.]

CASE V.—Mrs. K., æt. 49, the mother of 12 children, the youngest born 14 years ago, was admitted to the Royal Victoria Hospital on the 5th of February, 1898, with a history of two month's illness. On the 8th of December, 1897, she was seized with moderately severe pain in the epigastrium, which prevented her from straightening herself up. This was soon followed by jaundice. The jaundice persisted and the attacks recurred about twice a week until she came to hospital. She had lost a good deal of flesh and had been chilly and feverish. On admission she was deeply jaundiced; the stools were colorless and

the urine very dark. Operation was performed on the 10th of February. The duodenum was firmly adherent to the contracted gall-bladder and was wounded in separating them. The wound was closed by silk sutures—first through the whole thickness of the bowel and then a double row of Lembert sutures. A large stone weighing 3.25 grammes was found in the common duct which was much dilated. It was freely movable in the duct and was removed through a longitudinal incision which was sutured with fine silk in the usual way. A drainage tube was inserted and surrounded by iodoform gauze packing. The dressings next morning showed evidence of the escape of bile, and again on the following morning. From this time there was more or less escape of bile into the dressing for four or five weeks. In the meantime the jaundice had entirely disappeared and the stools and urine were normal in color and appearance, and the wound was almost completely healed. On the 24th of April, it was noticed that the skin was slightly yellow again. On the 6th of May, she had a severe attack of pain with increase in the jaundice. From this time on she developed symptoms of obstruction in the common duct and the abdomen was re-opened on the 21st of July, by an incision about an inch inside of the previous one. The duct was easily reached, although the duodenum was again wounded in separating it from the under surface of the liver. The wound was immediately closed by sutures as before. A movable stone was found in the common duct and removed through a longitudinal incision, which was closed by sutures of fine silk as in the previous operation. This stone weighed .5 grammes. There was nothing in the appearance of the duct to indicate that it had been previously opened or otherwise interfered with. The cavity was drained and packed as in the previous operation. There was some escape of bile the following morning. This soon ceased, however, and in four days the urine and stools were normal and the yellowness had almost entirely disappeared from the skin and conjunctivæ. This patient continues to make excellent progress towards recovery. This second operation was much easier than the first, and except at the lowermost part of the wound the operation field was entirely cut off from the general peritoneal cavity by adhesions.

CASE VI.—Mrs. B., æt. 33, the mother of six children, was admitted to the Royal Victoria Hospital on the 6th of May, 1898, suffering from jaundice and recurring attacks of pain in the right hypochondrium. Her first symptoms, of this kind, had occurred two years previously. In three months more she had a series of mild attacks and then remained well for a year, when she had another severe

attack. This was in June, 1897. She was again free from attacks of pain until four weeks prior to admission, when she began to have a series of attacks accompanied by jaundice which varied in intensity, from time to time, but never disappeared. The temperature ranged from 98° F. to 101° F., the liver was slightly enlarged and its lower border was palpable, and there was a trace of albumen in the urine. Operation was performed on the 12th of May. On opening the abdomen the colon and stomach were adherent to the liver, but the gall-bladder and ducts were exposed without much difficulty. The gall-bladder was distended and tense and the common duct much dilated. A stone was found firmly impacted in the ampulla, within the duodenum. It was removed through an incision over the end of the duct into the duodenum, which was immediately closed by silk sutures, first through all the tissues, and then a double row of Lembert sutures. This stone was faceted. The base of the distended gall-bladder was next aspirated and three ounces of greyish thick pus withdrawn which gave sterile cultures. Six faceted stones were removed from the gall-bladder and one from the cystic duct—eight in all, weighing 7.3 grammes. The cystic duct was obliterated beyond the impacted stone. The gall-bladder was attached to the peritoneum and a drainage tube inserted into it. A strip of iodoform gauze was passed down along the under surface of the gall-bladder and cystic duct, to the line of incision in the duodenum, at the end of the common duct. The remainder of the abdominal wound was closed. The patient made an excellent recovery and was discharged quite well on the 5th of July.

In estimating the value of a surgical procedure, we have to consider : (1) The conditions which call for operation and the prognosis in these conditions, under other methods of treatment, or no treatment at all. (2) The gravity of the operative procedure in itself, and (3) the results which we may reasonably expect to attain by operation ?

(1) *The conditions culling for operation.*—In jaundice due to mechanical obstruction by a stone, or by several stones in the common bile duct, there is but one ground for hope, outside of operation, and that is the expulsion of the stone by natural methods, or its escape into a neighbouring viscus, (stomach or colon), by adhesion and ulceration. Medicinal treatment is useless and nothing short of direct interference can avail to remove the stones. If the obstruction persists, cholæmia sooner or later proves fatal, (directly or indirectly), or perforation and escape of contents into the general peritoneal cavity occurs and sets up a fatal peritonitis, or cancer develops as a result of the long continued irritation of the passages and carries off the patient. The only question then would seem to be, how long one should wait in

obstructive jaundice before resorting to operation? This is a most difficult question to decide, because on the one hand we cannot fix any period at which we can say that the possibilities of nature have been exhausted, and on the other, it is obviously undesirable to allow patients to suffer unnecessarily for weeks or months before affording the relief which must sooner or later be given. In general terms, it may be said that no rule can be laid down and each case must be taken upon its own merits. On this point I have had, in my own experience, one very instructive demonstration.

[A young woman, aged 23 years, had her first attack of biliary colic on the 1st of April, 1897. Repeated attacks followed, and on the 22nd of June she became jaundiced. The jaundice persisted and attacks of pain, gradually increasing in severity, occurred at short intervals until the day after her admission to the hospital (August 19th, 1897), when they ceased altogether. I operated on the 25th August, only to find distinctive evidence that the stone had passed through the duct.]

(2) *The gravity of the operation.*—The operation, although often difficult, is not a serious one, as is shown by statistics, and no doubt the death rate, in this as in all the newer operative procedures, will be much reduced in the future. The number of choledochotomies heretofore reported is too limited to furnish statistics of any special value, but Mr. A. W. Mayo Robson¹ gives the death rate, as calculated from three series of collected cases, as well as from his own individual cases and those of two or three other surgeons, as ranging from 16 per cent. to 37.8 per cent. In my own cases (seven operations upon six patients), there was only one death, from pneumonia on the sixth day after operation. The dangers are, shock, from undue prolongation of the operation, peritoneal infection by the contents of the bile passages and hæmorrhage. Wounds of viscera in separating adhesions are accidents common to all abdominal operations. It is believed by many surgeons that long continued jaundice predisposes to hæmorrhage by altering the composition of the blood. My limited personal experience in these cases and others in which I have removed the stones by other means than through incision of the duct, has not confirmed this observation.

Method of operating.—The methods of different operators differ only in unimportant details. My operations have been carried out in the following manner: A vertical incision is made in the abdominal wall from the costal margin over the centre of the rectus muscle, down to about the umbilicus. The fibres of the muscle are separated and the peritoneum opened. Through this wound the parts are explored and the conditions determined as far as possible. A second incision is then made from the upper end of the first one along the costal

¹ Diseases of the gall-bladder and bile duct.

margin towards the ensiform cartilage, for one inch, or perhaps two inches. There is generally much adhesion of omentum, colon, duodenum or stomach to the under surface of the liver, and the separation of these adhesions is in most cases the most important and difficult part of the operation. The large thin-walled vessels of the omentum are easily torn and may give rise to very troublesome hæmorrhage and greatly prolong and complicate the operation. It is at this point, too, that the hollow viscera are likely to be wounded. When these adhesions are separated there is no difficulty in discovering the dilated common bile duct at the bottom of the cavity, extending obliquely inwards from the gall-bladder, (which is usually shrunken and contracted), to the head of the pancreas. It is, of course, indistinguishably bound up in cellular tissue with the portal vein and hepatic artery,—the whole appearing as a rounded rope-like mass, usually about two inches in length. The field of operation is now limited to a cavity, bounded internally by the stomach and duodenum, below by the colon, above by the liver and externally by the right lobe of the liver and the parietes of the abdomen; and with a few sterilized gauze pads the general peritoneal cavity is completely cut off. With the first two fingers of the left hand, under the rope-like mass above referred to, and the thumb apposed anteriorly the duct, which lies in front, can be explored from end to end and any stone easily detected. The stone is then made to project against the anterior wall of the duct by the fingers beneath, and the thumb compresses the duct on its proximal side to prevent the gush of bile which follows the relief of the obstruction. A longitudinal incision is made in the duct and the stone or stones evacuated. I generally retain the fingers and thumb in this position until I have passed three or four, or more, silk sutures through the edges of the incision, which are tied by my assistant. I can then relax my hold upon the duct and insert a number of Lembert sutures, carefully approximating the peritoneal surfaces. In this way neither bile nor blood escapes. A drainage tube is passed down to the bottom of the cavity near the line of suture and surrounded by a tubular packing of iodoform gauze to ensure the safety of the peritoneal cavity in case of the sutures in the duct giving way. It is sometimes said that it is unnecessary to close the wound in the duct. but the great gush of pent up bile which always escapes through the incision, if allowed to do so, leads me to think that closure of the wound is, at least, a wise precaution. I also look upon provision for drainage as a wise precaution—if not a necessary one, for in spite of the greatest care there may be some escape of bile from the wound in the duct, which may, as pointed out by

Riatal, be temporarily obstructed by blood clot after operation. In three of my cases there was some escape of bile a few days after operation, and I am of the opinion that to depend upon the suture of the duct with so much confidence as to close the abdominal wound completely would surely lead, sometimes at least, to disaster.

Finally, the vertical portion of the abdominal wound is closed by sutures and the drainage tube brought out through the obliquely transverse portion.

A SERIES OF NINE ABDOMINAL PAN-HYSTERECTOMIES PERFORMED IN ONE YEAR FOR UTERINE FIBROMYOMA.¹

BY

F. A. L. LOCKHART, M.B., EDIN.,

Lecturer in Gynaecology, McGill University, Gynaecologist to the Montreal General Hospital and Protestant Hospital for the Insane, Montreal.

As nine patients have undergone abdomino-vaginal hysterectomy for uterine fibroid disease at my hands from January, 1897, to January, 1898, only one of whom died, the following analysis of the cases may prove of interest.

The average age of the patients was 40 years and 6 months, the youngest patient being 32 and the oldest 57 years of age. In only two had the climacteric been reached and in these two it had occurred two and thirteen years respectively before operation. The age at which these women first menstruated averaged thirteen years and eleven months, the extremes being twelve and seventeen.

Sterility.—Six of the patients were married, and of these, three were absolutely sterile, one had had one miscarriage but no full-time children; one had had one full-time child and no miscarriages; and one had carried seven children to full-time and had miscarried once. Of those who were absolutely sterile, one uterus contained an interstitial tumour, while the other two patients had multi-nodular tumours scattered all through the uterus. The patient who had miscarried once had two interstitial fibroids, while the uterus of the woman who had carried seven children to full time was the seat of general fibroid enlargement and one small sub-mucous nodule. These women had been married for from two to twenty-seven years. While the number is too small upon which to form any opinion, it is seen that in this series the sterility was most marked when the tumours were interstitial, but it is quite likely that the presence of these growths played a very small part in the production of this sterility.

Symptoms.—Headache was a marked symptom in cases 2, 3, and 4, but in case 3 was due to defective vision and was cured by the patient wearing proper glasses.

Abdominal enlargement was the chief complaint in cases 3, 5, 6, 8 and 9, although it was plainly evident upon inspection in all.

¹ Read before the Medical Society of Northern New York, October 11th, 1898.

Pressure symptoms in the form of pain in the pelvis and thighs and obstruction to the circulation in the limbs were noticed in all but Nos. 1 and 9. It is strange that none were felt in case 9 as the tumour was a large one, but their absence may be accounted for by the fact that the growth was entirely abdominal, resting on the brim of the pelvis and was so firm as not to sink down into any of the hollows which contain the nerves and vessels. In No. 6, the tumour and uterus encroached to such an extent upon the right side of the pelvis that the vessels of that side were pressed upon, resulting in œdema and swelling of that leg.

In cases 4, 8, and 9, advice was sought chiefly on account of flooding, the tumour being entirely sub-mucous in Nos. 4 and 9, but more deeply situated in the uterine muscular tissue in No. 8. In all of the other cases, the growth was either sub-serous (as in the majority) or interstitial. Menstruation was both too frequent and too profuse in cases 1, 2, 4, 5, 7, and 9, while in Nos. 3 and 6, the flow was very scanty, and in both cases the tumour was entirely of the sub-serous variety.

Where the patient suffered from dysmenorrhœa, the pain began with the flow and lasted during the period in six cases. In No. 7, the pain began a few days before the flow and lasted until four days after the latter had ceased. This patient had a multilocular cyst of the left ovary, which, I think, accounted for the pre and post-menstrual pain, as it is not often that the pain comes on some days before the flow unless the appendages are diseased. The situation of the tumour in this series of cases made no difference in the degree of pain felt by the patient.

Operation.—In the first four cases, the operation was performed as follows: After thoroughly ennetting the uterine cavity and closing the cervix with a running catgut suture, the abdomen was opened by the usual incision in the middle line, and both broad ligaments were tied off in sections with stout catgut ligatures, the ligature including the ovarian and uterine arteries, and were divided. Peritoneal flaps were dissected off the uterus in front and behind, the anterior flap including the bladder. The vagina was then opened and its attachments to the cervix were divided with scissors, and the whole mass removed. Anterior and posterior peritoneal flaps were united to the anterior and posterior vaginal walls respectively so as to cover over the raw surfaces and also to prevent undue shortening of the vagina, after which the top of the vagina was closed in by a running suture of catgut. The abdominal cavity was then wiped dry and the incision in the abdominal wall closed by three rows of sutures. These con-

sisted of a continuous suture of fine catgut for the peritoneum and one row of interrupted silkworm gut sutures for the fascia of the rectus and another similar row for the skin.

In the 6th, 7th and 8th cases, after curetting the uterine cavity and closing the cervix with catgut, the vagino-cervical attachments were separated, the uterus pushed well to each side and the space thus formed was packed with gauze. The abdomen was then opened and the ovarian vessels were ligated and divided. An anterior flap of peritoneum was then formed and the broad ligaments opened up in such a way as to permit of the ligation of each uterine artery *per visum*. The posterior flap of peritoneum was then formed and the division of the broad ligaments completed. As the vaginal attachments had been previously divided from below, the uterus and tumour were quite free and could be lifted out of the abdominal cavity. All bleeding points were then secured by fine catgut ligatures and the two vaginal walls united. The peritoneal flaps were then sutured together so as to cover in all of the raw surface including the ligatures which had been applied to the ovarian and uterine arteries. The only point of difference in the operation in the 5th and 9th cases is that the whole operation was performed through the abdomen as the cervixes were too high up in the vagina to allow of the combined operation.

Complications.—The operation was complicated in four cases. In No. 1 the right ovary formed a cystic tumour, containing ten ounces of a dark grumous fluid, composed largely of extravasated blood. This was densely adherent to its corresponding tube, the upper part of the rectum and to the posterior surface of the uterine fibroid. These adhesions were separated and the cyst was removed, after which the tumour and uterus were likewise removed by total hysterectomy and the abdominal cavity wiped dry. The incision was closed by three rows of sutures without any drainage being employed.

In case No. 3 the complication was caused by the patient having undergone a previous abdominal section, as a result of which the omentum was firmly adherent to the old cicatrix. This adhesion was separated with some difficulty and the operation of hysterectomy proceeded with.

The seventh patient of the series had a multilocular cyst of one ovary, in addition to the uterine fibroid. This was the size of a large cocoon, and was densely adherent to the surrounding intestines, but was eventually removed before proceeding with the hysterectomy.

Mrs. M., first case (No. 5) is deserving of a somewhat fuller description. She was a widow, 57 years of age, complaining of weakness

and pain in the back and left groin. These symptoms had been present for the last three years and, at times, were so severe as to confine the patient to bed. She has lost flesh rather rapidly during the past year, and she attributes this to her appetite having been very poor. Even since her symptoms commenced three years ago, she has had a profuse thin yellowish watery discharge, but it has been neither hæmorrhagic nor malodorous. Menstruation began at fourteen years of age, recurred regularly every four weeks, lasting for four days, and was always accompanied by severe pain. She was never pregnant. Menstruation ceased entirely thirteen years ago, at which time she had a submucous fibroid removed. On making a vaginal examination, a multiparous cervix was felt high up and to the right in the vagina. The centre and whole of the left side of the pelvis were filled with a hard mass. Bimanually, the mass was felt to be the size of an adult head and to be firmly fixed in the pelvis. It was rounded and well defined on the right side, but it gradually became more and more indistinct to the external hand on the left side, pressure over the upper part of the mass on the side causing intense pain, which lasted for nearly 24 hours. The diagnosis was a uterine fibroid tumour with chronic pelvic peritonitis, the tenderness on the left side being probably caused by the inclusion of the ovary of that side in adhesions.

At the operation, the uterine cavity was curetted, the instrument bringing away a quantity of broken down purulent material. On opening the abdomen, the cæcum, descending colon and rectum were found to be adherent to the tumour, a mass the size of a small orange lying between the descending colon, the left broad ligament and rectum. After separating the cæcum from the tumour, work was begun on the left side, the adhesions being so dense that their division had to be begun with the knife. While separating the colon from the mass below it, a quantity of intensely fetid pus welled up from what, on further dissection, proved to be an old pyosalpinx, which had ruptured on the posterior surface where it was closely adherent to the rectum. This abscess sac (the left tube and ovary) was shelled out of its bed of adhesions, tied off and removed. All of the pus was carefully wiped up as soon as it appeared at the orifice of the rupture, the general peritoneal cavity being protected by a large pad. The tumour and uterus were now comparatively free, so both broad ligaments were tied off and divided, together with the uterine artery on each side. An interior and posterior flap of peritoneum were formed, after which the vaginal attachments were divided and the whole mass removed. The raw surface was packed with iodoform gauze, one end

being thrust into the vagina for drainage and to allow of its removal. The vesical flap was sewn to the rectum and to the peritoneum at the upper margin of the raw surface on the posterior pelvic wall, after which the whole abdominal cavity was well swabbed out and a glass drainage tube inserted, the incision being hurriedly closed with two rows of sutures as the patient was in such a weak condition. A small gauze wick was introduced into the tube to assist drainage, but the abdominal cavity was not flushed out with salines as this would only have tended to spread any pus which had escaped from the abscess and not been removed by the swabs. The tube was removed on the third day, as it remained quite dry after the first 48 hours. The orifice of the track of the tube was kept open by a light plug of gauze for a few days until it had apparently granulated up. The vaginal packing was removed daily for one week, at the end of which time dressing was discontinued as there was no discharge. As far as pulse and temperature went, the patient made a good convalescence, the pulse only once going above 100 after the first 24 hours, it touching 102 beats per minute on the second day. The temperature was still better, not reaching 100°F. once after operation, although it stood at 102°F. the day before. Notwithstanding this practically non-febrile chart, the pulse and temperature being taken every two hours, on the eleventh day as the patient was turning herself in bed, a great quantity of pus gushed up from the track of the tube, leaving a cavity which only closed up after over three weeks careful attention, the cavity being washed out daily with hydrogen peroxide, a small rubber drainage tube inserted and the opening covered with gauze. This shows how pus may form and only indicate its presence by slight rises of pulse and temperature and also without occasioning the slightest degree of pain, there being absolutely none in this case. A culture from the contents of the ruptured tube, taken at the time of operation but before the tube had been removed from the abdomen, showed that the only germ present in the pus was the *B. coli*. Unfortunately, no culture was taken from the pus which escaped from the tract of the drainage tube, so that it is impossible to say just what germ was present. It is well-known that the colon bacillus will cause suppuration but is not a very virulent germ, so that it is probable that the bottom of the drainage tube track was infected by some of these bacilli which had penetrated the wall of the bowel where it was weakened by the separation of the adhesions. This patient made a good recovery eventually. She has been seen within the last four weeks and is quite well, there being no evidence of weakness at the site of the drainage tube.

