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THE
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Original Communications.

LEUCOCYTHÆMIA.

BY J. E. GRAHAM, M.D., TORONTO,

Adjunct Lecturer on Medicine, and Lecturer on Clinical Medicine and Dermatology, Toronto School of Medicine. (Read before the Toronto Medical Society, on June 30th, 1881.)

The histories of the following cases of leucocythæmia are written in extenso, partly on account of the rarity of the disease and partly on account of some interesting pathological conditions which were present. The first case is one of the lymphatic variety, and the second belongs to the splenic form of this disease.

CASE I.—A. P., æt 26. Admitted to the Toronto General Hospital, November 15th, 1880. He has been employed from boyhood as a painter.

Family History.—Father healthy. His mother has been in delicate health for some years. She frequently complains of severe pains in the region of the stomach, which come in paroxysms. One brother suffers from bronchitic asthma. The other members of the family are healthy.

History of Previous Condition.—Patient has suffered for some years past from occasional attacks of severe colic, which were always considered to be the result of lead poisoning. His wife states that about two weeks before the commencement of his present illness he took a cold bath when in a heated, perspiring condition.

He is married and has a family of three children. They are all healthy.

The present illness came on three months ago. He complained first of most violent

pains in both hips, running down the thighs to the legs. The pains afterwards extended to the arms. For the first six weeks they were almost always present. Occasionally, however, they became more severe, and would be of the most excruciating character, causing the patient to shout out, roll about on the bed, or on the floor. Paroxysms would sometimes last for hours, and it would require large doses of morphia to relieve them. For the last two weeks patient has been free from pain, but during that time he has been troubled with a sore mouth, and has gradually lost colour. For some days past he has noticed swelling of the legs and feet. Previous to his admission, he had been under the care of Dr. A. H. Wright, from whom much of the information given has been obtained.

Present Condition.—The most striking sign present is the patient's appearance. His countenance is of a pale yellow colour, and his cheeks are flabby. The now existing anæmic condition presents the strongest contrast to the previous ruddy look for which he was remarkable when in health. The hair, which is very short, has not grown to any extent during the last four months, it has also changed in colour. The tongue is slightly coated. The gums are swollen and present a pale, rough, granular appearance, and exhibit ulceration in places. They show a strong tendency to bleed. Conjunctivæ are pale. The appetite is poor and the bowels are constipated.

Pulse, 108; resp., 20; temp., 102. The urine is normal in quantity, pale and thick; specific gravity 1020, loaded with uric acid and urates. There is no albumen or sugar. Urea, 23 parts in a thousand.

The lymphatic glands in the neck, axillæ groins and elbows are enlarged. There is swelling and œdema of the legs.

Physical Examination of the Chest.—The respiratory sounds are normal, with the exception of a prolonged expiratory murmur heard over the lower part of the left lung posteriorly. Nothing decidedly abnormal about the heart sounds can be discovered. A hæmic murmur is sometimes heard. The abdomen, is very much distended, especially in the upper part. Over the stomach there are slight extravasations of blood in the integument, producing discolourations which do not disappear on pressure. The area of hepatic dullness is increased, this is particularly the case over the right lobe. There is a very marked aortic bruit heard most distinctly a little to the left and above the umbilicus.

Blood.—A careful examination was made with the microscope. There was a great increase in the white corpuscles and proportional decrease in the red. The proportion was about one to twelve. Not having a hæmacytometer, the corpuscles were not counted.

There is a failure of the eyesight. The hearing is good.

Treatment.—Iron, quinine, and nux vomica were given, also pills of aloes and iron when required.

A lotion of borax and chlorate of potash was ordered for the mouth.

Tuesday, November 16th.—Morning, pulse, 108; resp., 22; temp., 100. Noon, pulse, 108; resp., 26; temp., 100½. Evening, pulse, 100; resp., 24; temp., 101.

Wednesday, November 17th.—Morning, pulse, 100; resp., 22; temp., 99. Noon, pulse, 108; resp., 24; temp., 99. Evening pulse, 112; resp., 24; temp., 101.

Thursday, November 18th.—Morning, pulse, 110; resp., 24; temp., 98½. Evening, pulse, 120; resp., 30; temp., 101½.

Examined the blood with microscope. 40 to 70 white corpuscles were found in the field of No. 7. ob. Hartnack.

Friday, November 19th.—Morning, pulse, 120; resp., 24; temp., 101½. Evening, pulse, 125; resp., 26; temp., 102.

The patient has become perceptibly weaker since he came into the hospital and complains of dyspnœa on the slightest exertion.

Saturday, November 20th.—Morning, pulse, 112; resp., 28; temp., 99½. Evening, pulse, 120; resp., 28; temp., 102.

To-day he had a severe attack of pain in the region of the stomach, followed by vomiting. He complains of palpitation. The bones of the hands and arms are especially tender. There is more or less hæmorrhage from the gums. He complains of sleeplessness. His hearing has become somewhat defective. The blood was very carefully examined to-day. Several counts were made. There were about 200 white to 800 red in the field of a No. 8 objective Hartnack.

Sunday, November 21.—Patient had another severe attack of pain to-day, followed by vomiting.

Morning, pulse, 125; resp., 30; temp., 103. Evening, pulse, 120; resp., 30; temp., 100½.

Monday, November 22nd.—Patient remained in bed most of the day. Palpitation and dyspnœa are more marked. The vibices over the chest and abdomen are more prominent. He complains of great thirst and anorexia. Moist rales are heard over the left lung, posteriorly. He complains of a dry, hacking cough. His hearing is somewhat better, but his eyesight is still very poor. He is not able to distinguish objects at a distance.

On examination of the blood we found that the white corpuscles were not so numerous. One white to twenty red.

Morning, pulse, 120; resp., 32; temp., 101½. Evening, pulse, 124; resp., 35; temp., 102.

Ordered to-day a stimulant expectorant mixture.