The only other case worthy of detailed mention is No. 8, this being the only one followed by a fatal termination. This patient was a strong multiparous woman, thirty-one years of age, who had a submucous fibroid the size of an adult head. Beyond the fact that she suffered from intense dysmenorrhœa and menorrhœa, the only point in the history worthy of note is the extreme rapidity of growth of the tumour. In March, 1894, the patient's pelvic contents were very carefully examined under anæsthesia, at which examination the uterus was felt to be ante-flexed but not enlarged. Early in 1897, the patient married, and in June of that year consulted me for pelvic pain. On making a local examination, the uterus was found to be the seat of a fibroid the size of a very large cocoon. Intra-uterine galvanism was given a fair trial, but its only effect was to cause such great pain that both the patient and her husband insisted upon an operation being performed. On October 23rd, 1897, abdomino-vaginal pan-hysterectomy was performed in my private hospital. There was absolutely no complication and the operation was over in sixty-five minutes. The patient's recovery was smooth and uneventful until the night of the 31st, her pulse, respiration and temperature being well represented by the accompanying chart of the average for the whole nine cases. She had been feeling very well all day, laughing and chatting with her husband and parents. At 11.30 p.m. she woke up complaining of pain in the left iliac region. Her bowels had moved during the day, but the nurse now emptied them by an enema and gave her ζ ss of brandy as she felt weak. This made such an improvement that the patient went to sleep, the pulse being regular and strong. At 1.30 a.m. she again woke up and said she had a "queer sensation." Her pulse was irregular and weak and her hands cold. She was given more brandy, but it did her no good, and I was sent for. Before I could arrive, however, she suddenly sat up in bed, vomited a little thin watery fluid and fell back again, only breathing three or four times after I reached the bedside at 1.40 a.m. Unfortunately no post-mortem examination was allowed, but I have no doubt in the least but that the cause of death was pulmonary embolism. There had been no evidence of a cardiac disease to be discovered although the patient's heart had been carefully examined on several occasions during the five or six years that she had been under my care. Septicæmia was out of the question, as there was not the slightest symptom of it from the day of the operation. Slipping of a ligature, followed by internal hæmorrhage, may also be put to one side as a cause, as it was eight full days after the operation by which time the pelvic vessels have become effectually plugged and there was

neither the pallor nor the sighing respiration which are seen in internal hæmorrhage. I have little doubt but that the pain in the left side of the pelvis complained of at 11.30 was caused by the temporary arrest of an embolism in one of the pelvic vessels. This became dislodged and subsequently found its way into one of the pulmonary vessels and so caused death.

After Treatment.—In these nine cases, opium was only given to three patients, each of whom received ten minims of Battley's solution hypodermically once on the night after the operation.

Only two of the patients required post-operative use of the catheter, viz., in Nos. 3 and 8, who required it for 48 and 72 hours respectively.

Stimulation after operation was resorted to in the majority of cases not as a routine measure, but because each patient required it.

The following table will show the particulars as to kind and quantity of stimulant employed :

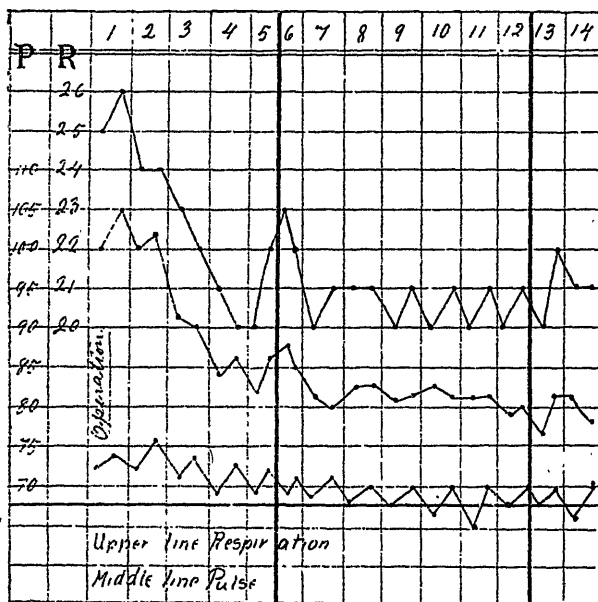
CASE.	KIND AND QUANTITY OF STIMULANT EMPLOYED.
1	Strychnine gr. $\frac{1}{80}$ q. 6 h. for 1st 8 days.
2	" " $\frac{1}{40}$ t. i. d. for 1st 21 days. Brandy $\bar{5}$ ss in nutritive, enemata q. 4 h. for 2 days.
3	Brandy $\bar{5}$ ss in nutritive enemata q. 4 h. for 2 days and champagne $\bar{5}$ ss p. r. n. for vomiting for one day.
4	Brandy as above. Also 3 saline enemata during 1st night.
5	" " " Also strychnine gr. $\frac{1}{40}$ q. 4 h. for 10 days. Also 2 saline enemata during the 1st 8 hours.
7	Strychnia gr. $\frac{1}{80}$ t. i. d. for 2 days.
8	" " $\frac{1}{40}$ t. i. d. for 2 days. One saline enema as soon as removed from the table.
9	Strychnia gr. $\frac{1}{40}$ q. 4 h. for 10 days. One saline enema just after operation, and $\bar{5}$ ss- $\bar{5}$ ss brandy or whiskey as required for several days after operation on account of a weak heart.

From the accompanying chart which represents the average of the morning and evening pulse, respiration and temperature of nine cases for eight days and eight cases for the remaining six days, it will be seen that the temperature reached the highest point on the second day after operation, when it ran up to 100.2° F., steadily declining from here to normal, which was reached on the eighth day. The pulse

and respiration were the most rapid on the night after the operation, reaching 105 and 26 respectively. They then steadily fell until the fifth day when they both again quickened, taking three days to reach 88 and 23 respectively and again fall to the point from which the second rise started, viz., 82 and 20, in the vicinity of which they remained until the patients were discharged.

A few of these patients returned to hospital after dismissal, complaining of the usual symptoms of the menopause, and were given ovarian extract, gr. v., t. i. d., after meals. All showed considerable amelioration of their symptoms for the first few weeks but the improvement was only temporary.

Although the one death brings up the mortality in the above series to 11.11 per cent., it will be acknowledged, I think, that that death was entirely unpreventable, and the combined results show that abdominal hysterectomy for moderate sized fibroid tumours of the uterus is not an operation which ought to be followed by a high rate of mortality when proper precautions are taken not only at the time of operation, but in the preparation and after treatment of the patient.



Case Reports.

"OBITER SCRIPTA" VI.

(Casual notes from the Medical Clinic Royal Victoria Hospital.)

ON SOME INTERESTING CASES OF ENTERIC FEVER.

BY

C. F. MARTIN, B.A., M.D.,

Lecturer in Medicine, McGill University, Assistant Physician, Royal Victoria Hospital.

AND

B. D. GILLIES, M.D.,

Resident Physician, Royal Victoria Hospital.

During the progress of enteric fever there is undoubtedly no symptom nor sign upon which more stress is laid than the course of the temperature curve, and yet it is remarkable how under certain conditions one may observe unusual and sudden elevations of temperature with as sudden remissions, when there is perhaps but little that is tangible to account for the abnormal type of the disease. The present epidemic, it would seem, has been more particularly characterized by the irregular types of fever that have developed, occurring often with chills and sweatings—the sudoral form as described by Jaccoud—and it has been moreover an interesting and not uncommon feature that from time to time in the otherwise quite ordinary and typical course of the disease a distinctly irregular type of fever has presented itself. The facts concerning a few of the cases are briefly summarized below, while some observations on the relapses in certain conditions have likewise been added.

CASE I. (Vide Chart No. 2.)

Enteric fever running a prolonged course—Chills, profuse sweating—Angio-neurotic oedema—Remarkable elevations of temperature without complications.

A man, 30 years of age, entered the hospital on the 5th day of the disease with the usual symptoms of typhoid fever, the pulse being 90 per minute, the temperature 104°F. Under the influence of baths, the temperature for the time being was readily reduced, rising, however, to a maximum of 102° or 103° each day during the first ten days following admission. Suddenly, on the 15th day of the disease,

the temperature rose to 105° and patient suffered from a severe rigor followed by sweating. No further symptoms developed, however, and for the subsequent week the temperature progressively decreased. On the 23rd and 24th days of the disease chills again recurred with profuse sweating, though careful examination failed to disclose any complications. On the 26th and 27th days of the disease the temperature remained below 99.5° and the patient was apparently convalescing rapidly, the pulse remained below 90 beats per minute, and his general condition seemed excellent. On the following day, again his temperature rose suddenly, and in 48 hours reached 104.2° . Rigors and sweating supervened, and patient complained of severe pain in the right hypochondrium, this condition lasting and repeating itself for several days. Careful and repeated examinations of affected region were made but failed to reveal either pleurisy, pneumonia or any signs of hepatic complications. The temperature again subsided, but two days later very large swellings suddenly appeared over the left shoulder and left hip joint. These were remarkably red and tense, the overlying skin was glistening, and the slightest touch seemed exquisitely painful. In fact over the hip joint particularly, it seemed as though a subcutaneous abscess were developing and that operation would be necessary. Within two days, however, the condition had entirely subsided and there was neither heat, redness, swelling nor pain. From that time on to the 32nd day of the fever the patient seemed to be gradually convalescing, and by the 51st day the evening temperature attained the normal, and it seemed again as though the patient would be assured of complete convalescence. But in this we were again disappointed, for within 72 hours the temperature reached 104.2° , though the patient seemed otherwise to show no evidence of complication. The fever subsided as rapidly as it had appeared and within a week was again normal. Once more, on the 64th day of the disease, the temperature rose from 98.2° to 105° within a few hours, rigors and sweating reappeared, only to be followed in two days again by a normal temperature, and patient has since been quite comfortable in every respect.

This case is particularly interesting as showing the uncommon condition of angio-neurotic œdema occurring with enteric fever and further, the presence of remarkable elevations of temperature due, not to any complication nor to a typical relapse, but rather to what we may regard as analogous to the temporary septic intoxications which occur in the puerperal state. The fact that the pulse in the interval of these high temperatures remained slow and the general condition of the patient excellent, would seem to indicate that no

serious complication has arisen and the prognosis would be correspondingly good, however, alarming the chills and high temperature might be.

The appended chart No. I., will illustrate the temperature curve from the 47th to the 67th day of the disease.

CASE II. (Vide Chart II.)

Enteric fever with progressive amelioration for three weeks, then recurring chills and sweating with sudden elevations of temperature.—Recovery without complications.

A young man, 17 years of age, developed after three weeks of a favourable course of typhoid with rapid defervescence, sudden rigors and sweating, the temperature curve reaching 105.5° though the pulse remained at 100 beats per minute.

As will be seen from the accompanying chart, within six days of the 4th week of the disease there were three distinct rigors, the temperature rising on two occasions to 105.5° and yet an examination of the chart will show that the average pulse rate was about 90, only twice or three times reaching 104. Apart from the discomfort necessarily occasioned by the rigors, the general condition of the patient was, if anything, better than previously. The tongue remained moist, the abdomen not distended and the only symptom unfavourable was the continuance of a rather profuse diarrhoea without, however, the presence of any blood. The slowness of the pulse with the absence of any signs of complications enabled us with justice to give a comparatively favourable prognosis, and, as will be seen from the chart the temperature again after 48 hours reached the normal without the use of antipyretics. Two days later another rigor supervened with a similar general condition and for about one week the temperature remained lower, the patient's general condition improving. During all this time the food was progressively increased, though, of course, as yet no solids were allowed. Suddenly again, on the 38th day of the disease a severe rigor took place followed on the next day by a sub-normal temperature from which time onward the temperature remained below the red line throughout convalescence.

This case is of particular interest as illustrating what has already been observed by German writers, viz., that in typhoid fever with severe relapses in which chills occur, the convalescence is apt to set in suddenly rather than by a slowly progressing defervescence.

CASE III. (Vide Chart No. III.)

Enteric fever, two relapses.—The first relapse occurring one week after subsidence of fever and preceded two days previously by a rigor.

In the present instance there is little of interest beyond what is mentioned in the above epitome. The presence of multiple relapses has not been uncommon in our recent series though the case is unique in that a rigor preceded the relapse by two days and the temperature, which rose to 101° after the chill, fell again to normal before actual relapse appeared.

CASE IV.

Enteric fever running the usual course.—Delirium five days after temperature attained the normal.—Relapse three days later.

The subject of the above attack entered the ward on the sixth day of the disease and for three weeks his fever ran a moderate course before it reached the normal. For five days he seemed assured of convalescence when suddenly delirium set in and patient endeavoured to get out of bed. The relapse, which set in three days later, was treated by baths and patient made a satisfactory recovery, no further cerebral symptoms ensuing after first attack.

CASE V. (Vide Chart No. IV.)

Patient with enteric fever of ambulatory type entering hospital with normal temperature followed by relapse.

This case is of no little interest for the victim afflicted entered hospital with practically normal temperature, complaining of some slight indisposition which had existed for several weeks previously, in which pains in the epigastrium and diarrhoea had been prominent features. The condition for the first day was looked upon as one of slight gastrointestinal indisposition. To the surprise of the Resident, however, the student in charge ventured on the diagnosis of typhoid fever and the Widal serum test was forthwith tried, giving to everybody's astonishment a decided and positive reaction. Two days later the temperature rose and as will be seen from the chart ran a more or less ordinary course to convalescence. Obviously the patient had been suffering from ambulatory enteric fever and the symptoms were so slight as to obviate the necessity of seeking for medical advice until the weakness obliged him to enter the hospital. (Vide chart No. IV.)

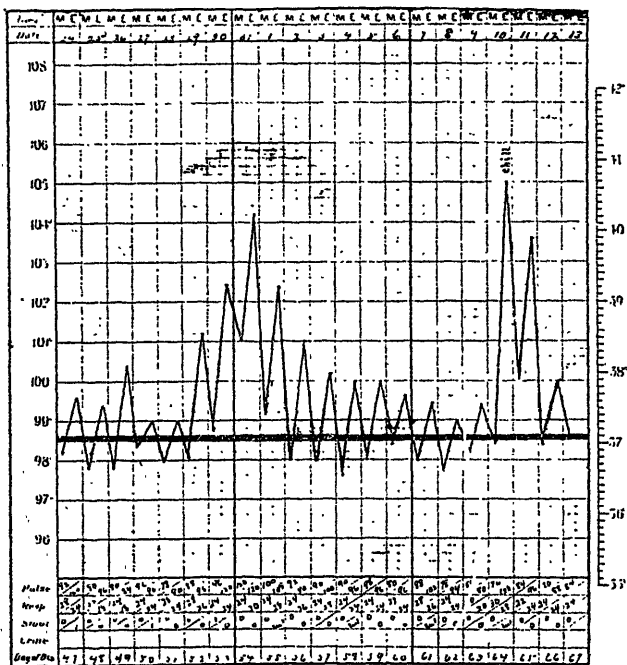


CHART I.

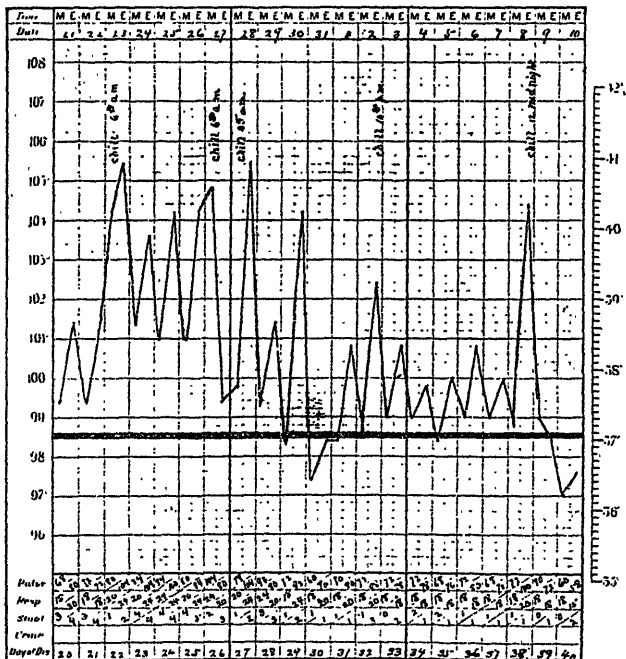


CHART II.

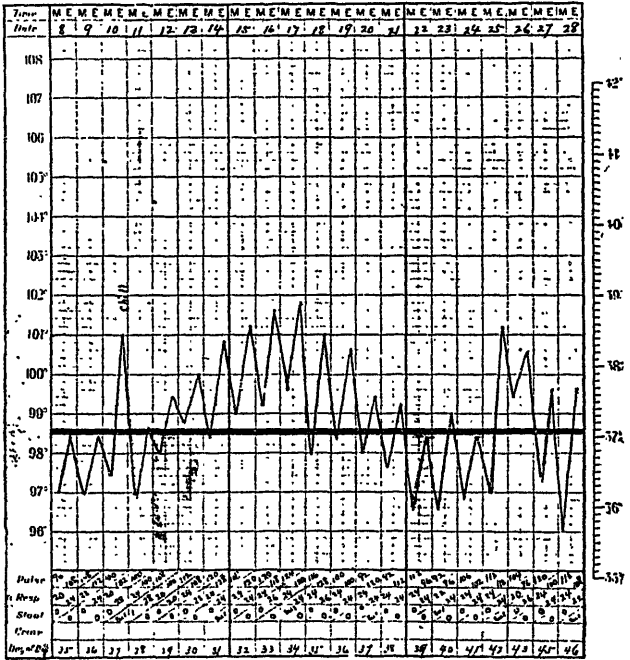


CHART III.