Tuesday, November 23rd.—Pulse, 121; resp. 36; temp., 100¾. Patient left the hospital. He was in much the same condition as when the last note was made.

Wednesday, November 24th.—Saw the patient at his own home to-day. He appears somewhat better. Pulse, 118; resp., 26; temp., 101. Noticed tenderness and pain over the region of the spleen. The area of hepatic dullness has increased. The action of the heart is laboured. Made a microscopical examination

of blood with much the same result as before. Noticed that the white corpuscles varied in size. Some were large, larger than ordinary, others again were normal in size while those of a third variety were about the size of red corpuscles. There were also microcytes present.

For the last day or two patient has complained of severe pain in the stomach.

Thursday, November 25th.—Morning, pulse, 120; resp., 48; temp., 100. He slept better than usual last night. Breathing is quick and shallow. He still feels pain over the stomach and also in the left side.

Evening, pulse, 120; resp., 36; temp., 100. Patient has vomited at intervals during the day. He had a very good sleep during the afternoon.

Friday, November 27th.—Morning, pulse, 120; resp., 42; temp., 99.5; vomiting continues at intervals. Breathing laboured. Patient complains of extreme weakness. The gums are not so swollen or spongy as formerly. They still continue to bleed occasionally. The tenderness over the hepatic region is not so great, but he complains of great distress in the lower part of the left chest. Ordered pills of morphia and hyoscyam to relieve the pain.

Evening, pulse, 126; resp., 36; temp., 100. Patient much weaker. Vomiting not so severe.

November 26th, morning, 1.—Pulse, 126; resp., 36; temp., 100. He slept moderately well last night. He still complains of severe pain and distress in lower part of left chest.

Evening, 5 p.m.—Pulse, 144; resp., 51; temp., 99. Patient was moderately comfortable until about noon, when he was seized with spasmodic dyspnoea. During the afternoon he had three or four violent spasms accompanied by pain over the epigastric region. When I saw him he had just recovered from one. Pulse exceedingly feeble.

8 p.m.—Patient is suffering from most intense dyspnoea.

9 p.m.—Dr. Reeve examined his eyes with the ophthalmoscope. Owing to the great weakness of the patient the examination could not be made satisfactorily. He found retinitis

with slight extravasations. The blood corpuscles were again counted. There was an immense number of white, and a great diminution of red. From several counts made with a No. 7 ob. Hartnack we found on an average 500 to 300 white. In some fields the white exceeded the red in number.

At 11.30 p.m., patient died. A short time before his death oxygen gas was administered with the object of allaying to some extent the severe dyspnoea.

Autopsy 14 hours after death. Body well nourished. Legs and feet œdematous. On opening the chest and abdomen serous fluid flowed from the cellular tissue. Ecchymotic spots were found on the surface of the liver and on the surface of the right lung, corresponding in situation with the purpuric spots previously described.

Heart enlarged, weight 14 oz. The surface presents a pinkish appearance. In the right ventricle a considerable quantity of partly coagulated blood was found. There were no valvular lesions.

Lungs.—The upper part of the left lung was apparently consolidated. This condition arose, to a great extent from œdema. The lower lobe of the same lung presented a remarkably pale appearance, and was more or less solidified. The part was to a great extent devoid of hæmagine as though the circulation had been obstructed in the artery supplying it. The surface was mottled by ecchymotic spots. There were pleuritic adhesions existing between the two lobes. Small lymphoid deposits were found in parts of the diseased lung. Other portions presented the appearance of catarrhal pneumonia.

The right lung was œdematous throughout. The anterior surface was mottled by ecchymotic spots.

Liver enlarged, weight 4lbs. 7oz. It was so firm as to resemble cirrhosis, and rather pale in colour. Microscopical examination demonstrated the presence of lymphoid deposits in parts of the organ. These deposits existed principally in the outer margin of the lobules, but they were also found near the centre. A more detailed description of the morbid anatomy will be found further on.

Spleen, weight 5oz. Firm and œdematous, ecchymotic spots on the surface. On microscopical examination, no marked pathological changes were found.

The mesenteric retroperitoneal glands were much enlarged, and a good deal of inflammatory thickening was found around them. The abdominal aorta was bound down by adhesions the result of inflammatory action in the neighbourhood of the pancreas and mesenteric glands. This construction was most probably the cause of the bruit heard during life. The lymphatic glands in other parts of the body were enlarged.

Kidneys, 7 oz. each. They were pale and firm. Capsule easily removed; ecchymotic spots were found on the surface of both.

Leucocythæmia in any form is not often met with, and the purely lymphatic variety occurs less frequently than the splenic. The present case appears to belong to the former class. The name lymphatic leucocythæmia is preferable in this case to Hodgkin's disease, as the increase of white corpuscles was one of the most prominent features.

There are a few interesting points in the clinical history. It is doubtful whether the spasms from which the patient suffered some years before his death, and which were diagnosed as lead colic, were not really produced by some inflammatory action in the region of the mesenteric and retroperitoneal glands. The patient himself could not be persuaded that they were from lead poisoning, as he said they were as violent and occurred as often when he was not exposed, as when he worked at his trade. If these spasms were really early symptoms of the disease, the duration would be at least six years.

The attacks of severe pain which marked the outset of the disease could not be accounted for. The pains in the thigh were excruciating and often continued for hours. They were put down at the time to rheumatism, although no swelling of the parts affected could be discovered. Reference will be made to this symptom further on. Another peculiar feature was the interference with the growth of the hair, during the last few months of his life. It not only did not grow, but also became changed in colour, and was dry and brittle. This

circumstance was no doubt due in part to the want of oxygen, as the oxygen carrying the red corpuscles were very much diminished in numbers. This, however, does not account for the hair suffering to a greater extent than the other tissues of the body. An examination of the scalp was made by the microscope, but no pathological changes were discovered. There was no general emaciation up to the last week.