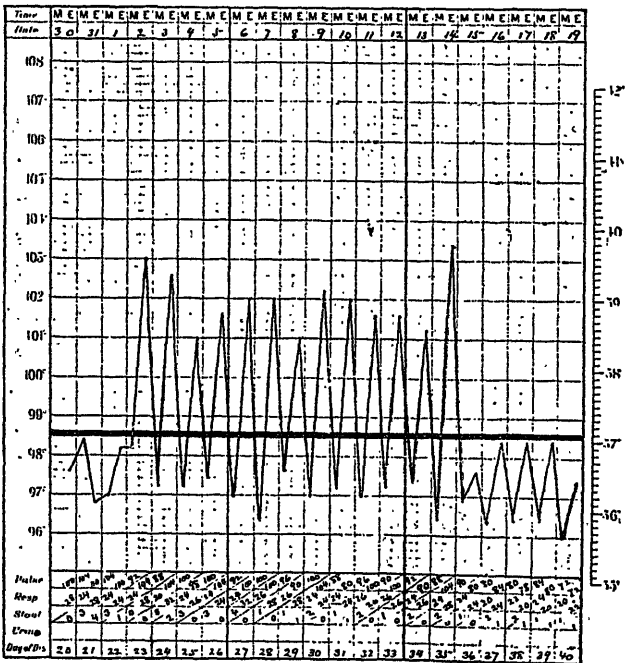


CHART IV.

RETROSPECT OF CURRENT LITERATURE.

Medicine.

UNDER THE CHARGE OF JAMES STEWART.

Prognosis of Cardiac Disease in its Bearing upon Life Insurance.

SIR WILLIAM T. GAIRDNER, M.D., K.C.B., and others. "Prognosis of cardiac disease in its bearing upon life insurance—A discussion in the British Medical Association, 1898."—*The British Medical Journal*, Sept. 17, 1898.

In opening the discussion of this important subject, Sir William referred to two cases of cardiac disease of long standing, and to one of the rarest forms of cardiac disease recorded. In the two of the first group an active life was spent—the murmurs showing the signs of disease disappeared. Death resulted in one case at the advanced age of 65 or so from muscular atrophy, while the other is living yet.

In that, the rarest of cardiac cases recorded, Sir William describes an auricular tumour attached to the right auricle, but not implicating the valvular orifice. It acted, however, as a ball valve, descending into the tricuspid orifice. The patient lived for 10 years after the signs were first detected. He complained of but little referable to the heart during this time, and died of pneumonia.

In dealing with the subject proper, the author includes the difficulties of the insurance medical officer under three heads, expressed in the following questions :

What amount of "loading" are we entitled to put upon any given policy ?

Under what circumstances are we justified in rejecting the life totally and absolutely without taking it twice into consideration ?

Under what circumstances are we justified in saying, "you are not insurable just now, but perhaps if you go on for two or three years and do not suffer you will be insurable" ?

The accurate answers to these questions are not forthcoming since the data concerning them are not sufficiently broad or accurate. Insurance without medical examination was mentioned as having occurred in an applicant who subsequently died with aortic aneurism.

After these somewhat preliminary remarks, Sir William stated that the object of his paper was to see whether any kind of *via media* could be got at whereby examiners would be able to deal with cases of extra risk in life insurance on better principles than at present. Eight divisions of his subject are made, and are taken up in the following order: Pericardial lesions, organic lesions without functional disturbance, senile degenerations, non-insurable organic lesions, functional disorders, bradycardia and tachycardia, the heart of chorea, large and small hearts, and angina and pseudo angina.

Under pericardial lesions, Sir William discusses the question whether a well ascertained case of acute pericarditis could ever undergo healing, so as to leave nothing behind that would effect an insurance risk. The usual reply is in the negative, but the author is of the opinion, and agrees with Dr. Kirkes, that such a case may terminate without derangement of the cardiac function, the pericardium being smooth and the heart function normal.

Under the second division, viz., organic lesion without functional disturbance, Sir William says there is no doubt that the principle, and the only just principle on which we can deal with these cases, as at present advised, is the principle of delay.

Those applicants presenting such lesions as are included under the term senile degenerations are to be dealt with by absolute rejection, or by an addition so heavy as to make it doubtful if the proposer will complete the transaction. They may be insured for a particular term of life.

The fourth division of this subject, viz., non-insurable organic lesions requires no discussion.

Functional disorders.—Under this division Sir William gave as a typical example of such cases well marked irregularity of rhythm, bradycardia and tachycardia. The tobacco heart and the senile heart are included, and a preference expressed in favour of applicants presenting tachycardia.

The murmurs in heart of chorea are regarded by the author as organic in origin, and the inference that they are not organic based upon the observation that they disappear, is regarded as unsafe.

On discussing the subject from the standpoint of the size of the heart, Sir William said that the muscularity of the patient must be considered as well as all the characters of the urine, especially in relation to manifest cardiac hypertrophy.

Angina and pseudo-angina.—No specific directions could be given by the writer for the assessment of these applicants who were the subject of this condition. Sir William could not make any absolute

distinction between angina and pseudo-angina, and expressed himself doubtful that anybody else could do so.

In the discussion that ensued, the following opinions among others were expressed :

1. A very slow pulse was not of such danger to life as Sir William Gairdner had suggested.

2. The wall should be considered as much, if not more, than the valves of the heart. Hospital statistics were misleading since they dealt with the poor and debilitated cases.

3. The normal apex beat was insisted upon as a criterion of a normal heart.

4. Definite conclusions in certain cardiac cases, notably the mitral form, should not be arrived at earlier than twelve months after the first observation.

The Diagnosis of Nephritis without Albuminuria.

ARTHUR R. EDWARDS, M.D. "The diagnosis of nephritis without albuminuria."—*The American Journal of the Medical Sciences*, October, 1898.

At the close of the discussion of this interesting subject the author summarizes the chief considerations and conclusions of his paper as follows :

1. Carefully repeated routine chemical and microscopical examination of the urine every 24 hours usually, but not invariably, detects acute and chronic nephritis.

2. The diagnosis of the albuminuric and non-albuminuric types of the nephritides is aided by searching examination of other viscera and parts, *e.g.*, by a disturbance of cardio-vascular changes, retinal involvement, etc.

3. These visceral or somatic changes usually present in nephritis may be lacking in concrete instances, or be capable of other or diverse interpretation as atheroma, etc.

4. The urinary findings most essential to the diagnosis of nephritis may be lacking, as many other signs and symptoms of minor dignity.

5. Nephritis may be unattended by albuminuria. Such nephritis is usually interstitial in type.

6. While certain instances of non-albuminuric nephritis correspond to the type described by Dr. D. D. Stewart, yet non-albuminuric nephritis may not exactly correspond to the said type since acute nephritis, chronic parenchymatous nephritis, and chronic interstitial nephritis may occasionally occur without albuminuria.

7. Casts should always be searched for ; they are more constantly found than is albumin, yet they seem, in certain instances, to betoken

renal degeneration rather than inflammation. They are not invariably in nephritis, nor are they invariably nephritic.

8. Future clinical caution and pathological examinations will probably increase the number of cases of non-albuminuric renal inflammations of acute, subacute and chronic types.

9. Non-albuminuric nephritis is of a special importance in life insurance and kindred examinations, and in practice, since prophylactic measures may be instituted, and the prognosis obviously influenced.

Infections in Pulmonary Tuberculosis.

ROBT. J. M. BUCHANAN, M.D., "Observations on pure and mixed infections in pulmonary tuberculosis in relation to prognosis—with an analysis of twenty-one cases."—*The Liverpool Medico-Chirurgical Journal*, July, 1898.

The demonstration of the presence of the bacillus of tuberculosis in sputum implies the existence of tuberculosis.

The number of the bacilli cannot be regarded in any way as indicating the gravity of the disease, since it is so variable, within short periods in the same case.

Spore formation is of much greater importance, and Dr. Buchanan says "in the acutest forms spores are always present."

The progress of most pathogenic organisms in producing lesions is greatly accelerated by association with other organisms. Observation of clinical cases and animal experiment confirm this. "Mixed infections" then are important in considering "prognosis." The author's observations bear this out in pulmonary tuberculosis; and he is convinced "that the great source of danger in pulmonary tuberculosis resides in the association of the tubercle bacillus with other organisms."

In this article, which he wishes to be regarded as the report of a preliminary step in the investigation of mixed infections in tuberculosis, Dr. Buchanan describes the method adopted and gives the conclusions drawn from the examination of twenty-one cases.

The chief point in the technique is that which aims at eliminating those organisms found so numerously in mouths of all patients. The mouth and teeth are thoroughly cleaned with a brush and antiseptic lotions, and with as little delay as possible the expectoration is received into a clean bottle and examined by the Ziehl-Neelsen method.

Without entering into the details of the cases reported, it may be said that sputum showing pure infection was from patients whose disease was slow, with tendency toward quiescence.

The cases of mixed infections showed no tendency to improve, and the general symptoms were more severe. When the secondary infection may arise is impossible to state. It may be early; it may be late.

W. F. Hamilton.

Surgery.

UNDER THE CHARGE OF GEORGE E. ARMSTRONG.

Pilonidal Sinus.

EDITORIAL. *The Philadelphia Medical Journal*, October 15th, 1896.

The occurrence of a suppurating sinus containing hair and located in the coccygeal region is by no means very uncommon. In some cases the sinus becomes clogged and an abscess forms. That the real cause of the suppuration is not always recognised is shown by the fact that cases often come to our clinics in which the sinus has been opened and packed, in some instances several times, without removing the little tuft or coil of hair which gives rise to the trouble. Probably a slight congenital dimple in which perspiration and filth accumulate, and an abundant hairy growth exists in some cases as predisposing cause. Strange to say this condition is not mentioned in most text-books on surgery, or even in the large systems of surgery and special works on diseases of the rectum, and when mentioned the names applied are, for the most part, inappropriate. Coccygeal fistula is incorrect, for it does not discharge the secretion of an organ; dermoid cyst is likewise incorrect, for it is not a congenital affair, and is said never to occur until after puberty, when the hairy growth in these parts is well developed; the French name, posterior umbilicus, has no descriptive value. The late R. M. Hodges, of the Massachusetts General Hospital, Boston, suggested the name pilonidal sinus, which has also been adopted by Kelsey, and its derivation from *pilus*, a hair, and *nidus*, nest, seems to make it the best descriptive name. The most essential point, however, is that the condition be recognised and the hair, including its roots, thoroughly removed.

Geo. E. Armstrong

Gynecology.

UNDER CHARGE OF F. A. L. LOCKHART AND J. C. WEBSTER.

Ectopic Gestation.

HENROTIN AND HERZOG. "Anomalies du canal de Müller comme cause des grossesses ectopiques."—*Revue de Gynécologie et de Chirurgie Abdominale*, Juillet-Août, 1898.

The writers describe a very interesting case of pregnancy in an accessory pavilion of the Fallopian tube. It occurred in a woman aged twenty-seven. Henrotin operated and the patient made a good recovery. Near the outer end of the Fallopian tubes were two accessory tubes, directly opposite to one another. One of these was enlarged in its outer part, the swelling measuring 4.2 cm. in its longest diameter and 2.5 cm., in its shortest. The interior contained three divisions, communicating with one another; these were filled with blood clot. The wall varied from 1 to 3 mm. in thickness. The pedicle connecting the sack with the Fallopian tube contained no lumen. Various portions were examined microscopically and presented the following appearances. The wall was mainly composed of fibrous tissue, but contained a few muscular bundles; enlarged blood-vessels were found in it. In parts the mucosa contained well-marked decidual cells; here and there were layers of hyaline tissue. In the smaller compartments the wall was lined with flattened cells. In the largest compartment the inner layer of the wall was of a fibrinous nature, in which degenerating decidual tissue could be recognised. In the blood filling the sac, chorionic villi were found, some being more or less degenerate. Numerous hæmatoidin crystals were scattered throughout the clot. The mucosa of the small pavilion attached to the sac contained decidual cells. The embryo was not found.

In referring to the subject of accessory pavilions, the writers state that Richard was the first to describe them, finding five examples in thirty pelves examined by him. Rokitansky described them as occurring frequently. Ballantyne and Williams found them twice in sixty-one examinations. Amann, who has worked particularly at this subject, divides these accessory *ostia* into the following: Those in which several orifices communicate with the lumen of the Fallopian tube, and those due to an apparent division of the latter into two parts. There is a difference of opinion as to the origin of these accessory *ostia*.

The writers also describe another case of an ectopic gestation in a tubal diverticulum. It occurred in a case operated on by Henrotin. The specimen is described as a swelling, about the size of a small apple, developed in connection with the ampulla of the Fallopian tube. The main lumen of the tube was patent throughout, but in the wall was another small canal which extended inwards as far as the isthmus, its outer part being lost in the ectopic swelling. The latter contained blood-clot, in which degenerated villi and hæmatoidin crystals were found. In the wall decidua cells were found. The mucosa of the tube proper showed also some decidua changes. No embryo was found.

Werth was the first to describe an ectopic gestation in a tubal diverticulum, but he was inclined to regard the latter as a result of the pregnancy. Landau and Rheinstein have described a case in which there was no doubt as to the condition.

New Growths of the Vagina.

R. KLIEN. "Die solid primären Geschwülste der Scheide."—*Monatsschrift für Geburtshülfe und Gynæcologie*, Mai, 1898.

In this article the author gives a *résumé* of the most important works dealing with the subject of vaginal growths published during the last three years.

He points out that fibromyoma and sarcoma are more frequently found on the anterior vaginal wall, carcinoma on the posterior.

As regards the frequency of primary vaginal carcinoma the following statistics were given :

In 5341 gynæcological cases in Vienna hospitals this disease was found only 15 times.

A. Martin had 4 cases among 5,000 patients.

Schwarze found records of 84 cases in 35,807 cases in the Berlin Frauenclinic.

In the Prag gynæcological clinic 38 cases occurred among 8,951 patients.

Klien thinks that the disease occurs primarily more frequently than is believed. A number of cases are never seen by the physician until both uterus and vagina are affected, and most of these are usually classified as examples in which the vaginal carcinoma is secondary to the uterine disease, whereas it is likely that the uterus is often affected secondary to the vagina.

The disease is found mainly between thirty and sixty years of age. Statistics do not show any special relationship to multiparity.

Primary vaginal cancer occurs in two forms, papillary canceroid, the

most frequent, and the infiltrating variety. The latter tends to grow around the vagina in the form of a ring.

Multiple carcinomatous nodules are very rarely found.

Extension of the disease leads especially to bladder and rectal complications, compression, perforation, etc. The ureters may become involved, leading to renal trouble. The disease may spread to the vulva. The cervix is not often affected. Metastases in other parts of the body are rarely found.

The disease may seriously complicate labour. Rarely may uncomplicated delivery take place. Among the cases described, premature labour, forceps application, embryulcia, laparo-elytotomy and Cæsarian section had to be employed. Among 12 cases, 10 mothers and 7 infants died.

J. C. Webster.

Pathology.

UNDER THE CHARGE OF J. G. ADAMI.

Bovine Tuberculosis.

THEO. SMITH, M.D. "A comparative study of bovine tubercle bacilli and human bacilli from sputum."—*Journal of Experimental Medicine*, Vol. III., Nos. 4 and 5, 1898.

NOCARD. "The identity of avian and human tuberculosis." Congress of Tuberculosis, Paris, July 27th, 1898.—*British Medical Journal*, Epitome (158), August 27th, 1898.

As Theobald Smith well points out, sufficient care has not in the past been taken to study the minute morphological and cultural differences of the tubercle bacilli obtained from various cases, and further, since Koch published his first remarkable series of cases in which he proved that we had to deal with one common disease affecting man and the lower animals, we have been too willing to accept Koch's dictum of having only to deal with one constant form. Koch, it is true, recognised the possibility that there might be differences among tubercle bacilli from different species of mammal, but he found no differences worth mentioning. Indeed, when the task that he had before him is taken into account, it was inevitable that he should look for points of semblance rather than points of difference, and thus when the difficulty of studying the tubercle bacillus is taken into account and the long months required before any adequate results can be reached, it is almost natural that years passed without any serious opposition being taken to Koch's views.

The first objection to these views came when it was discovered that tubercle bacilli gained from birds, hens and pheasants present certain constant characters differentiating them from bacilli to be obtained from the human lung. Indeed, I believe I am correct in stating that in consequence of the easier growth of the avian form, for some years Koch's laboratory ignorantly supplied other workers, not with human, but with avian tuberculosis; now it is generally accepted that the bacillus in birds is, at least, a very strongly marked variety of the tubercle bacilli. But we still hold that bovine and human tuberculosis are due to the same organism and much of our recent enactments and agitation with regard to the detection of tuberculosis in

the lower animals and the stamping out of the same, is directly based upon this assumption that the disease is one and the same in man and in the cow.

No one has done more valuable work than Dr. Theo. Smith in studying the most important subject of the finer variations, morphological and cultural, of pathogenic bacteria, and in the devising of methods which shall clearly show these finer differences. And largely as a result of his work, many of the best and most valuable bacteriological investigations published of late years upon this Continent, have been devoted to establishing this fact that pathogenic bacteria are by no means constant in their characters. There are, that is to say, certain broad general features characterising the typhoid, diphtheria and other bacilli, but we are bound to recognise, that granting this, the bacilli isolated from different cases or again from different epidemics of disease, show certain special characters, and it may be that a further study of these variations will eventually give us increased light upon the difference in the clinical course and in the symptomatology of different cases and different epidemics.

Now Dr. Theobald Smith has turned his attention to the study of bovine and human tubercle bacilli and he has reached some remarkable conclusions. He appears clearly to establish that there is a distinctively human or sputum and a distinctively bovine variety of the tubercle bacilli. He finds that the bovine variety (as others previously have noted) is invariably a short straight form and that it retains its characters little changed when subjected to modifying influences, to different media of culture and so on. It grows with greater difficulty outside the body and when inoculated into rabbits, guinea pigs or cattle, it shows itself much more virulent than does the human.

The human form as obtained from the sputum, is much more slender and slightly curved, and what is more, existing observations would seem clearly to show that whereas the bovine tuberculosis may pass to the human subject owing to its higher pathogenic power, the sputum bacillus is incapable of finding a foothold in the bovine body.

This last result is a little at variance with the results of previous observers. Bollinger, for example, finds that after four months a calf inoculated with fluid from a tuberculous human lung, showed appearances in the mesentery and the capsule of the spleen corresponding completely with that of spontaneous pearly disease of cattle. Crookshank, inoculated sputum containing numerous bacilli into the peritoneal cavity of a calf which died after a prolonged illness on the forty-second day. But inasmuch as the autopsy showed here a mixed

infection with streptococci, the case is hardly to the point, for the concurrent infection present might have aided the development of the bacillus, which was found in various regions, and the experiment therefore is incapable of proving that under ordinary conditions human bacilli will infect the calf. Sydney Martin obtained rather doubtful results upon feeding cows and calves with tuberculous material; some animals certainly showed tuberculosis, others none at all. He concludes that in the case of tuberculous sputum, we are dealing with material which is less infective to calves than is bovine tuberculous material. Similarly, Frothingham finds that human bacilli inoculated into the peritoneal cavity of calves and again into the trachea, produced only a small number of minute tubercles which were devoid of tubercle bacilli, and in one case lesions were absent. Human tubercle bacilli, therefore, have but a trifling effect upon them. Smith himself finds with sputum bacilli inoculated into cattle, that out of five cases, only one showed lesions beyond the place of deposit or in the lymphatic glands tributary to the region of deposit. In the exception, there was a multiple tuberculous focus in one of the dorsal mediastinal glands, and he himself is in doubt as to whether in this isolated instance there has not been previous latent infection of this gland with bovine bacilli. On the whole, I am inclined to regard the evidence as showing not that calves are incapable of being infected from human phthisical sputum, but that they are infected with difficulty, and putting together all the facts obtained by experiments on cattle, it would seem as though, through natural channels, the sputum bacillus can scarce gain lodgment in cattle.

The second and most important proposition, that, namely of the transmission of bovine bacilli to the human subject, has been much discussed in recent years.

Judging from Dr. Smith's observations, it would appear that as regards its effects upon the lower animals, the bacillus of the bovine disease is distinctly more virulent than that obtained from ordinary pulmonary phthisis in man. Accepting this fact, it is thus very possible that the disease can be transmitted from cow to man. In the *Journal of Comparative Medicine and Veterinary Archives*, for December, 1897, Ravenel gives perhaps the best recent compilation of cases of such presumed transmission, both through wounds of the skin and through the digestive tract. The interesting point is that the disease is apparently set up through the digestive tract, and more especially through the agency of milk from tuberculous animals, is not in general a severe tuberculosis, but a chronic disease with a ten-

dency to heal. Primary abdominal tuberculosis, for example, and tuberculous assites, may be said to be characterised by this tendency to be of a slowly progressive nature, and appear rarely to assume the fulminating character which pulmonary phthisis not infrequently presents, that we may have here another example of those cases in which the micro-organism which has assumed peculiar virulence for one species, has gained a lessened virulence for another..

Theobald Smith, in conclusion, raises the very interesting question as to the relationship between the bovine and the human bacillus and the possible changes such bacillus may undergo during its prolonged sojourn in the human body. He is much inclined to doubt whether the bovine bacillus once entering the human body becomes converted into the sputum bacillus. Such hypothesis he says, would deny us all possibility of utilising different characters of tubercle bacilli in tracing their source. If the bovine variety enter the digestive tract as such and after a more or less prolonged interval, merge from the secondarily affected lungs as a sputum variety, we may as well give up all further study of the tubercle bacillus. But here it strikes me that Professor Smith is a little begging the question, or rather is taking too one-sided a view of the case. We have to get at the truth and facts of the case and we may be fairly sure that once we obtain those facts, instead of preventing research, they will encourage it.

Now at the recent Congress of Tuberculosis in Paris, Nocard brought forward a very valuable and interesting paper bearing directly upon this point of the transmission of characters. The matter is so important that I here quote in its entirety the abstract of the communication given in the *British Medical Journal*.

"The bacilli of avian and human tuberculosis" said Nocard, "were distinguishable from each other by a number of characters the most important of which are the following:—The different appearance of the cultures which in the case of human tuberculosis were dry and warty and in the avian disease were fatty, shining and soft; the temperature at which the micro-organisms ceased to grow, which in the human was 42° C., while in avian bacilli continued to develop at 43° C. and 44° C. Moreover, the action on animals was different; the fowl almost invariably showed itself refractory to inoculations to human tuberculosis, but succumbed rapidly after inoculation with the avian virus. On the other hand, the dog died of tuberculosis after intravenous and intraperitoneal inoculations of human cultures, whilst it was impossible to infect him even by means of enormous doses of avian cultures. The guinea pig was relatively refractory to avian virus injected under the skin, but reacted to very small doses of

human tuberculosis. The rabbit was equally susceptible of infection by either virus, but after infection with human cultures the animal died of generalised tubercle whilst after avian infection it died of bacillary septicæmia. The horse was hard to inoculate experimentally, but the animal sometimes developed tuberculosis spontaneously, and the disease occurred in two forms, abdominal and pulmonary.

These two types corresponded to two different sources of infection. Nocard has recently found that bacilli isolated from the pulmonary form have the properties of the human tuberculosis, while those from the abdominal form approximate to the properties of the avian virus. Man, like the horse, appears to be susceptible of both forms. Two years ago, Nocard found in the sputa of phthisical patient bacilli which by the character of their cultures and the effect of inoculation very closely resembled avian bacilli.

Man may, therefore, he concludes, under certain conditions not yet determined, be infected by avian tuberculosis and there is some danger in the use of tuberculous birds as food. A strong argument in favour of the identity of human and avian tuberculosis is the fact that the disease may be introduced into an uncontaminated poultry yard by a keeper suffering from phthisis whose expectoration contains bacilli. Nocard says that the experimental failure of Straus and himself to infect fowls by making them swallow tuberculous sputum, cannot be regarded as evidence to the contrary, the condition of a laboratory and of a poultry yard being altogether different. He added that he had been able to furnish the final proof of the identity of human and avian tuberculosis by transforming a culture of human tubercle bacilli into avian. He filled sacs of collodion with a culture of human tuberculosis on glycerinated broth, and placed them in the peritoneum of fowls. After six or eight months, the fowls were killed, when the sac was generally found to contain nothing but liquid. But it also contained more bacilli than it did originally; the culture was fully alive, and when sown again it was found that it had acquired all the morphological properties of avian tuberculosis. Inoculated in fowls it was harmless. After three or four passages in the same way through the peritoneum of fowls, cultures more completely transformed were obtained which killed guinea pigs and rabbits just the same as avian tubercle did, and which were pathogenic in fowls. Nocard concludes that avian and human are two varieties of the same species and not different species."

This observation of one who is the most able man of science among modern veterinarians, is of the greatest importance. But, instead of the facts that he has made out, causing us to relinquish our studies

upon the tubercle bacilli, it seems on the other hand to open up the only possible avenue for the development of vaccination against tuberculosis.

We have here a condition that seems to be absolutely parallel to what we have in vaccinia and small-pox. It is impossible with the facts now at hand to arrive at any other conclusion than that these two are but manifestations of the action of the same infective germ, modified according to their previous environment. If by passage of the tubercle bacillus through one or other of the lower animals, we can render it harmless to man, then the possibility presents itself that we may be able to set up so mild an infection in the human being through the agency of one of these varieties that the organism will thereby be protected against the form or forms which are peculiarly virulent for the human species.

J. George Adami.

Canadian Medical Literature.

UNDER THE CHARGE OF KENNETH CAMERON.

[The editors will be glad to receive any reprints, monographs, etc., by Canadian writers, on medical or allied subjects (including Canadian work published in other countries) for notice in this department of the JOURNAL. Such reprints should preferably be addressed to Dr. Kenneth Cameron 903 Dorchester street, Montreal.]

The Canadian Practitioner.

August, 1898.

1. On the Stages and Forms of Syphilis, with more Especial Reference to the Hepatic Manifestations of the Disease (continued). J. G. ADAMI.
2. Ethmoidal Disease. R. OVENS.
3. Infant Diet. W. J. GREIG.

September, 1898.

4. Some Present Methods of Treatment of Patients at the Asylum for the Insane, London, Ont. A. T. HOBBS.
5. The Physician and Life Insurance. JAMES THORBURN.

2. OVENS describes the anatomy of the ethmoidal sinus, and the etiology and pathology of disease of that structure.

3. GREIG describes fully the plan developed by Holt for the modification of milk for infant feeding.

4. HOBBS points out the very great benefit that has followed the introduction of massage and gynæcological surgery into the treatment of the insane. The class of patients who are benefited by massage are the melancholics. This class are almost invariably subject to constipation and which is markedly relieved by the kneading of the abdominal muscles in the direction of the course of the large intestine. The eradication of pelvic disease has been the most important advance in the methods of treatment of the female insane. The serious fact has been recognized that perhaps one-sixth, if not one-fourth, of all the women in asylums are there because of the special infirmities of their sex and the disasters and penalties of their lives as wives and mothers.

One hundred and thirty-six women were examined, out of a total of over seven hundred and fifty female patients. Of this number one hundred and twenty-six had organic lesions or malformations incompatible with normal genitalia. One hundred and ten women were operated upon, with the result that 36 per cent. were restored men-

tally, 29 per cent. showed an improved mental status, while in 32 per cent. the mental condition remained stationary, and less than 3 per cent. died within a month succeeding operation. This almost instantaneous resolution of the mental faculties in some, and the steady evolution of the normal cerebral functions in others, cannot but afford incontrovertible evidence in support of the relation of physical cause and mental effect.

5. THORBURN touches upon some important features of life insurance, in so far as they concern the physician, and points out the great responsibility which rests upon the profession in the discharge of this most important trust.

The Canadian Journal of Medicine and Surgery.

August, 1898.

1. Notes on a Case of Acute Œdema of the Neck. A. J. HARRINGTON.

September, 1898.

2. The Treatment of Convalescent Club-Foot. V. P. GIBNEY.
3. The Treatment of Diphtheria at the Children's Hospital, Paris, and the Isolation Hospital, Toronto. J. J. CASSIDY.
4. Address in Gynæcology. T. K. HOLMES.

1. HARRINGTON describes the case of a man aged fifty who had been struck, transversely just below the thyroid cartilage, by a lever which was attached to a shunting machine. When seen very shortly afterwards he was unable to speak and breathing was very labored. His neck was very much swollen from the chin to the sternum. The condition was so grave that no time was taken to prepare the man for operation, but an incision was made in the mesial line over the cricoid and down through the trachæa. The relief was immediate, dyspnœa stopped, speech returned, and the swelling rapidly subsided. The hæmorrhage was very copious.

2. GIBNEY discusses the treatment of club-foot during the stage between the time the doctor has pronounced the deformity fully overcome and the time when all concern about the shoes and other retentive appliances may be abandoned. He dwells strongly upon the over-correction of the deformity and the maintenance of this over-correction for a reasonable length of time, say from eight to twelve weeks; upon the employment of simple and uncomplicated apparatus; upon the daily manipulation of the foot and the development of the muscles after the deformity has been corrected; upon the opportunity for an occasional observation, extending over many months; upon the superintendence of the construction of shoes which are intended to throw the weight of the body along the inner border of the foot and

to assist in eversion; and finally the resort to bone operations when simpler methods fail.

3. CASSIDY makes a comparison of the results obtained in the treatment of cases of diphtheria at the Children's Hospital, Paris, and the Isolation Hospital, Toronto, during 1897. In the former institution all the patients received a dose of Roux serum immediately after their entrance into hospital, the dose being regulated by the gravity of the disease, age of the patient, and the part of the body affected. The percentage of mortality was 10.80. In the latter institution antitoxin was employed in a few cases, 15 out of 431, and not as a substitute but as a supplement to the ordinary treatment. The percentage of mortality was 15.77. The writer goes on to say that with a little good will and the systematic use of antitoxin the mortality from diphtheria for 1899, at the Toronto Isolation Hospital, ought to bear the same proportion to its recorded mortality for 1897—15.77 per cent.—that the mortality for 1897, at the Paris Children's Hospital—10.80 per cent.—bears to 51.71 per cent. the old mortality rate at Paris prior to 1894.

4. HOLMES discussed the subject of uterine cancer in his address in gynecology before the Ontario Medical Association.

The Canadian Medical Review.

September, 1898.

1. The Significance of Pain in Gynecological Diagnosis. ERNEST HALL.

1. HALL has translated and condensed this article from *La Gynécologie*.

The Canada Lancet.

August, 1898.

1. Some Points in the Diagnosis of Morphia Addiction. STEPHEN LETT.

2. Eczema Seborrhœicum. WM. NELSON.

3. Abdominal Pregnancy. S. H. LARGE.

September, 1898.

4. Metatarsal Neuralgia or Morton's Disease. A. A. SMALL.

5. Puerperal Septicæmia. H. D. LIVINGSTONE.

1. LETT quotes Dr. Mattison, Medical Director of the Brooklyn Home for Habitues, who says, in the *Quarterly Journal of Inebriety*, that in the detection of morphinism two tests place the diagnosis beyond doubt, namely urinary analysis by the Bartley process, and enforced abstinence. These means of diagnosis Lett holds are open to grave errors which might lead to serious results. It is not always

possible to place the suspected person in such a position that abstinence can be enforced for forty-eight hours, but supposing this can be done, the patient might have been addicted to some other drug—cocaine, phosphorus, paraldehyde, chloral, etc., or even alcohol; the sudden and protracted deprivation of the accustomed drug would be followed by a train of symptoms so closely allied to those consequent upon the sudden withdrawing of morphia that it would require a very acute diagnostician to make a diagnosis that could not be called in question. In chemistry there is a surer and better method—the Bartley method is not reliable in some persons taking less than three grains of morphia in the twenty-four hours. He recommends the following test: 'Collect about twenty ounces of the suspected urine. If it has not an acid reaction, acidulate with dilute hydrochloric acid until it reddens blue litmus. Concentrate to about three ounces and let it stand in a cool place for twelve hours, then filter. To the filtrate add sufficient carbonate of sodium to render it alkaline, and let it stand for twelve hours, then filter and collect the precipitate, wash this with distilled water made slightly alkaline with carbonate of sodium, and dry. Digest the dried precipitate with pure alcohol at a gentle heat and filter, evaporate the filtrate to dryness, dissolve the residue with dilute sulphuric acid, and test for morphia by the iodic acid or other well-known tests. By this method morphia sulphate can be obtained from persons taking very minute amounts of the drug.'

2. NELSON discusses the pathology, etiology and treatment of this disease.

3. LARGE relates the history of a case of ruptured tubal pregnancy of five months duration, upon which he operated successfully. He points out the difficulties a surgeon has to contend with among country people.

4. SMALL writes on this condition which is a neuralgia, chiefly situated at the anterior part of the foot, especially about the head of the fourth metatarsal bone. In most cases the pain is very acute but in slighter cases it consists merely in a dull ache.

5. [This paper which deals with puerperal septicæmia, is suspiciously like a puff for a much advertised specific.]

The Dominion Medical Monthly and Ontario Medical Journal.

August, 1898.

1. Reflex Neurosis. A. S. FRASER.
2. Some Leading European Gynæcologists and Their Work. A. LAPHORN SMITH.
3. Intestinal Obstruction—Diagnosis and Treatment. A. P. CHALMERS.

September, 1898.

4. Fibro-Cystic Tumour of Uterus—Hysterectomy—Exhibition of Specimen. A. F. MCKENZIE.
2. Some Leading European Gynæcologists. A. LAPHORN SMITH.
 1. FRASER first describes the process of normal reflex action and then points out the various reflex neuroses that may occur in an impaired nervous system.
 3. CHALMERS describes the several forms of intestinal obstruction, with the cause and treatment of each.
 4. MCKENZIE gives the history of a case of fibro-cystic tumour of the uterus and describes in detail the operation performed for its removal.

Maritime Medical News.

August, 1898.

1. Reciprocal Registration. D. A. CAMPBELL.
2. Medical Evidence before the Law Courts. WM. BAYARD.
3. Gynæcological Notes from Paris. A. LAPHORN SMITH.

September, 1898.

4. The Importance of the Early Recognition of Glaucoma by the General Practitioner. J. E. MORRISON..
5. Thiosinamin in the Treatment of Painful Gastric Tumours. J. F. Macdonald.
6. Some Leading European Gynæcologists and Their Work. A. LAPHORN SMITH.

4. MORRISON says that if a person, over forty years of age, desires to change his glasses frequently, if he sees colored rings around artificial lights, if he experiences short blind spells, if he complains that his sight is failing, is slow to recognize colours, has a dilated or irregular pupil, careful search should be made for all the symptoms of glaucoma. If an eye becomes quickly inflamed, lids swollen, conjunctiva greatly injected with vision reduced to mere perception of light, glaucoma should be eliminated before making a diagnosis of anything else. If one is tempted to put atropine into such an eye, do not do it if the diagnosis is doubtful.

5. MACDONALD reports upon the use of thiosinamin, in five cases of tumours in the region of the stomach, associated with more or less severe pain, tenderness, vomiting and emaciation. The drug was administered hypodermically and the treatment extended over a period of three or four months. Complete disappearance of the tumour and the alleviation of the symptoms occurred in all the cases. In four of the cases he had no doubt about the tumour being malig-

nant for the symptoms and the history seemed unmistakable. The rapidity of relief in each case was remarkable. Three of the cases were well twenty-one months after treatment. He had also used the drug in a case of cancer of the breast, but without benefit.

Canada Medical Record.

August, 1898.

1. Case of General Paralysis. F. W. CAMPBELL.
2. Some Leading European Gynæcologists. A. LAPHORN SMITH.

1. CAMPBELL relates in detail the history of a case of general paralysis in a young man, aged 21 years. He was unable to satisfy himself as to the pathological condition present but as the paralysis was all but entirely motor, sensation being comparatively little affected, he was inclined to believe that the *corpus striatum* was the seat of some extravasation which under the influence of ergot was arrested and by the iodide of potash caused to be absorbed.

Eliminative Treatment of Eclampsia. D. W. ROSS, Florenceville, N.B.
The Medical Council, August.

Notes on the Progress of Legal Medicine—The Medico-legal Study of Injuries. WYATT JOHNSTON, Montreal. *The Philadelphia Medical Journal*, August 13th, 1898.

A Demonstration of a New and Original Method of Making Casts. GEO. A. PETERS, Toronto. *British Medical Journal*, Sept. 3rd, 1898.

The Surgeon in Court. B. B. OSLER, Q.C., Toronto. *The Railway Surgeon*, Sept. 6th, 1898.

A New Dissection Showing the Internal Gross Anatomy of the Hippocampus Major. J. G. MCCARTHY, Montreal. *British Medical Journal*, Sept. 10th, 1898.

Some Points in the Micro-Chemistry of Nerve Cells. A. B. MACALLUM, Toronto. *British Medical Journal*, Sept. 17th, 1898.

Treatment of Displacement of the Uterus by Operation Based on Two Hundred Cases. A. LAPHORN SMITH, Montreal. *British Medical Journal*, Sept. 12th, 1898.

Notes from Midwifery Practice. W. S. MUIR, Truro, N.S. *Annals of Gynecology and Pediatrics*, September.

Rupture of Vagina During Parturition. J. W. DANIELS, St. John, N.B. *Annals of Gynecology and Pediatrics*, September.

Some Leading European Gynæcologists and their Work. A. LAPHORN SMITH, Montreal. *Annals of Gynecology and Pediatrics*, September.

Reviews and Notices of Books.

Sir Benjamin Brodie. By TIMOTHY HOLMES, M.A., F.R.C.S. Master of Medicine Series. London: T. Fisher Unwin, 1898. Small 8vo., pp. 255.