One does not often meet with a case of leucocythæmia of the purely lymphatic variety such as this was, in which the white corpuscles were so numerous as compared with the red. In the count shortly made before death the white were to the red as three to five, while at the same time there was little or no enlargement of the spleen. It must be remembered, however, that the greatest number of the white corpuscles were of the smaller variety.

During the winter session I had also the advantage of observing a case of the splenic form of leucocythæmia. The history is as follows:—

W. T., æt. 57, printer and farmer. Admitted to the Hospital March 1st. The greater part of his life was spent in London, England. He came out to Canada about fourteen years ago, and since that time he has resided in Muskoka, having taken up a farm in the Free Grant District. He was in the habit of spending the winter in Parry Sound, working at his trade. When about twenty years of age he suffered from a slight attack of gonorrhœa. He has been for many years subject to attacks of diarrhœa, coming on without any apparent cause. He has also been subject to boils. With these exceptions he has enjoyed fair health up to the commencement of the present disease. He has never suffered from ague, and the neighbourhood in which he has lived for the last fourteen years is absolutely free from malaria.

Although the patient has had no severe illness, he does not appear to have been a strong man. He states that he was very much overworked when he served his apprenticeship in London. About a year ago he began to complain of hæmorrhoids. Frequent losses of blood from the bowels weakened him very much. About six months ago he noticed a swelling in

the left side, which has increased in size since that time.

Family History.—His father and mother are both living; father eighty-one, and mother seventy-six years of age. His father suffered from ague when he was a young man. His grandfather, on his mother's side, died in his ninetieth year. There were twelve children in his father's family, four of whom are dead. One died during infancy, another from some prevailing epidemic. A brother died in India. Another brother died when about twenty years of age, from what appears to have been a large lumbar abscess.

Present Condition.—Patient is pale anæmic and considerably emaciated. He is able to walk across the ward and to sit up most of the day. He says he is stronger now than he was three months ago. He is of a nervous temperament, but sleeps well. His breathing is somewhat accelerated. No signs of disease of the lungs could be made out on physical examination. The respiratory murmur is slightly prolonged over the right apex. The pulse is frequent. Number of white corpuscles largely increased, and the number of red very much diminished. One white to fifteen red. The area of cardiac impulse is somewhat increased. A systolic bruit is heard at the base, it is most probably of a hæmic character. A venous hum is heard over the veins of the neck. His appetite is moderately good. He suffers from frequent attacks of diarrhœa. The area of hepatic dullness is markedly increased. On the left side of the abdomen there exists a large, well-defined tumour. From the shape and position of the swelling it is, in all probability, an enlarged spleen. The splenic dullness extends from above downwards at the side from the sixth to some distance below the twelfth rib. The lower margin almost touches the crest of the ilium at a point about two inches behind the anterior process. An idea of the size of the organ may be obtained from the accompanying diagram.

The kidneys appear to be in a healthy condition. The urine contains an excess of uric acid. The following is a record of the pulse, temperature, and respiration, taken for several successive days:—

	Pulse.	Temp.	Resp.
March 3rd.—	108	101½	26
“ 4th.—	90	98½	26
“ 5th.—	96	99	24
“ 6th.—	90	98	27
“ 7th.—	90	98½	21

March 8th,—From a count made of corpuscles there was one white to fifteen red. The blood corpuscles in a cubic millimetre: Red 2,695,000; white 24,000.

March 10th. The patient is somewhat better. Proportion of white to red corpuscles, one to eight.

March 16th. The patient is weaker again. Has lately been troubled with nose-bleeding and occasional attacks of diarrhœa. For the first ten days after admission, iron and quinine were given. He is now taking chaulmoogra oil. A liberal diet was ordered.

March 15th. Epistaxis was quite free last night. There was some trouble in stopping it.

June 2nd. Since the last note was made there has been very little change in the patient's condition. The blood corpuscles have been counted several times by Mr. Fletcher. The results will be given in detail. The patient took the chaulmoogra oil for about a month with no beneficial effect. He had to give it up on account of the nausea which it produced. More benefit was derived from iron tonics, etc. He has had the most liberal diet. I do not think there is any improvement since he came into the hospital. On the other hand I do not think he is any worse.

This is a very marked case of leucocythæmia of the splenic variety. There is very little enlargement. The histories of these two cases give one a very fair idea of the two principal forms of the disease: the lymphatic as represented by Case I., and the splenic as represented by Case II. The third, or myelogenous, is a very rare variety.

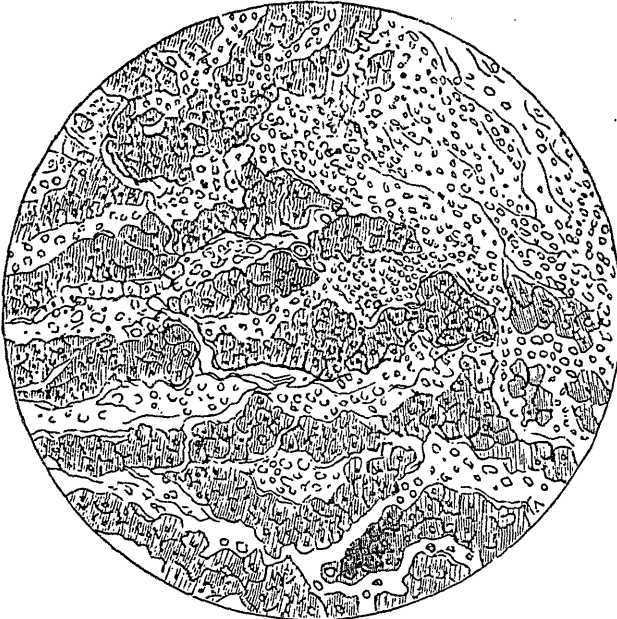
In the post mortem examination of the first patient some peculiar conditions were revealed. The pale exsanguined condition of the lower left lobe could not well be explained. Microscopic examination revealed the presence of lymphoid deposits. It is possible, as was before stated, that an embolus so obstructed the arterial circulation as to cut off the supply of blood.