We have not so far called attention to this admirable series of works due to the initiative of the late Ernest Hart, a series filling a distinct gap in medical literature. There are, it is true, published from time to time two- or three-volume biographies of distinguished medical men, but the size and cost of these are prohibitive for most medical practitioners. There are several more or less well-known histories of medicine, but there is no standard history available for the use of the ordinary practitioner in which the salient features of the lives of the Masters of our craft receive adequate notice. Yet for a man filled with the love of his profession, there can be few more interesting subjects wherewith to fill up an idle hour than biographies of the great physicians and surgeons. This series above referred to helps to fill the gap, and throughout the English speaking world; the works upon John Hunter, by Stephen Paget, on Harvey by D'Arcy Power, on Sir James Simpson by Laing Gordon, on Stokes of Dublin by his son, Sir William, have all been received with enthusiasm. Other works upon Helmholtz, Vesalius, Claude Bernard and Sydenham are being anxiously looked forward to.

We must confess that we were a little surprised when we heard that Brodie was to be included in this series of the great Masters. Harvey, Hunter and Simpson go without saying, and Stokes did so much to advance clinical medicine, that it would have been a mistake to have forgotten him. But Brodie, it would seem to us, had been more the type of the successful and fashionable surgeon rather than one of those who had notably advanced his craft—an acute and practical man rather than an originator—and the titles of Timothy Holmes' chapters rather bear out this view:—"Early Life and Education," "Early Days of Practice," are followed by the chapters entitled, "Marriage, Professional Success," "Full Tide of Success," "Honours and Public Services." In reading the work, interesting as it is to all medical men, we cannot but recognise that there is singularly little which Brodie has left for the good of the profession, remaining as a permanent memorial to him. His greatest work, and that which at the same time was his most original and valuable contribution to practical surgery, was his Treatise upon Diseases of the Joints; but even in this it must be confessed, that great as may have been his advance upon his predecessors in his knowledge and in his classification of these diseases, so imperfect at his date was the knowledge of pathology

of joint affections and so imperfect, I may add, does that still remain, that his classification was at the most of transient value. His most important observation that hysteria is the cause of much apparent joint disease, more especially in the female, is still neglected by most practitioners, who thus contribute to the discredit thrown upon the profession by the apparently marvellous success of the charlatan in his simple treatment of this class of cases.

After all the greatest service performed by Brodie was not in surgery itself, but was in the originating and organising of sound teaching of the same and improved hospital practice in London. Before his time the practice at all the Metropolitan hospitals was for the surgeons to go round the wards but two days in the week and never to attend otherwise, except when there were operations to perform, or when they were especially sent for in emergencies. Brodie and Keate at St. George's were the first persons to adopt a different method; they were at their post daily and superintended everything, and there was never an urgent case which they did not visit in the evening and not infrequently early in the morning also. No wonder that the effect of so healthy a change was soon visible in the increase in zeal and diligence on the part of the students and in their increased numbers. Brodie also introduced the practice of the appointment of clinical clerks, and early in his connection with St. George's he began a course of clinical lectures on surgery, the first lectures of their kind which were ever delivered in a London Hospital. Practically then to Brodie the metropolitan schools owe the beginning of their present methods and owe their main value as teaching schools in the old country.

Londoners are too apt to think that what has been done for the first time in London has been accomplished for the first time in creation. But in this matter Brodie was only following precedents which had already been established in Germany, and, if I mistake not, had already found their way to Edinburgh. Hence, while it may be true that what has been done for the good of London and London institutions has been done for the good of the world and deserves full recognition, it is also true that there is a tendency to unduly recognise such benefit conferred in the metropolis.¹ Valuable, therefore, as were Brodie's efforts to improve

¹ It is interesting in this connection to quote Mr. Timothy Holmes. ". . . the paper in the Medico-Chirurgical Transactions which records the great progress in the treatment of stone by means of crushing, or lithotrity, which owed so much to Brodie's ready appreciation of Civiale's teaching and practice and to the zeal and ingenuity which he showed in improving the instruments and elaborating the details of the process. Brodie had, of course, nothing to do with the invention of lithotrity, this was due to French surgeons. And the perfection of the invention whereby the whole stone is removed at one sitting—litholaxy—was devised by Bigelow, an American surgeon. But it was Brodie who popularised the method in England, and by so doing chiefly contributed to the ready reception of an operation which has robbed what was one of the deadliest diseases that afflicted humanity of nearly all its terror. This will remain to all time one of Brodie's greatest claims to public gratitude."

hospital practice and medical teaching, it does not under the circumstance quite entitle him to a position among the masters in medicine. At most they entitle him, shall we say, to the position of Provincial Master, not of necessity to that of Grand Master.

But granting this, the story of Brodie's life is worth the writing and the reading. He came of a good Scotch family which had invaded England. His cousin, Thomas Denman, became the well-known Lord Denman, Chief Justice; Dr. Bailey, the well-known nephew of John Hunter, had married one of his cousins; Sir Robert Croft, the leading accoucheur of the day, had married another; his grandfather, from whom he took his christian name, is remembered as the patron of Goldsmith, who in 1762 bought a third share of the "Vicar of Wakefield" for 20 guineas, and who printed the same; his father was a very intimate friend of Lord Holland and of his brother Chas. James Fox, and by the Fox family was given one of the livings in their possession, at Winterslow in Wiltshire. There it was that he himself brought up his boys, giving them a sound and thorough classical education.

It is interesting to notice that Brodie was "put to medicine" largely for family reasons, and also that he had no special taste or desire for the profession in which he became so eminent. Mr. Holmes gives us Brodie's opinion on this matter: "Others," he wrote, "have often said to me that they supposed I must have had from the first a particular taste or liking for my profession; but it was no such thing; nor does my experience lead me to have any faith in those special callings to certain ways of life which some men are supposed to have. . . . The persons who succeed best in life are those who, having (perhaps from some accidental circumstances) being led to embark in them, persevere in their course as a matter of duty, or because they have nothing better to do. They often feel their new pursuit to be unattractive enough in the beginning, but as they go on and acquire knowledge and find that they obtain some degree of credit, the case is altered and they become every day more interested in what they are about. There is no profession to which these observations are more applicable than they are to the medical. The early studies are in some respects disagreeable to all, and to many repulsive. But in the practical exercise of its duties in the hospital, there is much that is of the highest interest; and the collateral sciences, to those whose possessions give them opportunities of cultivating them, offer at least as much to gratify our curiosity and excite our admiration as any other branches of knowledge, not even excepting the sublime investigations of astronomy."

This sentiment of Brodie's will probably come in for a considerable amount of discussion and criticism. There are undoubtedly those whose mental and physical constitution is so admirable that they are bound to succeed in whatever profession or calling they may happen to take up, but I cannot but think that the greater number of those men who have

made a reputation in medicine and those who are even ordinarily successful in the practice of the same, are men who from the first have felt a liking for and an interest in the same, and it is this primary interest in the subject which carries them through what would otherwise be the repugnant portal to medical practice ; I refer to the first two years of the medical student's life. Certainly my own experience has been that those who have entered upon the study of medicine purely for family reasons, with no liking for the same, have in general either dropped out of the race before completion of their years of study, or if they have graduated, have accomplished little good.

It is needless here to detail the progressive steps in Brodie's career. His connection with St. George's Hospital and the important part which he took in making that a great centre of medicine ; his connection with the College of Surgeons from the time that he was lecturer in 1820 ; with the Royal Medico-Chirurgical Society, of which he was President in 1829 ; with the Royal Society, of which he was President in 1858, and with the General Medical Council of which he was chosen first president in the same year. All these matters are well treated by Mr. Timothy Holmes in the book before us, as also, we may add, is the subject of his professional relationship to the Royal Family, and more especially to George IV. It is only necessary here to epitomise that the Life of Brodie is a most interesting and readable work, even though it bears out the contention that Brodie scarce deserves to be placed among the Great Masters of Medicine.

J. G. A.

A Contribution to the Study of Leprosy in Australia. By J. ASHBURTON THOMPSON, M.D., D.Ph. Report on the Conditions under which Leprosy Occurs in China, Indo-China, Malaya Archipelago and Oceania. Compiled chiefly during 1894. By JAMES CANTLIE, M.A., M.B., F.R.C.S. Being the Prize Essays on Leprosy of the National Leprosy Fund. Second Series. Svo., pp. 415. London : New Sydenham Society, 1898.

While mainly an Oriental disease, leprosy is of more direct interest to practitioners of the Dominion in that it is a disease not wholly unknown ; it is what may be termed an " old established disease " in Nova Scotia, where at Tracadie there is a leper settlement, and with the influx of Chinese labour upon the West Coast cases are not infrequent there, and appear sporadically among the Chinese here and there throughout the country. The two essays published in this volume of the Sydenham Society, while they approach the subject in somewhat different ways, are of very considerable interest.

In a most judicial study of leprosy in Australia, Dr. Thompson attempts to determine whether the study of the rare cases of the disease occurring upon the Australian Continent, will help us to ascertain the manner in which the disease is maintained. " If," says he, " an area

isolated from the world could be found ; if it could be ascertained to be leprosy-free, if, then, the advent to it of lepers were observed ; if, lastly, the state of that virgin population could be watched during a sufficiently long subsequent period, some weighty evidence might be got. But," he adds, " in order to attain to a positive conclusion, these conditions must be scrupulously fulfilled. The indigenous population must be ascertained to be leprosy-free beyond a doubt ; the advent of the earliest immigrant lepers and their subsequent movements must be watched and recorded ; and either the continued freedom of the population must be established by the most thorough enquiry, or else the date at which cases of lepra began to appear among it must be learned with similar exactitude. This must be impossible, I suppose, except in a deliberately planned experiment ; but there is a chance that the requirements may have been met by one of the unplanned experiments of life, with accuracy sufficient to warrant a very probable conclusion." And Dr. Thompson endeavours to see whether in Australia this chance presented itself. Certainly Australia presented a very favourable ground. The Continent constitutes an isolated area, its aboriginal inhabitants had always lived free from intrusion and admixture of blood until the beginning of its present occupation by the English. Next, this occupation occurred almost within living memory, and when it occurred it was under military control, so that records and reports of all considerable events are well preserved. Thus, granting that the aborigines were found primarily unaffected by the disease, the earliest appearances of this disease upon the Continent ought to be discoverable with some certainty if that be possible in any country at all.

Dr. Thompson, from a study of reports and narratives published during the last century, concludes that there had been even before historical times certain annual visits by Malay prows from Macassar, Timor and other regions to the northern coast of the Continent, and concludes that although we can usually make sure of the primeval state of the aborigines discovered by whites in Australia, we cannot be sure of the primeval state of the north coast natives at any particular part of the coast line and thus the question whether lepers were imported to the north coast, must ever remain unanswered. Of course, the question is not whether Malays, but whether lepers were imported. Further as to the aboriginal lepers first observed in this district during a very few years past, there is no evidence at all as to the date at which lepers first made their appearance. He thus comes at the end of a long search to the conclusion that the requisite etiological certainty is not ever likely to be reached in Australia, and if not there, not likely to be reached anywhere else. Certainly the aboriginals are susceptible of lepra and leprous aborigines were found in some regions, but no case has been recorded in Australia south of the latitude of Maryborough, Queensland. No case was recorded among them in any part of Australia before the year 1892, or until after the advent of immigrants from recognised leprous areas.

While bringing forward these facts Dr. Thompson is so cautious that he will not venture to base any conclusions upon them. He further deals with the subject of the leprous Chinese in Australia and lepers of European descent and the amount of leprosy in the different races, but is so cautious that he reaches no conclusions.

Mr. James Cantlie has studied the distribution of leprosy in China, Indo-China, The Malays Archipelago and Oceania, and among his conclusions are : that while leprosy is not proven to be diffused by heredity, the evidence is not strong enough to prove that it may not be so distributed. Secondly, that where leprosy exists, the disease may affect an individual independently of personal contagion. The Southeastern provinces of China, Tonkin and Fokein form one of the great centres for leprosy and for its distribution ; three-fourths of the immigrants from China being from these provinces. In the various parts of the regions studied, the aborigines ascribe leprosy to the Chinese immigrants. Where the Chinese coolie departs from a country, as in North Borneo, leprosy also disappears.

Mr. Cantle urges a closer inspection of Chinese immigrants travelling by British ships, and also a monthly inspection of the coolies on plantations and wherever Chinese congregate.

We may here suggest that the method carried out by Drs. Wyatt Johnston and Jamieson of the bacteriological examination of scrapings from any suspected nodule or tubercle, whether recent or dried, affords a rapid and sure means for determining the presence, at least, of cutaneous leprosy among such coolies and bands of Chinese. J. G. A.

On Cardiac Failure and its Treatment, with Especial Reference to Baths and Exercises. By ALEXANDER MORISON, M.D., Ed., F.R.C.P., Ed., Physician to Out-Patients to the Great Northern Central Hospital and the Paddington Green Children's Hospital, etc. London : The Rebman Publishing Company, 11 Adam Street, Strand-1897.

The first part of this work deals with the diagnosis and symptoms of cardiac failure ; the second is devoted to a consideration of the neuromuscular and hæmic factors in diseases of the heart, and their bearing on prognosis and treatment. The third part is taken up with an account of the general treatment of cardiac failure. The fourth and concluding part enters very fully into the treatment of cardiac failure by baths and exercises, especially as it is carried out at Bad-Nauheim. In an appendix, Dr. Grœdel, of Bad-Nauheim, refers especially to the method of using the baths and graduated exercises.

The remarkable results obtained by this treatment in many cases, is clearly set forth by both writers, and the volume will well repay a close and careful study.

There are many photographic illustrations of the different exercises, which will greatly simplify a thorough understanding of them.

Dr. Morison has not been entirely lead away by the results of this method of treatment to discard measures which so often have proved to be of value. On this point he says : " It may thus be very justly maintained that baths and exercises have a very wide sphere of usefulness, and an experience now not inconsiderable has rendered this conclusion incontestible. But to give one's adhesion to this view is not at the same time to proclaim a belief that these measures are equal to every contingency, or that they may not for a time in many cases have to play a subsidiary rôle. . . . I should emphatically state that he who trusts mainly to these measures when a cardiac patient is in extremes occurs a grave responsibility, and to rescue when rescue is, as it often is, possible, such a case from death, the exercise of all the skill in the employment of the potent pharmaceutical remedies, in the use of which the genius and patience of generations has instructed us, is the duty of the physician and the rightful expectation of the patient. These pharmaceutical agents are not, in such cases, relegable to the rank of auxiliaries. They afford the patient his only chance of life, while baths and exercises await his convalescence, and may be powerfully promotive of its secure establishment."

J. S.

A. Clinical Manual of Skin Diseases with Special Reference to Diagnosis and Treatment for the use of Students and General Practitioners. By W. A. HARDAWAY, A.M., M.D., Professor of Diseases of the Skin in the Missouri Medical College, St. Louis ; Physician for Diseases of the Skin to the Martha Parsons Hospital for Children and to St. John's Hospital ; Ex-President of the American Dermatological Association. Second edition, revised and enlarged. With 42 illustrations and 2 plates. Lea Brothers & Co. Philadelphia and New York. 1898.

- As stated in the preface, the second edition of Hardaway's work contains some changes in the arrangement of the material which at once strike one as a decided improvement. Thus, the alphabetical arrangement of the various diseases in the former edition has been replaced by the now most commonly used classification—Crocker's modification of Hebra's—with the exception that the class of congestions is omitted, the simple erythemas usually found under this heading being included in the inflammations. The nomenclature is that of the American Dermatological Association. In the introductory pages is included a table of the local distribution of skin diseases. This, we think, would better have been omitted. It belongs more properly to the class of books which endeavour to supply the imperfectly educated with aids in diagnosis, and at the same time it is apt to be misleading to just such readers. In this list the diseases credited to the upper lip are, eczema, herpes and lupus, and to the lower lip, epithelioma and syphilis. No one, who knows him, would for an instant suppose that the author wishes to state that

epithelioma and syphilis are the only diseases ever found on the lower lip, yet this is just what the practitioner whose knowledge of dermatology is insufficient to enable him to determine to what class of diseases a lesion in this locality may belong, would conclude on turning to the list for help. Again, though the book is entitled a clinical manual, the entire absence of pathological anatomy and any description of the physiology and anatomy of the normal skin detracts much from its value as a guide to the student of dermatology. Apart from these features, the book is to be commended for clearness and conciseness of descriptions of symptomatology and treatment. The publishers' part of the work has been well done and the two coloured plates are well executed. G. G. C.

Hand-Atlas of Legal Medicine. By Dr. E. VON HOFMANN. Authorised translation from the German. Edited by FREDERICK PETERSON, M.D., Assisted by ALOYSIUS O. J. KELLY, M.D. Philadelphia: W. B. Saunders. 1898. \$3.00.

This book, of which the German edition was barely completed and passing through the press when its distinguished author died, is the authorised American edition of the corresponding volume in the Lehmann series of Hand-Atlases. The illustrations, are throughout coloured lithographic plates and photographs, furnished direct by the publishers of the original German edition. They include a large number of objects which none of the existing works have attempted to illustrate, and represent by photography subjects for which previously one had to depend upon diagrammatic and wholly unreliable wood cuts. The execution of the plates is, on the whole, excellent and gives an accurate idea of the appearances they represent. We would like to have seen included some micro-photographs of spermatozoa, these being objects which our existing text-books seem to find a special difficulty in portraying correctly. Also the omission of plates of the blood spectra makes the work less complete. On the other hand the fact that photographs of Hofmann's celebrated and unique collection of abnormal conditions of the hymen are included makes the book of special value as a work of reference. The translation is accurate, but might with advantage be rendered more idiomatic in future editions. We have no hesitation in warmly recommending the book. W. J.

Atlas and Abstract of the Diseases of the Larynx. By Dr. L. GRUENWALD. Edited by CHARLES P. GRAYSON, M.D. Philadelphia: W. B. Saunders. 1898.

This book is the work of a well-known laryngologist who has sought, by means of his large experience as a specialist and a teacher, to place in the hands of students and practitioners a means whereby those who wish to become more familiar with affections of the larynx may be better able to do so by this work which he places at their disposal. It embraces a very

clear description of the anatomy and physiology of the larynx, methods of examination and practical hints for the examination, these being especially useful, and such as are never found in any book treating of diseases of the larynx. There follows also a full description of the pathology and treatment of the more common affections of the larynx, which descriptions are made all the more lucid and interesting by many beautifully and accurately depicted coloured diagrams.

The book itself reflects great credit upon the publisher, and as a work it is to be strongly recommended as a companion to any well recognized treatise on diseases of the larynx.

H. S. B.

Manual of Hygiene and Sanitation. By SENECA EGBERT, A.M., M.D., Professor of Hygiene and Dean of the Medico-Chirurgical College of Philadelphia. Philadelphia: Lea Bros. & Co., 1898. Small 8vo., pp. 368. Illustrations, 63.

We have been much pleased with the clear, simple manner in which the various subjects included under the heading of Hygiene and Sanitation, are treated in the work before us. It does not pretend to be in any sense an advanced manual or text-book, but it seems to us that the author has very fully realised his desire to "give a plain statement of the fundamental principles and facts of hygiene and sanitation, together with such explanations and details based on American practice, as would serve to make the work clear and readable." The work, while perhaps not so authoritative or so full, will take the place for American students, that is occupied by Wilson's handbook, for English students.