The deposit in the liver was both localized and diffused, as is shown in the accompanying diagrams. They seem to have been found first in Glisson's capsule, and to have been extended towards the centres of the lobules. In some places the hepatic cells had undergone fatty degeneration. The action of the lymphoid growths on the healthy liver structure resembled very much the hypertrophy of connective tissue in cirrhosis.

The spleen, so far as we were able to judge, was healthy. If there were any lymphoid

cupied by enlarged glands. It will also be noticed in his case that at the onset of the disease, he suffered from most excruciating pains in the limbs. Whether these were caused by any change in the bone structure or not, could not be determined, as no examination was made. It is possible that lymphoid deposits or growths were taking place beneath the periosteum, or in the medulla, at the time. One of the ribs was examined but no pathological changes were found.

In Case II. the diarrhoea, from which the



[FROM A DRAWING BY DR. NEVITT.]

deposits or growths they must have been very slight.

These deposits or growths were also found in the lymphatic glands. The walls of the intestines were not examined.

In Case I. the blood presented corpuscles of different sizes, as has been already described. In Case II. there was not so much difference, the majority being of the normal size.

The clinical histories of both cases were of a typical character. There were, however, in both some peculiar symptoms which preceded the onset of the disease by many years. The first patient suffered for years from violent attacks of pain in the region of the stomach. The situation of the pain was afterwards oc-

patient suffered for years, may perhaps have been due to some tissue changes going on long before the apparent onset of the disease. The question arises whether this may not be a much more protracted disease than we have hitherto supposed, and whether in such cases a diagnosis might not have been made much earlier if the blood had been examined.

The anæmia was much more marked in the lymphatic than in the splenic case. With regard to the causation of this disease, these cases throw very little light. In neither was there any hereditary weakness. In the second case it is possible that hardship endured during his apprenticeship may have been a predisposing cause. The occupation of the first

patient, that of painter, may also have had something to do with the disease.

The pathology of leucocythæmia has not yet been satisfactorily cleared up. The two prominent features are: (1) lymphoid deposits of growths in various parts of body, and (2) increase of white corpuscles in the blood with diminution of red corpuscles. It has been a matter of dispute which of these two conditions precede the other.

I am inclined to think that the lymphoid growths precede the appearance of white corpuscles, and that the white corpuscles are, in very many, if not in all cases, simply lymphoid cells derived from the growths. My reasons for coming to this conclusion are: (1) The varying size of the leucocytes, as seen for instance in Case II. and their exact resemblance in this and every other respect to the cells which go to make up the growths; (2) From the fact that we have a disease (Hodgkin's) in which these lymphoid growths, identical so far as the morbid anatomy is concerned, without the presence of excess of white corpuscles. The question might be asked here, if these two diseases are identical so far as the lymphoid growths are concerned, why should we have leucæmia in one and not in the other? The only way I can see of accounting for this would be that in Hodgkin's disease the cells are so situated that they cannot enter them, and that in leucocythemia they can and do enter the circulation. There is no doubt also that in the latter disease the lymphoid cells, after having been taken up into the circulation, may be deposited in other than gland tissue. In Hodgkin's disease, too, a greater or less number of leucocytes enter the circulation, but not in such enormous quantities as in leucocythemia.

I would be inclined to think then, that in both these diseases there exists previously to their onset a diathesis which may have been present for years; that in Hodgkin's disease the growths take place in the glands without the cells finding their way into the circulation in any number, and that in leucocythemia the growths more often take place in the spleen, and the cells pass in large numbers into the circulation. In both diseases we have an interference in the manufacture of the red corpuscles.

The question might be here taken up as to the relationship which these growths bear to those commonly called malignant, viz., carcinoma and sarcoma. Certainly so far as the clinical history is concerned there is a very striking resemblance between these diseased conditions. In the morbid anatomy there is very little difference between the structure of one of these growths and a round-celled sarcoma. In one we have a slight network of connective tissue, and in the other we have none. In both, the cells enter the circulation and are deposited elsewhere.

Now as to the connection existing between this disease and progressive pernicious anæmia. It is the opinion of some authorities that the latter disease is simply the myelogenous form of leucocythemia. This, as Dr. Howard remarks, in his paper read at the International Medical Congress in 1876, has not been proven.

The chief resemblance existing between the two diseases is the diminution in the number of red corpuscles. It is doubtful if in pernicious anæmia there exist lymphoid growths or deposits, to any extent, in the marrow of bone or elsewhere.

I am inclined to think that the relationship existing between these two diseases is not so striking as has been supposed by some. It is probable, as Dr. Howard concludes, "That all the various forms of anæmia, *e.g.*, forms as determined by the condition under which they occur, may occasionally take on a progressive and pernicious character." It is still doubtful if there exists anæmia as an independent disease. Leucocythæmia, on the other hand, is a pronounced diseased condition, one of the essential and primary features of which is the presence of lymphoid growths. We may have pernicious anæmia as the accompaniment or rather result of leucocythæmia, in the same way as it accompanies pregnancy, but I am doubtful if a true case of leucocythemia has ever resulted from pernicious anæmia.

The prognosis in the disease under consideration is as bad as it can be. Patient No. 2 will, no doubt, soon follow patient No. 1.

As to treatment, no remedy appeared to have the slightest effect. I do not see how we could expect any cure from the administration

of drugs when the disease is seated. We might as well expect to cure a case of malignant growth in a similiar way. By future study of the disease, however, and by a careful collection of clinical and pathological facts, we may arrive at the cause so as to prevent its onset, and thus save the patient from an entirely incurable condition.

In conclusion, from my study of these diseases, I may be allowed to venture the following opinions:—

(1) That the essential features of leucocythæmia are the lymphoid growths, and the leucocytes found in the blood derived from them.

(2) That the existence of similar growths is the essential feature of Hodgkin's disease, but in it the cells, for some reason which I cannot explain, do not find the way into the circulation.