Transactions of the College of Physicians of Philadelphia.

Third Series, Vol. XIX., October, 251 pp. Philadelphia, 1897.

This volume of these well-known transactions is in no sense inferior to its predecessors, and is a credit to an Institution which dates back over more than a century, and which has had for its Presidents during the last 20 years such well-known men as Alfred Stillé, Samuel Lewis, J. M. DaCosta, S. Weir Mitchell and Dr. Hayes Agnew.

In the present volume we would especially call attention to Dr. Stengel's paper on "Auscultatory Percussion in Diagnosis," to Dr. Burr's paper on the "Mimicry of Tumour of the Brain in Bright's Disease," to an article by S. Weir Mitchell, M.D., and Alonza H. Stewart, M.D., on the "Action of the Venom of the Rattle Snake upon the Blood Corpuscles," a paper by Drs. Packard and Steele upon "A Case of Sarcoma of the Lung in which symptoms of Addison's Disease were brought about through secondary growth in the suprarenal bodies; Dr. Van Harlingen's contribution upon the "Hysterical Neuroses of the Skin," and Dr. Savary Pearce's "Study of the Blind, being an Analysis of the Physical and Mental Characteristics of 180 pupils at the Pennsylvania Institution for the Instruction of the Blind."

There are many other papers of considerable value, but these possibly will excite most general interest.

Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Annual Meeting.

The Twenty-First Annual Meeting of the Montreal Medico-Chirurgical Society was held in the rooms of the Natural History Society, on Friday evening, October the 7th, 1898.

The retiring President, Dr. ROBT. CRAIK, occupied the chair.

The Treasurer, Dr. J. M. JACK, read the following report for the session, 1897-98.

Receipts.

Oct. 1.	To Cash in Bank.....	\$ 93 05
Nov. 4.	“ Rent Clinical Society, '96-97	\$ 19 50
Dec. 24.	“ Cash from Lister Dinner Committee.....	37 41
1898.		
Jan. 22.	“ Interest on Cash in Bank for 1897.....	4 22
Sept. 30.	“ Cash, members subscriptions.....	580 00
		621 13
		714 18

Expenditures.

By Cash to Secretary's Current Expenses, 1897-98.....		44 80
“ Charges Dr. G. Campbell, Secretary, 1896-97.....		50 00
“ Account Bentley, printing for session, 1897-98.....		36 25
“ Charges Dr. S. R. Mackenzie, Secretary, 1897-98.....		50 00
“ Account Electric Co., lighting for 9 months, 1897-98.....		14 21
“ Charges Dr. Buller, 9 months rent, 1897-98.....		318 75
“ Cash, care of Hall, for 9 months.....		18 00
“ Account E. Cox, re Lister Address.....		50 00
“ Cash, Treasurer for postage, 1897-98.....		5 00
“ Account Davis, type-written letters, special....		7 50
“ Cash, Natural History Society, rent of Hall.....		24 00
		618 51
Cash Balance.....		95 67

Assets.

Members subscriptions overdue.....		545 00
Society furniture.....		210 00
Cash on hand in Bank		95 67
		850 67
		850 67

Liabilities.

Account Dr. Lockhart, re. cash paid for removing books...		3 05
Account M. Hicks for storage on books.....		3 00
Account Sabiston Litho. Co., printing.....		3 75
		9 80
Net Assets.....		\$840 87

JAMES M. JACK,
Treasurer.

Montreal 5th October, 1898.

The Secretary, Dr. RIDLEY MACKENZIE, reported that eighteen regular meetings had been held during the year, the average attendance being 32. Thirteen new members had been elected during the year, making the total number of ordinary members on the roll 156. With 16 temporary members the grand total numbers 172.

The work of the year had consisted of eleven papers, twenty case reports, sixteen living cases and thirty-five pathological specimens, besides the exhibition of electrical apparatus and skiagrams.

The report of the Committee on Provincial Elections was then read and adopted without discussion, the President thanking the committee on behalf of the Society for the faithful and efficient manner in which it had performed its work.

The following were elected officers for the ensuing year :—

President—Dr. J. G. ADAMI.

First Vice-President—Dr. H. A. LAFLEUR.

Second Vice-President—Dr. J. M. ELDER.

Secretary—Dr. A. J. BAZIN.

Treasurer—Dr. J. M. JACK.

Council—Drs. ROBERT CRAIK, F. J. SHEPHERD and JAMES BELL,

The retiring President, Dr. ROBERT CRAIK, before reviewing the work of the past session, spoke of the unfailing courtesy and kindness shown to him by the members, which had made his duties as chairman a pleasure as well as profit. He thanked the Society for the honour they had done him in calling him to preside over the meetings after an unavoidable absence of years. Although the work of the year had all been of value, there were a few subjects of sufficient importance for special reference. Thus the modern improvements in the different departments of surgery, especially of the uterus, gall-bladder and bile ducts; and the operations for the relief of malignant disease of the larynx and tongue marked an immense advance in this department to one who, like himself, had seen the beginning of the surgery of these organs. Twenty-five or thirty years ago such operations never entered into our calculations in the most remote way, yet the progress made during this period of time was but a fore-taste of what the next twenty-five years would bring about. Another point to which reference was made was the growing influence of the Society in municipal affairs. During the year our advice had been sought by influential aldermen on important sanitary matters. Of still greater importance was the reform of the College of Physicians and Surgeons of the Province, which our Society has been largely instrumental in bringing about.

QUEBEC MEDICO-PSYCHOLOGICAL SOCIETY.

The physicians attached to the insane asylums of the Province of Quebec—Arthur Vallée, Medical Superintendent of the Quebec Lunatic Asylum; T. J. W. Burgess, Medical Superintendent of the Protestant Hospital for the Insane; E. J. Bourque, Physician in Chief; Geo. Villeneuve, Medical Superintendent; F. E. Devlin, Ass. Superintendent; F. X. Perreault, A. J. Pricur, C. Laviolette, and E. P. Chagnon, Assistant Physicians of the St. Jean de Dieu Lunatic Asylum, Longue-Pointe—held a preliminary meeting on the 16th of February last, at St. Jean de Dieu Asylum, Longue-Pointe, for the purpose of organizing themselves into a society for the advancement of the specialty.

It was resolved that the Association should be known as the "Quebec Medico-Psychological Society," and that meetings should be held in turn at the different asylums of the province. The following officers were elected for the years 1898-99.

President: Arthur Vallée, M.D., Medical Superintendent of the Quebec Lunatic Asylum.

Vice-President: T. J. W. Burgess, M.D., Medical Superintendent of the Protestant Hospital for the Insane, Verdun.

Secretary: E. P. Chagnon, M.D., Assistant Physician of the St. Jean de Dieu Asylum, Longue-Pointe.

Pursuant to this organization the first meeting of the Society took place at St. Jean de Dieu Asylum, on July 14th, 1898.

Report.—Dr. Vallée, President:—

Election of New Members.—A. Marois, Assistant Superintendent; A. Belanger and C. S. Roy, Assistant Physicians to Quebec Insane Asylum; L. J. O. Sirois, Physician to St. Ferdinand d'Halifax Asylum; and J. V. Anglin, Assistant Physician to the Protestant Hospital for the Insane, Verdun, were elected members of the Association.

Resolutions.—Mr. Villeneuve moved that Honourable Mr. J. E. Robidoux be elected *Patron* of the Society. Dr. Burgess seconded the motion. Carried unanimously.

Moved and unanimously voted:—

1. That Mr. Gustave Lamothe, C.R., be elected as legal adviser of the Society.

2. That the Inspectors of Insane Asylums be invited to form part of the Association.

3. That Messrs. Villeneuve and Chagnon be chosen to draw the rules and by-laws of the Society.

4. That the members of the Society have learned with grief the death of the lamented Doctor L. M. A. Noel, Medical Superintendent of St. Ferdinand d'Halifax Asylum, and member of the Quebec Medico Psychological Society, and that they express to Mrs. Noel their sympathies and their most sincere condolence in her great misfortune.

5. That the members of the Society present to the Reverend Sister Superioress of St. Jean de Dieu Asylum, their best thanks for the generous hospitality which she tendered to them, on the occasion of this meeting.

6. That the second meeting take place next October at the Protestant Hospital for the Insane, Verdun.

On the Admission of Patients to Insane Asylums—Form of Medical Certificate.

Speaking about the admission of public patients in insane asylums, Dr. Villeneuve regrets to say that most of the medical certificates are far from being equal to the importance of the measure which they authorize.

If a person be in the mental condition, required by law to be admitted into an insane asylum, this fact is to be established by a medical certificate made out according to formulas B. and C. signed by the same doctor and certified under oath.

The administrative decision of the medical superintendent, regarding the admission of patients, rests on the statement of facts contained in the medical certificate.

The medical superintendent, according to the gravity of these facts, is justified in keeping the patient in an asylum, for a certain time, under observation, or, in certain cases, for an unlimited time.

Therefore that certificate is of great importance, because the proceedings relating to the admission of a patient in an insane asylum are taken, for the most part, according to the facts stated in this certificate.

These facts must necessarily decide how long the patient is to be kept under treatment or discharged.

I have been worried very often over the insufficiency of medical certificates, in which doctors accept, without questioning their veracity, the information furnished to them by friends or relatives of the patients, and who are often interested in deceiving them.

To my knowledge people have tried to secure admission for incorrigible children, unmanageable deaf and dumb, old troublesome dotards; even, cases in the very last stage of chronic affections, such

as locomotor ataxia, have been sent to me for admission. Cases of typhoid fever, meningitis, encephalitis, have been brought to the asylum, because the doctor had not taken enough care in his diagnosis.

But the law is very clear on that point; the medical certificate must state the mental condition of the patient, the details of the disease and the necessity of having the patient admitted into an asylum to be therein treated properly.

This document must enumerate the symptoms and facts personally observed by the doctor, which constitute a proof of insanity; moreover, it must state the reason why the patient should be admitted for treatment in an insane asylum.

The fact being proved that a patient is insane, he may be admitted to the asylum, as I have already said, either to be treated therein, or as a matter of public order or security.

Besides the certainty of the proof of insanity, contained in the medical certificate, the medical superintendent must find in it the above mentioned reasons to justify himself in having the patient admitted to an asylum.

Therefore, this certificate must contain facts, and not vague presumptions, especially when the indications for admission are not exclusively deduced from the particular form of insanity of which the patient is suffering actually.

There are circumstances where it may be necessary to have recourse to a magistrate; when the doctor is obliged to rely, for the most part, on statements which are given to him by friends or relatives of the patient; when investigation and inquiry are necessary to establish the veracity of these statements; or when any difficulties arise about the admission of a certain class of patients, persecuted or otherwise.

In these cases, it is well to proceed before a magistrate, according to the law concerning dangerous lunatics, and to take the testimonies of the persons who have witnessed the insane actions of the patient; after that, a warrant is issued by the magistrate, who orders the patient to be sent to an asylum. I believe that the medical certificate ought to be divided in two distinct parts, as in England and the State of New York. In the first part, the doctor should state the symptoms of insanity which he has observed himself; in the second, he should state the facts which he has known from other persons, at the same time, naming these different persons.—This paper gave rise to a discussion in which most of the members have taken part.

At the next meeting it will be more fully discussed.

A Case of Diabetes Treated by Protein.

Dr. DEVLIN reported a case of diabetes, which he was treating with protein. He had already noticed a very great improvement.

Rubeoliform Eruptions Produced by Sulphonal.

Dr. BURGESS reported a case which after the use of sulphonal, presented an eruption so closely resembling that of measles, that he could have easily taken the former for the latter.

A Case of Sitophobia Cured by Sulphonal.

Dr. A. VALLÉE reported a case of sitophobia, in which sulphonal seems to have had an excellent result. A. B., aged 26 years, was admitted to the Quebec Insane Asylum on May 1st, 1893, suffering from melancholia with stupor. She was in a complete state of mutism and refused all nourishment.

Having tried, in vain, to feed her by the ordinary means, we were obliged to nourish her by the stomach tube. This continued for many months. The mental state remained the same all along; A. B., was still in stupor, motionless, head dropping on the chest, indifferent to everything around her and absorbed by her delusional conceptions. In spite of tonics, stimulants, electricity, hydrotherapy and a generous diet, we could not obtain the least improvement in her mental condition.

She still continued to remain speechless, to refuse food, and to offer more and more resistance when she was fed artificially.

The organic functions were greatly deficient; nutrition was bad, the extremities were cold and cyanosed. In fact, A. B., was losing flesh very rapidly and had even become gâteuse.

Very little hope had we of any improvement at all.

I then happened to read in the October number of the "*Journal of Mental Science*" a short report by Dr. Brough, on the use of sulphonal in sitophobia.

Dr. Brough reported five observations which seemed to me very encouraging.

I decided to try the remedy on A. B. On the 10th day of November, at 8 p.m., I gave her 40 grs. of sulphonal. She slept very well at night, and next morning when she woke up, she made a few signs to her nurse, indicating that she wanted something to eat.

Food was brought in immediately and A. B., ate it up greedily. We continued to give sulphonal for a few days; the appetite remained good and the patient continued to eat with relish.

To-day her mental condition is not much better, but she is a little brighter, she talks more readily and her general health is excellent.

Foreign Body of the Intestine—Death—Autopsy.

Dr. BURGESS. R. S., æt. 32. A case of long standing dementia, 1898.

July 3rd, 1898. A slight attack of diarrhœa. Little or no pain, no constitutional disturbance. Treated with lead and opium pills, which checked diarrhœa, kept in bed.

July 7th. Complained of slight pain in abdomen, but no signs of tenderness and no constitutional symptoms. Bowels loose again.

July 9th. Still complains of pain in abdomen, and there is a slight tenderness on pressure, and some tympanites. Vomited several times during day, but no diarrhœa. Pulse slightly increased but full and soft, also a rise of one degree in temperature. Appendicitis suspected.

July 10th. Did not sleep any last night, in spite of a full dose of morphia and is much worse this morning. Constant vomiting with signs of failure. Pulse and temperature both much increased; and a good deal of tenderness over abdomen, especially on right side. Dr. Armstrong was at once called in consultation but decided that it was too late for operative interference. Patient died at 2.40 p.m.

Autopsy performed July 11th, 1898.

Body that of a young man dead twenty hours. Post-mortem rigidity complete. Skin sallow. Post-mortem lividity well marked on back, sides and thighs. Signs of commencing decomposition in front of abdomen, which is distended. Subcutaneous fat absent, and muscles of a dark red color.

On opening the abdomen there gushed out an abundant, turbid, brownish fluid having a fecal odor. On the left side, about the level of the umbilicus is a small, black, gangrenous area, in which projects a broken piece of needle. The omentum is greatly inflamed and adherent to the subjacent layers of the intestine; it is also shortened and thickened. The intestines are greatly distended and reddened, and adherent to one another by recent loose adhesions. The transverse colon is very high up, being concealed by the ribs. The lower coils of the small intestines are collapsed and intensely reddened.

Intestines:—In feeling through the great omentum, near to where it is adherent to the parietes another fragment of needle is discovered. On separating the coils of the collapsed portion of intestine, a wire (hair-pin) is found penetrating the mesentery about two inches from the edge of the bowel, penetrating also one of the coils of the ileum. This wire passes backward, catching up on its passage, the serosa of a second coil of ileum, and is then imbedded in the quadratus lumborum muscle of the left side.

On removal of the intestines they are found normal until about three feet from the ileo-cæcal valve, where the intestine becomes much dilated; the walls and mesentery are much thickened and inflamed. This condition persists for about eighteen inches to a point where constriction has occurred through the mesentery of the intestine. On opening up the affected section, about eighteen inches from the ileo-cæcal valve there are found three or four sharply cut lacerations of the intestine, as if from some sharp pointed instrument. About this point perforation has occurred. At every place where the wire came in contact with the tissues could be traced a brownish-black, rusty discoloration. The appendix was inflamed externally, but practically normal within.

Stomach:—Normal, no trace of inflammation.

Kidneys:—Of normal size. Capsule normal. The sections are pale and cloudy. Pelvis normal.

Spleen:—Small, capsule wrinkled, very flabby, on section, pale and firm. Weight two ounces.

Liver:—Congested with cloudy swelling. Lobules indistinct.

Heart:—Right side contains soft, reddish clot; left side is contracted and empty. All the valves normal.

Lungs:—Right lung free from adhesions, somewhat congested, crepitant throughout on section. Weight nineteen ounces. Left lung adherent by lower lobe posteriorly and to diaphragm. Weight sixteen ounces. Bronchi in both lungs normal.

Brain:—Not examined.

Anatomical Diagnosis:—Septic peritonitis following perforation of ileum by a foreign body. Obstruction of intestines. Strangulation of bowels. Needle in mesentery and abdominal parieties. Cloudy swellings of heart, liver and kidneys. Œdema of the lungs.

The opinion formed was that the hair-pin had probably been swallowed some time previous as there was no trace of irritation in the stomach; that it had passed through that organ and lodged in the intestine; in its passage it had been partially straightened by the peristaltic action of the bowels, and when checked in its progress had perforated the intestine and then become fixed in the quadratus lumborum muscle.

Influence of Traumatism on Certain Mental Affections.

Dr. A. VALLÉE reports a case which tends to demonstrate the influence of traumatism on certain mental affections. L. T., 62 years old, was admitted to the Quebec Insane Asylum on March 12th, 1894, suffering for the last five months from a severe attack of melancholia.

brought on by great pecuniary troubles and alcoholic excesses. He was sad and very depressed, believing himself to be damned for 99 years; he kept to himself in perfect silence. Nothing could distract him for a moment, and he opposed a passive resistance to all our encouraging exhortations. His general health gradually gave way, under the influence of this great moral depression complicated by insomnia and sitophobia.

L. T. was so emaciated and weak that he was sent to the infirmary during April.

On the 3rd of May, at about 3 p.m. I was hastily called to see him, to extract a foreign body which he had thrust in his eye. I find him sitting on his bed; to my questions he answers not a word. I perceive a black spot at the internal angle of the right eye; it was the head of a nail.

I extracted it immediately; the nail was four inches long. Alarmingly symptoms soon appeared; face very pale, extremities cold, pulse thready, left arm and leg paralysed.

The day after he rallied a little, but the hemiplegia continued. On the 5th of May, partial convulsions set in over the face, at the labial commissures, over the neck and over the left arm. These attacks last about 24 hours.

On the 8th of May the hemiplegia tends to get better and the patient seems more lucid.

He gets up after three or four days, all the nervous symptoms have disappeared, except a divergent strabismus of the right eye, which lasted about 15 days. The general health, the mental condition continue to improve gradually.

At the end of May T. is able to walk around the asylum by himself.

His memory is perfectly good, but he does not know why he thrust that nail in his eye.

On the 15th of July, T. leaves the Asylum perfectly well for over a month.

I remember another case where traumatism hastened the cure.

O. R., 25 years old, was admitted a few years ago, suffering from a violent attack of acute mania.

A few weeks after his admission he quarrelled with another patient. During the squabble, he got his thumb bitten very deeply.

Immediately R. is taken with intense nervous trembling for about an hour.

This nervous symptom disappears, he becomes conscious. R. continues to improve and leaves the asylum a few days after perfectly cured.

T H E

Montreal Medical Journal.

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No. 10.

PROFESSOR CLIFFORD ALLBUTT'S ADDRESS.

In its broad philosophic treatment of the various subjects touched upon and in the exquisite language in which the various thoughts were clothed, the address delivered at McGill on the 13th inst., fully bore out the expectations we had formed of the Regius Professor of Medicine of the University of Cambridge. It is indeed doubtful whether our profession contains another who approaches all that bears upon it from so philosophic a standpoint as does Professor Allbutt. Deeply versed in the writings of the older Greek and Roman as well as of modern philosophers, he further belongs to a type, rare in the old country, still rarer among us, that of the scholar in medicine, and it was healthy and stimulating to listen to him. To some of us indeed, Allbutt's scholarship and love for the exact word may seem carried to almost too great an extreme, and to render his style so rich as to make his writings no easy reading, as witness, the introductory article in his great "System of Medicine." No such accusation, however, could be brought against his spoken address, which from beginning to end carried his hearers with him.

It is not for us here to recapitulate the lecture; doubtless each carried away some different thought or suggestion from among the many poured out. To us, the most striking feature of the whole was the almost hidden current of wistfulness, if we may so term it, with which one, who for long years has striven to maintain medical education in England at the highest level, reviewed his recent experiences in visiting America and Japan, and compared conditions of medical education in the New World with those with which he is familiar in the Old. He saw here, in Montreal, in a colony, a progressive school with hospitals affording provision for teaching the student, distinctly in advance of anything he could recall in the British medical schools:

away in the Western States, at San Francisco, he had come across schools magnificently endowed, equipped with admirable buildings and every modern aid to medical research; and even when he crossed the Pacific, he found the Japanese medical student taking clinical notes (in German), fuller and richer in data of chemical and microscopical examinations of the secretions and blood, than what he ordinarily found in British hospitals. He had not visited Harvard, Philadelphia or Baltimore, but from his knowledge of the course demanded and the work published, he recorded his belief that without doubt Johns Hopkins is at the present moment the foremost medical school upon either Continent. In this judgment we believe him to be absolutely correct. He himself, is head of the medical faculty of that University whose medical degrees are accounted the best in Great Britain, but in striving to improve the training and equipment in Cambridge, he has found himself constantly hampered. In consequence of petty local rivalries, the hospital there does not freely aid the university and, what is more, wealthy as is the Old Country, scarce any of that wealth is at the present time dedicated to medical education. Thus, without the means, it would appear to him as though higher medical education in Great Britain must lag behind and that America with the present enthusiasm for encouraging research and for building hospitals and clinical laboratories in the various cities, each better than the last, must become the great home for medicine, Great Britain, the mother country, being left in the background; not because the men there have a lower standard of education, for still the English and Scotch medical student begins his medical studies with a far better preparatory training than does even the better class American student, but because adequate conveniences for research and adequate endowment for the pursuit of higher medicine are largely wanting.

While admitting this much, and admitting it freely, if somewhat sadly, Professor Allbutt did well to impress upon his hearers the enormous value of tradition. The very rapidity of the advance on this side makes for a too complete confidence in the superiority of men and things present and for a forgetfulness of the heavy debt we owe to our forebears. If medical education here be forging ahead, we must not forget that the first stimulus to such came from those trained in the hospitals of Europe and more especially of the old country. America thus owes a constant debt to London and Edinburgh, while, going further back, modern medicine is founded on the labours of long generations, from Hippocrates onwards. We now are not beginning to build from the rock bottom, but stand, as it were, and build upon a pyramid, incomplete, it is true, but one whose base

was begun to be laid down in the far distant centuries. That being the case, the value of our building depends largely upon the nature of this foundation; we can only build aright by keeping in mind the nature of what we build upon. It is before all necessary for us to keep this warning in mind.

On the other hand we cannot but recognize that there exists the contrary danger of depending too much upon tradition and of being too well satisfied with it. The danger of old institutions is that the tradition of what has been accomplished in the past and the proper pride in that tradition counteracts and nullifies the enthusiasm of those anxious to progress. It is the old story. And if now the progressive party in our relatively new institutions upon this continent has everything in its hands, it is possible, nay, probable, that in thirty years or less, the individuals who now form that party will be apt to rest upon their laurels and to think that the universities have accomplished all that mortal man can accomplish. Thus as local tradition becomes strong the stimulus to progress is weakened.

We now are upon the advancing wave; with Cambridge, Edinburgh and other British centres, after the strenuous efforts of the last two decades to introduce better methods and higher teaching, 'tradition' tends to render the progress more difficult. If this be so, we can but hope that the recent visits of so many leaders of the profession to this country, will stir up the Old Country to emulate whatever is best in medical conditions upon this side, and our feeling of patriotism leads us to hope that the wealthy and public-spirited throughout Great Britain, will be roused to afford more aid to the education of the medical man.

THE NATIONAL LEAGUE FOR THE SUPPRESSION OF TUBERCLE.

Apropos of what we have just stated concerning the falling behind in the Old Country in the matter of higher medicine, we may remark that it is even more true that in the matter of Hygiene, Great Britain has allowed itself to fall behind. For a century or more it had taken the noble lead in almost every branch of preventive medicine, in municipal legislation, in factory legislation, in notification of disease, in water supply, in drainage and the disposal of excreta; indeed in everything which tended to improve the health of the masses. It would be difficult to name a single department of this wide subject of hygiene (if bacteriology be not included therein) in which the Old Country has not taken the initiative in introducing practical and useful legislation. But now, alas! during the last few years, it has been

resting on its oars, while other nations taking advantage of what it accomplished as pioneer, have come up quietly, level with it, and now are shooting ahead. Nay, more, in these as in almost all other human affairs, to rest is surely to begin to drift backwards. There can be no more telling illustration of such backward progress than the recent lamentable withdrawal of compulsory vaccination in the country that gave birth to Jenner.

If by inducing the British Medical Association to meet in Montreal, we accomplished a great service for Canada, it is probable that also, by inviting Dr. Hermann Biggs, of New York, to give the address during the meeting, upon the work of the Board of Health of the City of New York, we accomplished a yet greater service for Great Britain, for, if it be allowed to medical men to use such a metaphor, we thereby turned outwards eyes that had been a little too much occupied in self-complacent introspection.

To many of us in this country and in the United States that address may not have seemed so very novel; we were already acquainted with the remarkable work accomplished in New York by Dr. Biggs and his colleagues. Our leading cities had already copied not a few of the New York innovations, and in some instances the municipal and provincial Boards of Health here and elsewhere had taken the first steps in one or other direction; New York had but followed and it may be, improved. But that address, published in the "*Times*" and in the two leading organs of our profession in London, and circulated thus through the length and breadth of Great Britain came as a revelation to a vast majority of practitioners and those interested in Public Health. The tentative measures taken in Manchester, Liverpool, Leicester and other centres to establish bacteriological laboratories and to control the spread of tuberculosis, diphtheria, typhoid, and so on, as also the municipal legislation bearing upon infectious disease and its prevention, were found to be far behind what New York and other American centres had obtained years ago. It was interesting perhaps for the press to dwell upon the fact that a democracy could be more autocratic than the most autocratic of European communities, that New York could through a single department of its notoriously lax city government, place greater restraints, (however beneficial those might be) upon the freedom of the "freest people in the world" than even Petersburg or Berlin dared venture to place upon citizens accustomed to centuries of bureaucracy. The paradox was interesting, but the fact remained. New York was far in advance of London or any British city in its protective sanitary regulations. The elaborate care taken years ago to establish in Great

Britain a central body (the Local Government Board) to deal with matters of Hygiene was found to have arrested new and healthy developments in preventive medicine and the impression made by the discovery of this fact has been deep and lasting.

Already through the instrumentality of one of the Presidents of Sections at the Montreal Meeting, Mr. Malcom Morris, practical steps are being taken in one direction at least, to bring not only London but the whole of Great Britain, equal to, if not ahead of, New York.

A few months ago, the energetic editor of the "*Practitioner*" published a very remarkable 'Tubercu'osis' number of his Journal, which deservedly attracted great attention; to this Dr. Hermann Biggs contributed an article, dealing even more fully with the New York methods in combatting tuberculosis than did his Montreal address. In the August number of the "*Fortnightly*" again, Mr. Morris has quoted largely from the leaflets issued to the general public by the New York authorities. Now with Sir Wm. Broadbent as President, he has organized a National League for the suppression of Tubercle which has gained the cordial support of the Royal College of Physicians and Surgeons, of the medical profession in general and of those high in the land.

As it is pointed out in the last number of the *Medical Chronicle* by Dr. Arthur Ransome, an English pioneer in matters relating to the prevention of tuberculosis, who for long years has been almost a '*vox clamans in deserto*' this league will have to obtain a passage of legislation for Great Britain similar to that in force in New York. There must be complete census of all persons suffering from the malady; notification must be compulsory; the New York methods of obtaining and preserving data must be employed; a census of tuberculous cattle must be obtained and all cattle be tested with tuberculin, and measures must be laid down to prevent infection. The league will also distribute leaflets concerning the disease, will establish sanatoria for the poor¹ and it is suggested that a corps of peripatetic lecturers be organized to deliver simple 'health lectures' to the people.

In the matter of municipal health laboratories as already indicated, the old country is far behind. For the last two or three years men like Boyce in Liverpool, and Délépine in Manchester, have done much to interest their respective communities in the matter, but the support obtained from the municipalities has been utterly inadequate. Now, at last, when every leading American city has had its well paid bac-

¹ While Dr. Trudeau's Adirondack Sanitarium has been established for the last fourteen years, it is only within the last two years that the first proper cottage sanatorium has been established in England under the direction of Dr. Burton-Fanning, of Norwich, at Cromer; now others are rapidly being organised.

teriological staff for some years, London is slowly moving and there is an attempt to establish there an adequate bacteriological laboratory for diagnostic purposes. Altogether, those "at home" are beginning to see that in this as in commercial matters, other nations have of late taken greater strides and that it is necessary for them to bestir themselves into activity if they are to maintain the old supremacy which we so much honour.

THE PLEBISCITE.

The vote on the question of prohibition has been taken and the daily press has announced the result. Judging from what is being said as to this result, one is forced to conclude that the interpretation thereof depends somewhat upon the bias of the interpreter. The vote proves very clearly that the question of prohibition easily runs into politics, and this raises another fundamental question, viz., what are rights and powers of a majority in a democratic community. Has the majority a right to force its opinion upon the minority? Has the majority the right to assume paternal power and to arrogate to itself the duties and privileges of an absolute monarch? Certainly this is not the principle underlying democracy, but rather that it is better for the individual to be responsible for his own conduct and acts than to be controlled by some one else. Under a democratic form of government the individual is free to do as he pleases, so long as he does no injury to his neighbours. He may live plainly or sumptuously. He may eat meat or confine himself to a vegetable diet. He may dress as he pleases, but may not go upon the street naked. He may live in a palace or in a shanty, but he may not make his residence a hot-bed of disease and a danger to the community. According to Spencer the government should protect one community from another and one individual from another, and it should enforce contract, but the government has not the right to compel all men to eat the same food or dress after the same fashion-plate.

The world has sufficient evidence that individuals and communities may be moderate drinkers without injuring themselves, mentally or physically, or doing their neighbours any harm, and it is a vital question whether the majority have the right to prohibit the moderate drinker unless it can show that his moderate drinking injures his neighbours. The teetotaler must not assume that the moderate drinker has no conscience, and the moderate drinker must not assume that the teetotaler is without conscience. These two classes are found in every community, they must live side by side and the one must respect the wishes and tastes of the other or there will be per-

petual discord. The teetotaler must know that moderate drinking can do him no appreciable harm, and the moderate drinker must know that the drink traffic costs the country an immense sum of money each year in police, courts, and jails. Let these two classes then come together and rationally consider on what grounds they can mutually agree. It is drunkenness that should be stopped, and the handlers of liquors should be made to bear the cost to the community of this traffic. The drunkard should be arrested, and if incurable, he should be confined in a hospital or sanitarium. Any man has a right to go out on the street and talk, but if he uses profane and obscene language he should be arrested and dealt with. The same principle of personal liberty and personal responsibility should be applied to the use of wine. A man has the right to take a glass of wine, if in so doing he does his neighbour no harm, and if he becomes intoxicated and offensive he should be dealt with in a way that will insure his neighbour against the offence being repeated. The majority in a community might belong to one religious persuasion, and believe that all others were on the road to perdition, does that give the majority a right to enforce their religious belief on the minority? If so, then the majority believing that the eating of meat produces bloodthirstyness and war, might enact that no one should eat meat. Such a tenet is absolutely ridiculous. We have outlived such principles, and they can not be applied to moderate drinking any more than they can to eating of meat, or to the tenure of theological opinion. The absurdity of such views is demonstrated by centuries of experience.

What the temperance people can do, and all reasonable moderate drinkers will help them in doing, is to regulate a traffic which is injurious, above all others, to every community where it obtains. Lessen the number of places of sale, prohibit the sale to minors and during hours coincident with the greatest drunkenness, for only in some such reasonable way can people holding such diametrically opposed views live together in the same community in peace and harmony.

THE SEPTEMBER MEETING OF THE PROVINCIAL BOARD.

The regular September Meeting of the Provincial Board of Medicine of the Province of Quebec, was held on September 28th, 1898, in Quebec. Dr. E. P. Lachapelle, President, was in the chair, and the attendance included forty out of the forty-two members.

The minutes of the ordinary meeting of July 6th, last, and of the special meeting of July 13th, were read and adopted.

The Treasurer presented his report which was adopted. It was as follows :

Preamble.

July 12th, 1898, Balance in bank (audited).....	\$7,732 40
July 13th and 14th, Paid by Dr. L. Larue (ex-treasurer).....	270 44
Balance.....	\$7,462 05

Receipts.

August 4th, 1898, Received from Dr. L. Larue balance in bank..	\$7,462 05
License fees	1,100 00
Preliminary examinations.....	970 00
Annual assessments.....	66 00
Balance received from Dr. Brosseau.....	136 00
Dr. Austin, returned.....	50 00
Interest on deposits	6 76
	<u>\$9,790 81</u>

Expenditure.

Governors, meeting fees.....	\$ 60 00
Assessors fees.....	190 00
A. Deom, agent, and to M. Girouard, salary and commission.....	225 00
Notices and printing.....	554 72
Books and binding.....	65 10
Refunds	200 00
Examiners, fees and expenses.....	386 00
Dr. A. P. Brosseau, secretary's fees to July, '98	250 00
Insurance and guarantee, premium for four officials	80 00
Stationery	12 50
Sundries : stamps, cabs, etc.....	11 00
	<u>\$2,034 32</u>
Total receipts.....	\$9,790 81
Total expenses.....	2,034 32

Balance in bank.....\$7,756 49

Besides five shares of the Bank of Montreal quoted approximately at 244, valued at \$488 00 per share.

(Signed)

ALBERT JOBIN,
Treasurer.

A motion was passed congratulating the president upon having received the title of "Chevalier of the Legion of Honour" from the French Government.

The following resolutions were also adopted :

That the president and vice-presidents, each in his own district, should be authorized to administer the oath and give the licence to those who were entitled to it after the adoption of the report of the committee on credentials.

That the president be authorised to place on the frame of the portrait of S. Arnoldi, the first president of this college, now in Laval University, in Quebec—but the property of the college—his name, date of death, and the fact of his being the first president.

The report of the committee on credentials was adopted.

The committee on credentials reported the following graduates to be entitled to the licence of the college :

Euclide Archambault, Jos. Zéphirin Beaumier, Wilfrid Bégin, Chas. F. Boisvert, Théophile D. Boulanger, Gordon Byers, Frederick Burke Carron, Jean Rémi Chrétien, Edouard Cook, Jules Alphonse Dion, John H. Finnie, A. MacKenzie Forbes, Louis Geoffrion, Jos. Ernest Lavois, Louis Leclerc, J. P. Cyrinus Lemieux, Herménégilde Maranda, Frs. Moise Peltier, Gustave Arthur Tachereau, and David Warren.

Drs. Edward William Archibald, William Delaney, and Edgar Turgeon, are to receive their licence they having already fulfilled all the conditions entitling them to it.

The following candidates for the licence, must pass the professional examination : Drs. Roméo Beauchene, Jos. Narcisse Boivin, Napoleon Boucher, Ernest R. Brown, Ernest S. Harding, Thomas Lovitt, and Chs. R. Rouleau.

The following bachelors of arts and letters are entitled to their certificate of admission to study medicine :—Roméo Beauchene, B.L., Jos. Dominique Achille Chouinard, B.L., Jos. E. Bibaud, B.L., William leMessurier Carter, B.A., Désiré Houde, B.L., Wilfrid Labarge, B.L., J. Albert Paquet, B.A., J. W. Leopold Picard, B.L., J. Omer Royer, B.L., L. Dubois, B.L., Paul Emile Rochon, B.A., Edouard Verdon, B.A., Gabriel Brisset, B.A., Joseph Ayotte, B.A.L., Antonio Gauthier, B.L., Hubert Martel, B.L., Arsène Christin, B.L., Azarie Turcotte, B.L., Armand Beauséjour, B.A., Wilfrid Comptois, B.L., D. Omer Choquette, B.L., George Thibault, B.L., Olivier Demers, B.A., Ernest Gagnon, B.L., Jos. L. L. Gagnon, B.L., Jos. Wilfred Collerette, B.L., Hormidas Ethier, B.A., Ernest Rudolf Brown, B.A., and Ernest Stanley Harding, B.A.

Thirteen candidates have presented themselves for the preliminary examination. Four only have been admitted in the section of letters. They are Joseph Dobbin, J. A. Pilon, V. H. Cullen and Victor Painchaud.

Many candidates having paid the fee either for the preliminary examination or for the licence and not having presented themselves for examination, the committee recommends the adoption of the following resolution. *Resolved* : That the president be authorised to submit to the legal advisor of the college the following question : When a candidate for the preliminary examination, the professional examination, or the licence does not present himself for examination, or for the receipt of his licence, is he entitled to a refund of the whole of his fees or merely to half as in the case of failure at the examination ? And that the president shall then act according to the opinion given by the legal advisor of the college.

The report of the committee on professional examinations was then adopted and the examiners named by the president are as follows: The Hon. Dr. D. Marsil, operative surgery and gynæcology; Dr. H. Lafleur, general pathology and chemistry; Dr. McConnell, physiology and normal histology; Dr. A. Demers, medicine; Dr. L. J. A. Simard, ophthalmology, otology and laryngology; Dr. L. Catellier, surgery; Dr. A. Vallée, mental and nervous diseases, legal medicine and toxicology; Dr. L. J. Desroches, hygiene; Dr. L. J. O. Sirois, diseases of children; Dr. L. J. V. Cléroux, materia medica and therapeutics; Dr. C. C. Sewell, obstetrics; Dr. Cotton, anatomy and bacteriology. In the absence of Dr. Sewell, Dr. F. W. Campbell was asked to examine upon obstetrics.