(3) That in both diseases the presence of these growths or deposits interferes with the manufacture of the red corpuscles producing anæmia.

(4) That these growths bear a strong resemblance to those of a malignant character, especially sarcomata.

(5) That progressive pernicious anæmia may arise as a consequence of leucocythæmia or Hodgkin's disease in the same way as it sometimes results from pregnancy, or any other condition which interferes with the proper elaboration of the blood.

These opinions I give as the result of very limited opportunities of study, and hope you will receive them as such. I am, however, well aware that somewhat similar conclusions have been arrived at by authorities—Wilkes and Maxon for instance—much more competent to give an opinion than I am.

A measure is before the French Chamber of Deputies, enacting that in future no druggist shall be allowed to combine with his profession that of a doctor, or to sell or advertise any patent medicine or nostrum.

Professor Wm. Warren Greene, of Portland, Maine, returning from the International Medical Congress, died on board the Cunard steamer *Parthia*, and was buried at sea.

A CASE OF INTRA-CRANIAL DISEASE.

BY WM. CANNIFF, M.D., M.R.C.S., ESQ.

Read before the Ontario Medical Association.

The case I am about to bring under the notice of this Association may not be regarded as one of extraordinary interest, but is, I think, of sufficient practical information to warrant me to ask your attention for a brief space of time. Indeed I venture to say my opinion is that unique and startling relations which any one in active practice may select for the consideration of meetings like this, will not best serve to make this Association a success, and secure that mutual advantage which the promoters of it aim to secure for the profession of Ontario. I wish to say, moreover, that my object is not to throw light, but to obtain it; and after I have related the case and the result of the treatment which, I may say, has not been marked by anything unusual, I hope to hear from those present remarks and suggestions of such a practical nature as to afford instruction for future guidance.

The patient of whom I am about to speak has been under treatment in the Toronto General Hospital since the 19th June, 1880, where he is still an inmate. His history, as supplied by himself, is briefly as follows: Aged 31, is a native of Ontario. Since the age of 15 his occupation has been chiefly chopping and hewing timber in the woods in winter, and acting as engineer in mills and factories in summer. Up to the period when he began to work he always had good health, except an attack of scarlet fever when quite young, in connection with which there was nothing particular. In the summer of 1871 he was laid up with typhoid fever, which was prevalent where he lived, and when recovering he suffered a relapse, which was complicated with inflammation of the lungs. He was confined altogether for three months. For a few months before the fever he felt pain in the back of the neck, and easily became tired. Three weeks before the attack he had contracted gonorrhœa. In the fall of '71 he went to the woods, and continued there at work all winter, in good health. The following spring he came to Toronto, with the view of joining the Mounted

Police. He passed the medical inspection, but he, with a number of others, were not required to complete the number needed. He then took a situation as engineer in a steam paper mill, where he remained four and a half years. During that time he was troubled for a while with swelling and pain in the left knee. He noticed at the same time that the leg above and below the knee was smaller than the other. The pain in the knee was at times severe, and continued to trouble him for about two years, gradually getting worse, when he had to give up work. After resting some time the knee got well, and has remained so ever since. He next took a job to clear a field of stumps, and then a contract to build abutments for a bridge, meanwhile remaining quite well. In the autumn of '78 he went to Michigan and engaged in chopping and hewing timber. Towards the first of March he at times found himself dizzy, and if spoken to he could not reply. He "either forgot what he should say or could not get the words out." Would feel hot and a rush of blood to his head. Some days he would have to leave off work before night, but would return to it the next morning. This continued until the 9th April, when in the night he was taken with a fit while asleep. His brother, who was sleeping with him, told him afterward that he made a noise with his throat and that his body was stiff. A doctor, who was called, told him his liver was affected. After this he had great pain in his head, sometimes in the back, sometimes in both temples. He would frequently vomit, especially after eating. This continued for two weeks, when he began to get better, and in a week was out, and at the end of another week returned to work. From this time he continued working all the summer and following winter, having only an occasional headache. In the spring of 1880 he took a job to cut some ship timber, some distance from where he had been working. In going to the new place of labour he noticed a singing in his ears, and found he could not speak, except to say yes or no. If he tried to say more he would make a mistake. The next two days being Saturday and Sunday he felt all right. On the Monday he hewed timber all day; the next day, after working for three hours, he in

a moment found he could not use his left arm and that it had no feeling, but in about half an hour the arm recovered and he resumed work, and continued at it all day; but he had the singing in his ears, and distant sounds seemed near-by and intensified. The following day he had a slight return in the arm at about the same hour. He struggled to overcome the feeling, or want of feeling in the arm, and worked on. At last, suddenly, the left arm was drawn up until the hand was at the shoulder, he then fell to the ground, the left leg having become paralyzed. He was carried to the house, while a greenish fluid oozed from his mouth. He afterwards had an indistinct recollection of what took place, but was unable to speak. In two hours' time he was able to walk, but his arm remained quite paralyzed. Gradually from day to day power returned to the arm; but to the present day its usefulness has remained impaired. This attack, which occurred on the 12th April, 1880, was attended with nausea and vomiting. Similar fits occurred about once a week, and after each the arm for a time was completely powerless. Power of speech was usually lost, and he could not remember names. His condition improved somewhat during the month of May, but his arm was useless for work. On the 17th of June he found his way to the General Hospital. One other occurrence should be mentioned. In the month of February, 1880, while standing in the woods, a limb of dry cedar fell upon him, striking his shoulders and bending him forward to the ground. His head was not touched, and he continued his work. I should also say that about this time he noticed his left eye was affected—he saw double, and to see straight had to shut the left eye. Moreover, he felt the scalp sore to the touch in spots, with a little swelling.

When he came to the Hospital he presented the appearance of a well-nourished young man, with a florid complexion. He had a dull look, and when spoken to answered in a hesitating manner, and his speech indicated partial paralysis of the muscles concerned in articulation. His memory was evidently defective. Nothing abnormal was found to exist in connection with the stomach, bowels, kidneys, or

other abdominal organs. The action of the heart and lungs was natural. His appetite was not very good, but it had been generally very good, but not excessive. The eyes seemed very prominent, and the pupil of the left eye was widely dilated, nor would exposure to light affect it in the least degree. There was a slight contraction of all the flexors of the left arm; the hand was partially closed, and the fingers, especially the little one, firmly flexed. He complained of a dull, heavy pain in the occiput most of the time, and occasionally of sharp shooting pain in the temples. It was some days after his admission before he had a fit. He felt it coming on and laid down. He was convulsed in the left side of the body, but did not lose consciousness; it lasted about fifteen minutes. He described the sensation of an approaching attack, as beginning in the fingers of the left hand, creeping up to the shoulder, and then passing down the side to the foot. Seven weeks later he had another fit, seemingly brought on by stooping over to pick up a child. He felt a rush to his head, tried to walk away but fell in convulsions on the left side. The attack was of short duration. Not long after he was sitting down, engaged in painting a box. The room was close and hot, and he felt the approach of a fit. But he stood up and walked out of the room and upstairs, and it passed away. Two weeks later, on getting out of bed, he experienced a shaking feeling and an odd sensation on the left side of his face, and his tongue felt thick. This lasted only for a few minutes. The last attack approaching to a fit took place last October. But he still has periods of warning, especially when he hears a sudden noise. He described it as a pricking of the nerves, particularly in the arm; and there is occasionally an involuntary winking of the eye. The pupil still remains dilated, but not so much as it was. The arm, as a whole, has mostly regained its power, but the fingers are not under the control of the will. He has been for some time employed in the hospital dispensary, which he keeps in order, and carries the medicines to the patients. He is sometimes forgetful, and gets puzzled. I omitted to mention that shortly after he came in Dr. Reeve instrumentally examined his eyes and found

well-marked optic neuritis of both eyes. Recently Dr. Ryerson used the ophthalmoscope, and he reports: "I examined Cooper's eyes, but did not find any very definite changes. There is some pallor of the left optic disc, but it is not definitely atrophic. His vision is normal. There is diplopia above the horizontal line, indicating lesion of the third nerve."

With regard to the diagnosis: When he came under treatment, although there was much which seemed obscure and uncertain, there appeared sufficient evidence to warrant the opinion that the seat of the disease was at the base of the brain. Many of the symptoms indicated an intra-cranial tumour, or, perhaps, the remains of a blood-clot, or products of chronic inflammation. The possibility of an abscess at first was admitted. I have mentioned that he at one time had gonorrhœa, and he admits to have had it more than once, but I have failed to learn that he ever had syphilis. At first I was inclined to believe from his statements that he had contracted the disease; but the restoration of his memory and clearer statements from him do not support the view of syphilization. While many of the attacks had apparently been excited by what he called a rush of blood to the head, or congestion of the brain, it was apparent that there existed a permanent predisposing cause of the repeated explosions. Respecting congestion of the brain, it may be well here to refer to the lectures recently delivered by Dr. Moxon, before the Royal College of Physicians, "On the Influence of the Circulation on the Nervous System." In these lectures, Dr. Moxon clearly shows that any important increase of blood in the brain is impossible at any time, even when the face and scalp are suffused; but on the contrary that in those cases where it is commonly believed that congestion exists, the brain is deprived of the normal quantity of blood. A few of the symptoms brought to mind that form of convulsive movement known of late as "Jacksonian Epilepsy," in which the spasms are limited to one side of the body, beginning in one limb and spreading to the whole of the one side. This, Dr. Hughlings Jackson regarded as irritation of motor convolutions functionally related to the corpus striatum. But the same careful observer has pointed out the

connection between unilateral fits with double optic neuritis and new growths involving the brain. And Dr. Bramwell, of Edinburgh, says that it is a most important practical fact to remember that double optic neuritis is the most important of all symptoms of intra-cranial tumour, while headache is second in importance, and nausea third.

As to treatment: Absolute rest of body and mind was for some time strictly enjoined, and when he, from time to time, undertook to do anything the warning symptoms clearly showed how necessary it was for him to have complete rest. At first he had only bromide of potash, in doses of grs. xv, every six hours. After a few weeks he had in addition iodide of potash grs. v. per dose. On the 29th September the iodide was increased to grs. x. three times a day. October 22nd proto-iodide of mercury was ordered, which in a week's time caused tenderness of the gums, when it was discontinued. The iodide and bromide were then resumed, grs. x. and xv., and these he has continued to take up to the present. In September a seton was introduced at the back of the neck, where blisters had previously been applied. He felt great relief from the seton, and it remained in for two months. In December, at his own request, another seton was placed in the neck, from which he again found great relief from pain in the head.

I omitted stating that the patient says he rarely takes alcoholic drinks, and never had been using them immediately before any of the attacks.

I may say that the iodide of potash has been used with the view of promoting absorption of any adventitious material, whether specific or otherwise, and the proto-iodide likewise. I was led to employ the seton from experience acquired many years ago when House Surgeon in a New York Hospital, where in a number of instances of chronic brain affections, probably of a syphilitic nature, the use of the seton was followed by marked relief and ultimate recovery.

DISCUSSION.—The President (Dr. Workman) said, the case described by Dr. Canniff was one of very great interest, and Dr. C. was deserving of the warm thanks of the Association for the clearness and exactitude of the details furnished

by him; he was, however, strongly inclined to think that the symptoms justified apprehension of a syphilitic complication, and he regarded the adoption of specific treatment, in that relation, as a very judicious decision. We all know that denial of venereal misfortunes by patients is often of questionable reliance. As regarded the cerebral location ascribed to the case by Dr. C., he (the President) was inclined to assign it to the cortex, rather than to the base of the brain. The prodromic sensation mentioned by the patient, as commencing in the fingers, would seem to point to the motor-centre of the arm, as the locality of initiatory morbid disturbance. Ferrier places this centre in the ascending parietal convolution, and I believe he has been sustained in this view by other careful experimenters. It is not, however, improbable, from the aphasic symptoms occasionally observed, that the cerebral trouble extends beyond the motor-centre of the arm, and involves the third frontal convolution. Whether, however, the primary morbid agency may be of syphilitic character, is a question for ulterior decision; but when amelioration or cure follows specific treatment, the presumption of syphilitic influence is very strong.