Seven candidates presented themselves for examination on the 27th instant, only one of whom, Dr. Ernest Stanley Harding, passed a satisfactory examination entitling him to the licence.

The following letter from the President of the Pharmaceutical Association of the Province of Quebec was read:

QUEBEC, September, 28th, 1898.

TO THE GOVERNORS OF THE COLLEGE OF PHYSICIANS OF THE PROVINCE
OF QUEBEC.

Gentlemen:

Inasmuch as the sale and use of medicines of which the formula is unknown is increasing considerably from year to year, and inasmuch as in a great number of instances these medicines are injurious to the public health, it is of the utmost importance that the sale of these preparations be controlled by the Government more effectually than it is at present.

We, therefore, earnestly pray the College of Physicians and Surgeons to appoint a committee to study this question and to report on it at the next meeting.

The pharmaceutical chemists would gladly lend their assistance to the committee. The pharmaceutical chemists also trust that they may count on the moral support of the physicians to prevent any legislation tending to amend the present law concerning the sale of drugs before, at any rate, the committee which you may be pleased to appoint has submitted its report. A delegation from the Pharmaceutical Association is at your disposal if you desire to hear its views.

(Signed) R. W. WILLIAMS, President,
Pharmaceutical Association, Province of Quebec.

The delegation being admitted, the President of the College replied that it was the intention of the Board to appoint a committee to study

identical topics and that the two committees might, if need be, agree on joint action.

Dr. Baril gave notice that at the next meeting of the Board he would move "That the Board draw up a Bill in order that the Federal Government may decree:

(I) The abolition of the right of manufacturing, importing and selling in the Dominion of secret remedies under any form whatsoever.

(II) The revision of the list of poisons and substances acting as poisons under certain conditions.

(III) The obligation, for all holders of a trade-mark or of a patent protecting the sale of a remedy containing one or more toxic ingredients, of placing on the package or envelope of such remedy the name and the proportional quantity of each of the ingredients in the said remedy; the sale of such remedies to be subject to regulations established by a medical commission appointed for the purpose by the provincial authorities.

Dr. Marsolais presented a report on the proposed auditing of the books of the former Board. He stated that the auditors appointed on the 13th of July had not been able to prepare a report owing to some of the documents relating to the administration of the former Board not being in the possession of the auditors. One ex-official, Dr. Beausoleil, the former registrar, had refused to hand over his account books, maintaining that these books, with the accompanying vouchers up to the date of the last audit accepted by the then medical board, were his personal property and that he was not bound to give them over to the present board. Dr. Marsolais claimed that the books formed part of the archives of the College of Physicians to whom they indisputably belong and that consequently the College has the right to them.

A resolution was then passed authorising the President in the name of the College to institute against the late registrar, the necessary legal proceedings to compel him to furnish to the College a true and faithful account of his administration of the funds of the College covering the period of time during which he performed the duties of registrar, and authorising him in the name of the College to defend any action which might result from such a procedure either in account of first instance or on any appeal.

A report was also received from Messrs: Rainville, Archanbault and Gervais, dated 23rd August, 1898, in reply to the following question: "Is the College of Physicians and Surgeons of the Province of Quebec bound to respect the lease passed on the 13th of July, 1898, before Labadie, N.P., between the Board of Governors of the College

and one Minier, for the establishment of a library of medical works ? The report states, after reciting the powers of the College, that " The College of Physicians has neither the mission nor the right to establish a public library such as is referred to in Minier's lease passed before Labadie, N.P., and bearing date July 13th, 1898. The late Board of Governors, in adopting the resolution authorising the passing of this lease on the 8th July, 1898, have therefore acted *ultra vires*."

The following resolution was passed : " Whereas the College of Physicians of the College of Quebec is not authorised to make any expenditure of moneys for the maintenance of a medical library, and to wit to maintain the Minier lease : That the president be authorised to repudiate the said lease between the College and Minier either by notarial protest or by action at law, according to the necessity of the case, the College withdrawing from the said lease and having no intention of taking further steps in the matter and refusing to pay the stipulated rent, not having availed themselves of the said lease, and not being desirous of so doing.

The following were named to constitute the " Council of Discipline " : The president and secretary of the district in which the meeting is held, who are members, *ex officio*, and Drs. R. Craik, D. Marsil, A. Vallée and C. C. Sewell.

The following were appointed a committee to formulate a scheme for a change in the mode of voting for the election of governors, and the establishment of elections by districts and by ballot. Dr. Lachapelle, Marsil, Craik, Campbell, Catellier, Pelletier, Cléroux, Desroches and Boulet.

Mr. Honore Gervais was, on motion, appointed legal advisor of the College.

On motion, the registrar was instructed to notify each and every member of the College, at least one month before the 1st July each year, of the amount which he is indebted to the College for annual dues.

An " Executive Committee " consisting of the President, Vice-President for Montreal, and the Registrar, was appointed to settle the question of the library, the salary of the agent, and any other urgent matter concerning administration, such committee to report at the next meeting of the Board,

Mr. Siméon Mondou, of Montreal, was on motion, appointed agent of the College, in the place of Mr. Avila Déom.

It was proposed and resolved that Drs. Lachapelle, Brophy, Campbell, Desroches and Baril, be named a committee to study the question of the sale of secret remedies, patented or not, and to invite

if advisable, the co-operation of the medical boards of the other provinces and the various pharmaceutical associations, such committee to report at the next meeting of the Board, and that the Legislature of this Province be asked, by special request of this Board, not to legislate in the matter of the sale of proprietary remedies until the Federal Government had taken this subject into consideration.

The officials of the College in Montreal were authorised to chose from the following list the assessors for the examinations at the Universities in Montreal for the next three years : Drs. Hon. D. Marsil, Rudolphe Boulet, E. P. Benoit, Triganne (of Somerset). Gauthier, E., Turcot, Joyal, Dubé, J. O. Beaudry, Lalonde, Provost (Sorel), Cléroux, Cotton, Worthington, Quirk Brown, Prendergast, and J. H. Bell.

After dealing with some miscellaneous business, and passing the usual vote of thanks to the University of Laval for the use of its rooms, and to the President, the meeting adjourned.

McGILL MEN DINE.

ANNUAL DINNER OF THE NEW YORK GRADUATE SOCIETY.

NEW YORK, October 25,—The third annual dinner of the New York Graduates Society of McGill University was held to-night at the Hotel Majestic. Some fifty men, who proudly acknowledge allegiance to the famous Canadian seat of learning, were gathered together, and proved by word and deed that their love for the mother country was still very strong. The menu card contained the names of such dishes as "Filet of sole a la Kitchener," and "Punch a la Fashoda." The decorations consisted chiefly of the Union Jack and Stars and Stripes entwined.

The very first toast on the card was "The President" and was responded to with good will by the men of McGill, who rendered "My Country 'Tis of Thee," with fervor ; the second toast, "The Queen," provoked the greatest amount of enthusiasm. Then came a toast to "The Governor-General of Canada," after which the Rev. Edward Krans, President of the Graduates' Society, toasted the "Alma Mater." Dr. Krans also spoke to the toast "Anglo-Saxon Unity," and "Unity and Expansion." Among the other toasts and speakers were : "The University as a Factor in Anglo-Saxon Accord," the Rev. Dr. Morgan ; "Theology and Anglo-Saxon Unity and Expansion," the Rev. Dr. C. Body ; "The Canadian Society," Dr. Wolfred Nelson ; "Sister Universities," A. Percy Bennett, Consul for Great Britain in this city ; "Woman's Destiny and Mission as Affected by the University," the Rev. Dr. Dacosta, and "Our Guests," Dr. George A. Shrady. These officers of the Society were elected for the ensuing year :

President, the Rev. Dr. D. E. Krans ; First Vice-President, Dr. Wolfred Nelson ; Second Vice-President, Dr. James Albert Meek ; Treasurer, H. N. Vineberg ; Secretary, Dr. W. Ferguson ; Executive Committee, Rev. Dr. J. J. Rowanspong, Dr. George Becket and James A. Stevenson.

THE NATHAN LEWIS HATFIELD PRIZE.

The First Nathan Lewis Hatfield Prize for Original Research in Medicine has been granted under the following conditions :

The College of Physicians of Philadelphia announces through its Committee that the sum of Five Hundred Dollars will be awarded to the author of the best essay in competition for the above prize.

Subject : " A Pathological and Clinical Study of the Thymus Gland and its Relations."

Essays must be submitted on or before January first, 1900.

Each essay must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device and containing the name and address of the author. No envelope will be opened except that which accompanies the successful essay.

The Committee will return the unsuccessful essays if reclaimed by their respective writers or their agents within one year.

The Committee reserve the right not to make an award if no essay submitted is considered worthy of the prize.

The treatment of the subject must, in accordance with the conditions of the Trust, embody original observations or researches or original deductions.

The competition shall be open to members of the medical profession and men of science in the United States.

The original of the successful essay shall become the property of the College of Physicians.

The Trustees shall have full control of the publication of the memorial essay. It shall be published in the Transactions of the College, and also when expedient as a separate issue.

GESTA MEDICORUM.

" QUICQUID AGUNT MEDICI NOSTRI FARRAGO LIBELLI."

Owing to the recent political troubles in Bohemia, Prof. von Rosthorn, Professor of Gynæcology in the German University of Prague, has resigned to accept a position in Gratz.

Dr. Michael Foster, Professor of Physiology in Cambridge Univer-

sity, has been elected to the Presidency of the British Association for the Advancement of Science in succession to Sir Wm. Crookes.

Virchow's visit to England is an event of more than common interest. Invited over to deliver the second Huxley Lecture at the Charing Cross Hospital, he accepted with readiness and pleasure, although burdened with pressing work at home. The lecture is published in the *Philadelphia Medical Journal*, of the 8th of October, and should be read by every medical practitioner and student.

The Undergraduate's Medical Society of McGill University has elected the following officers:—Hon. President Prof. Geo. E. Armstrong, M.D.; President, F. T. Tooke, B.A., '99; Vice-President, T. E. Craig, '99; Secretary, J. E. M. Carnwath, '00; Treasurer, F. S. Porter, '00; Reporter, W. A. Wilkins, '99; Pathologist, A. H. Gordon, '99. Councilmen, Dr. Laffeur, Dr. Garrow, A. C. P. Howard, B.A., '01.

It is reported that the micro-organism of rabies has been discovered, Memmo (*Centr. b. f. Bakt. Bd.* xxi. 17-18) describes a blastomycet which he could cultivate and which when he inoculated it into dogs, rodents, or birds, produced the typical disease. It grew best on glucose-agar slightly acidulated with tartaric acid. The organism is found in the cerebro-spinal fluid, brain, cord, saliva, and parotid gland.

Dr. Hamilton K. Wright, the Medical Registrar of the Royal Victoria Hospital, who was last year appointed Exhibitioner to the British Medical Association, and John Lucas Walker Exhibitioner of the University of Cambridge read at the meeting of the International Physiological Congress at Cambridge, the results of his investigations upon the action of chloroform and ether upon the cells of the cortex and will this Autumn give a series of demonstrations at Cambridge upon the pathology of the nervous system.

The American Electro-Therapeutical Association held its 8th Annual Meeting in Buffalo, Sept. 13th to 15th, Dr. C. R. Dickson, Toronto, in the chair. Many interesting papers were read. Those contributed by Canadians were:

"Cases of Lightning-Stroke causing Diseases of the Eye," G. Sterling Ryerson, Toronto. "Electricity in the Treatment of Goitre," C. R. Dickson, Toronto. "Surgical Uses of Electricity," C. R. Dickson, Toronto. "Electricity in the Treatment of Certain Diseases of the Eye," G. H. Burnham, Toronto. The Association meets next year in Washington.

A very instructive paper on 172 cases of Diabetes treated in the Massachusetts General Hospital, during the past 64 years, was read by Drs. Fitz and Joslin before the recent meeting of the American

Medical Association. Judging from the examination of these records it would appear that we have really made no advance in lessening the mortality from this disease. Much has been done, however, in clearing up the nature and course of the disease. Previous to 1851, the presence of sugar in the urine was determined by tasting it. An antidiabetic diet was first introduced about 1840. From then on to a comparatively recent period, it was the custom to strictly limit not only the sugar making foods, but also all fatty substances. The practice of the present day is to give fatty substances, as they spare the albuminous tissues. At the present time it is not considered advisable to push antidiabetic regimes to the extreme. Most diabetics can assimilate small quantities of sugar. It is a rational therapeutics to allow as much sugar to be taken as can be properly assimilated. The quantity be it ever so small will tend to promote healthy nutrition.

The twenty-sixth annual meeting of the American Public Health Association began on Tuesday, Sept. 27th, in the Railway Committee Room of the Parliament Buildings, Ottawa. Addresses of welcome were delivered by Mayor Bingham, Dr. Sweetland, of the local committee, and Sir James Grant, M.D. These were responded to by the President, Dr. Lindsley, Dr. B. Lee, Philadelphia, and others.

The Hon. Sydney Fisher, Minister of Agriculture, was present at the opening, and delivered an address. The sessions extended over three days, closing on the 30th.

The first subject discussed was "The Disposal of Sewage," by Dr. R. W. Bucke, London, Ont., in which the utilization of sewage for fertilization, as adopted at the asylum in London was strongly urged. The sewage was diluted, well mixed and spread on the land. This yielded a remarkable crop of wholesome vegetables and cereals absolutely free from any taint. Dr. Bucke concluded that this was nature's way of disposing of sewage. His observations were endorsed by Dr. Bryce, the provincial medical health officer.

This view was opposed by Mr. Thomas McFarlane, Chief Analyst of the Inland Revenue Department. Mr. McFarlane said that diluted sewage has no value as manure. He gave the results of attempts in the Old World to utilize sewage for fertilization, In London, England, 17,000 tons of sludge prepared for fertilization is made daily from the sewage. Anybody who wants it can have it gratis; it finds no customers, however, and is carried fifty miles to sea and there dumped.

A couple of suburbs of London have tried sewage farms, but propose to abandon them as soon as they can get connection with the London sewage system. Mr. McFarlane gave particulars of various

experiments in the utilization of sewage for fertilization in England and Europe, none of which have proven financial successes.

Filtration through coke was advocated by Mr. C. G. Horetzky; this, he maintained removed all organic waste. A million gallons of sewage could be strained, he estimated, at an expenditure of \$5.43 on coke. The coke was then burned and its value as fuel was unimpaired. The subject was further elucidated by a paper on the filtration of sewage by Captain W. F. Vanbuskirk, of Stratford, Ont.

Mrs. Ellen H. Richards, of the Boston Institute of Technology, contributed a paper on the urgent need of sanitary education in the public schools. Mrs. Richards said it was most apparent that the average American citizen has not accepted the teaching of sanitary science as a part of his creed. The remedy for this ignorance is to be found in securing the correct teaching of the elements of public hygiene in the public schools of the country. The diseases among American soldiers in the late war were caused, she claimed, by culpable ignorance among the officers. Mrs. Richards advocated the appointment of a committee to prepare a primer which shall contain the essential principles of preventive medicine, and which can be as universally taught as is first aid to the injured. The recommendation, however, did not meet with favor as it was considered that there are plenty of text books in the schools already, in fact one delegate held there were far too many.

Mr. William Paul Gerhard, C. E., New York City, contributed an interesting paper on "Theatre Sanitation," in which he criticised severely the unsanitary condition of theatres.

Dr. P. H. Bryce, Toronto, read the report of the committee on "The Cause and Prevention of Infectious Diseases." He announced the general conclusion that until regular medical supervision of the public schools becomes as recognized part of municipal health work, no great advance over present *laissez faire* methods are to be expected. In cases of diphtheria, the most effective preventative of the spread of the disease he said was the prompt measures for the detection and isolation of the afflicted person. He advocated cottage hospitals for the treatment of the patients.

Dr. Ernest Wende, Health Officer, Buffalo, N.Y., read a paper on "The Cause and Prevention of Infant Mortality," in which he stated that since the long-tubed nursing bottle had been prohibited in Buffalo, the infant mortality had diminished one-half. A resolution was passed placing on record the Association's conviction as to the danger of the long-tubed nursing bottle.

Among other contributions was a discussion on tuberculosis by Dr.

Irving A. Watson, New Hampshire, Drs. Sir James Grant, Bryce, and Gibson; (Iowa). Other papers were: "On the Treatment of Incubates," A. M. Roseburgh, Toronto; "Yellow Fever," Eduardo Liceaga, Mexico; "An Epidemic of Typhoid Fever (Paterson)," J. L. Leal, New Jersey; "What Constitutes an Epidemic," Benj. Lee, Philadelphia; "The Farm-well," F. T. Shutt; "The Chlorine Matter in Well Water," A. McGill; "Typhoid and Dysenteric Diseases," Veeder, Lyons, N.Y.; "The Fly as a Cause of Disease," R. Ramirez, Mexico; "Compulsory Vaccination," M. Septien Queretaro, Mexico; "Leprosy in Minnesota and the North-West," H. M. Bracken, Minn.

Among the resolutions adopted were the following: "That the Governments of the United States, Canada and Mexico, be requested to make the Bertillon classification the basis of the mortality statistics of the censuses of 1900 and 1901. The committee also approved of a plan of procedure relative to the periodical revision of the Bertillon classification of causes of death as submitted by the committee of demography and statistics in their sanitary relation. The committee also recommended that President Lindsley appoint one representative each from Mexico, United States and Canada to act jointly with each other and with similar commissioners from other countries in the revision of the Bertillon classification of causes of death; and that said commission shall be authorized to adopt such necessary rules in conjunction with other countries associated in the work of revision as shall be necessary for its successful conduct. They shall report progress to the association at each annual meeting and shall be continued until the work of revision is completed and their successors selected for the next periodical revision."

"That a committee be appointed to endeavour to bring about cooperation between sanitary laboratories and to have them send reports of the progress of their work to the American Public Health Association."

"A recommendation to the Government of the United States to establish Leper-homes similar to those in Canada and Mexico."

The Association meets next year in Minneapolis and the following officers were elected:—President, Dr. George H. Rohe, Baltimore; First Vice-President, Dr. Henry Mitchell, of Asbury Park, N.J.; Second Vice-President, Dr. Jesus Monjaras, San Luis Potosi, Mexico; Secretary, Dr. C. O. Probst, Columbus, Ohio; Treasurer, Dr. Henry D. Halton, Brattleboro, Vt.; Executive Committee, Prof. F. C. Robinson, Brunswick, Maine; Dr. G. Mendezabel, Mexico; Dr. P. H. Bryce, Toronto; Dr. H. M. Bracken, Minneapolis; Dr. Irving A. Watson, Concord, N. H.; Dr. F. W. Wright, New Haven, Conn.