Dr. McFarlane thought the case to be clearly one of syphilitic origin, but believed the subject of localization of lesion in cerebral tumour to be one of extreme difficulty. He, therefore, would not hazard an opinion as to the precise location of the tumour, but advised perseverance in the anti-syphilitic treatment, with augmentation of the dose.

Dr. Oldright agreed as to the syphilitic nature of the trouble, and would give iodide of potash in large doses as well as mercury.

Dr. Teskey said that from the symptoms observed and related in the paper, one would not hesitate in coming to the conclusion that there existed some intra-cranial lesion, probably a tumour, which would be further confirmed if, by examining the fundus oculi, retinal changes were found. But what is most important in view of treatment is to determine the character of the growth. And first, considering the age of the patient, one would be led to exclude tubercle, aneurysm, and malignancy.

nant disease, and at the same time to suspect syphilitic deposit; but, in the absence of any reliable history, either for or against that hypothesis, we have the treatment, which has been anti-syphilitic, and attended with marked improvement, thus confirming in some measure such a diagnosis.

Dr. Cameron said the case was interesting, as presenting an example of left hemiplegia with aphasia. The evanescent character of the symptoms pointed to a discharging rather than destroying lesion of the cortex, and their varying and shifting tendency pointed to syphilis. The existence of hemispasm (convulsion), without loss of consciousness, might, perhaps, point to embolism, or vascular obstruction, as Hughlings Jackson held hemiplegia without loss of consciousness did; but certainly the occurrence of headache, nausea, or vomiting, and double optic neuritis, pointed strongly to tumour. The clinical history and transient character of the symptoms, the clearing up of the optic discs between Dr. Reeve's and Dr. Ryerson's examinations, suggested syphilis, and he concurred entirely in the treatment, but would push the iodide to 200 grains a day if need be.

Dr. Temple had recently had three cases of cerebral tumour under his care. One proved fatal, and post-mortem examination disclosed two tumours. The other two cases are still under observation. In the fatal case profound drowsiness with severe headache were the only two symptoms. The patient could be roused, would take food, and at once go to sleep again. In the other two cases, great disturbance of vision is the most prominent symptom. One is so blind that she has to be led about by the hand; general health not bad. In the third case, vision is much disturbed; patient sees objects much distorted, upside down, disappearing and reappearing suddenly; fixed headache is complained of. In all three cases, double optic neuritis existed; in none had vomiting or paralysis been present.

Dr. Canniff replied.

OPIMUM EATING—Charles Chassaignac, in the *N. O. Medical Journal*, reports a case of 20 years' standing, in which 1 dr. of morphia a day had been taken, and 500gr. gum opium. Cured by sudden deprivation.

NOTES OF THE SECOND DEMONSTRATION IN THE MORBID ANATOMY COURSE IN MCGILL COLLEGE.

BY W. OSLER, M.D., M.R.C.P. LOND.

(Reported by Mr. R. J. B. HOWARD, B.A.)

GENTLEMEN,—I. We are accustomed at the Hospital to recognize typhoid fever by the fever, diarrhoea, and other abdominal symptoms, and by the marked early prostration and muscular weakness which is so familiar to you all. But there are cases of this disease in which the muscular prostration and constitutional affection is so slight, that the patient may never take to his bed. In these ambulatory cases—the typhus ambulatorius of the Germans—the patient, though feeling out of sorts, feverish, perhaps suffering from headache, furred tongue, and diarrhoea, will not give in: he scorns the suggestion of his friends as to “knocking up,” and going to bed: and will go about his work as usual, till forced by weakness or some accident to give in and send for a doctor. I have often observed and pointed out to you, that these cases, when they do succumb to the disease, are apt to suffer a very bad 'bout of it: and the prognosis is unfavourable in proportion as the patient has resisted the onset of the disease.

It was from a case which I believe to have been of this nature, occurring in the practice of Dr. Trenholme of this city, that I obtained the specimen which I will show you in a few moments. Sudden accidents may occur in this ambulatory form: hæmorrhage from the bowels, or intense abdominal pain due to perforation. Such cases are fortunately rare: but not so rare but that you will meet with them occasionally, and probably be much puzzled as to their nature.

In this case the patient was a man 63 years of age, who up to Tuesday had been well: he went about his work on Tuesday as usual, but returned to his home in the afternoon, complaining of great abdominal pain and distress. In the evening he sent for Dr. Trenholme, who informs me that he found the patient pale and collapsed, looking like a cholera patient; but that no alvine dejections were passed. That evening he did pass a large amount of blood.

Next morning he was very much depressed, not feverish, complained of severe abdominal pains. In the afternoon he again passed blood, and died that evening.

At the *post-mortem*, we found the ileum much congested—the mesenteric glands enlarged and deeply engorged. The jejunum presented the numerous diverticula which you saw in the last demonstration. Cutting the bowel open, we found the Peyer's Patches uniformly enlarged, tumified, and presenting an appearance strongly suggestive of typhoid. The surface is cribriform, looking like the top of a thimble. the intervening bridges between the depressions covered with thin grayish-yellow exudation. The solitary glands are much enlarged throughout the entire ileum, while the mucosa is deeply congested. No distinct ulceration exists: only great swelling of the Peyer's Patches, and their cribriform appearance, due to the distention and rupture of the small follicles. The blood doubtless came from the distended capillaries in the Ileum. The spleen was not enlarged, but deeply engorged, and its pulp softened.

Now this I believe to have been a case of ambulatory typhoid, proving fatal from hæmorrhage at an early stage of this disease. I have seen one other case of typhoid fatal by hæmorrhage in the first week. In it there was also no ulceration. In 7 out of 80 fatal cases of hæmorrhage in this disease, noted by Liebermeister, the bleeding occurred in the first week.

II. Last week, gentlemen, I showed you a specimen of aneurysm of the aorta: it was a large saccular aneurysm springing from the transverse arch, and pressing back against the trachea; and I there told you how common these thoracic aneurysms seemed to be in this country. To-day I have another specimen to show you, taken from a patient of Dr. Roddick's. You see that these saccular dilatations spring from the arch in this case. Of these, one springs from the top of the ascending part, and projects to the right side; it displays three or four bulbous dilatations. All of these, and in fact its entire cavity, are filled with firm laminated fibrous clot. From the posterior part of the transverse arch, springs another large sac, the size of a billiard ball, extending between the aorta and the trachea, compressing the lat-

ter tube just at the bifurcation, but no erosion has taken place. The whole arch is dilated; the walls thick and show many gelatinous buttons of atheroma. The great vessels are not involved by the tumors.

Notice, gentlemen, the intima. You see it is uniformly coloured a brilliant red. Such colour is at once associated with active inflammation. I am sure that two-thirds of you would, if asked, tell me that the intima is here acutely inflamed; and a sad mistake you would make. For this colouration has nothing to do with inflammation—it is simply due to post-mortem staining, or imbibition of the blood-colouring matter. The lining membrane of the heart and vessels when inflamed does not show a vivid red. When you see the intima thus stained, it is usually a post-mortem appearance—nor is it usually developed till some days after death, occurring more rapidly in hot weather. In cases of death from septic conditions, you may meet with this staining a very few hours after death, as occurred in a case of septicæmia from acute necrosis of the tibia, in which I found it strongly developed only four hours after death.

The heart, in this case, is quite normal, except for a very little hypertrophy of its ventricles. This illustrates what I told you last week, that in cases of thoracic aneurysm, the heart usually escapes any secondary changes.

As regards the clinical aspect of this case. The symptoms had only lasted some two months. There was the characteristic aneurysmal cough, dyspnoea, pain. On percussing his chest, there was dulness about the first and second bones of the sternum, extending to the right side. But there was no bruit; no abnormal pulsation, that so-called infallible sign; tugging at the trachea did not exist; the pupils were of equal size; and none of the evidences of intra-thoracic pressure existed, other than those mentioned.

I omitted to say that the radial pulse was not quite the same on each side.

I will pass round with this specimen, the one which you saw last week; note especially the condition of the intima, and compare it with the high degree of atheroma in our last specimen. You may notice too, that the whole

aorta is greatly dilated, while in last week's specimen it was not so at all.

III. The specimen I have next to show you, was taken from a woman, aged 40, who was admitted into the hospital with fever, and great pain in her belly. The case was believed to be one of typhoid fever, but, before her death, peritonitis was made out. She was married; had a child a year ago; and, I have learnt that her labour was a difficult one, and her "getting up" slow. Her present illness dates from eight or ten days before admission, she being feverish and complaining of abdominal pains; but she did not take to her bed till a few days before entrance, and she died on the third day in hospital.

Most of you saw the autopsy performed. We found extensive purulent peritonitis; about fifty ounces of thick, creamy pus filled the cavity; the coils of intestines were deeply injected, matted together, and between them pockets of pus existed. On looking for the cause of this condition, no perforation or ulceration could be found in the course of either small or large bowel. But as we approached the sigmoid flexure of colon, we saw a projecting mass lying between it and the psoas; this tumor was soft and fluctuating, and full of pus. It was, in fact, an abscess in the left broad ligament. It did not appear to have perforated, but its wall was soft and infiltrated with pus, and its peritoneal investment was in a state of purulent inflammation. The contents of the pelvis, which I now show you were removed *en masse*. We found abscesses in both broad ligaments. That on the left side was very large, distending the broad ligament, reaching down behind the womb to the level of the os uteri. In the right broad ligament are several smaller abscesses—three of them—quite isolated and distinct. The left ovary was matted into the abscess wall, and quite flattened; the right ovary was healthy.

The womb was enlarged, the endometrium thick, shaggy, and coated with a layer of pus, indicating chronic endometritis.

These abscesses of the broad ligaments are by no means rare; and they often produce just this condition. This they usually do by perforating and discharging into the peritoneal

cavity, when a general peritonitis, of course, ensues. They are themselves usually a sequence of parturition. Probably, in this case, the hard labour set up some parametritis, which passed on to form these abscesses, and they in turn, by perforation, or by mere contiguity, set up the peritonitis. Or the chronic endometritis, which here existed, may have spread through the fallopian tubes to the broad ligament.

The womb shows in its upper and interior part an isolated tumor, of the size of a horse-chestnut. It is an intramural uterine fibroid, or more properly, fibromyoma, and we shall have many examples of this form of neoplasm before this course is ended. The point of interest about this one is, that it is undergoing a change. In places it is soft. It has not the pearly glistening look usual in such tumors, but a dull, opaque yellow hue. In fact it is caseating, which is one of the commonest of the degenerations to which these tumors are prone; another common change being calcification.

Here is the right kidney from the same patient. I have cut it open so as to lay bare the pelvis, and you see inside, three or four hard concretions. These are renal calculi. They are irregular in size and shape, the largest about the size of a bean, and of a light orange-brown colour. There is no history of renal colic in this case. The larger of these stones could not have passed down the ureter, but would probably have produced the changes which follow obstruction of the ureter; these are well illustrated in this plate which I will pass around.

IV. Next, I will call your attention to these organs taken from a phtisical woman, who you remember died in Ward 24, last week. Her lungs showed the usual evidence of the disease in an advanced stage. I shall only show you the apices. In this there is a cavity of the size of a small apple; this has smooth walls, and is lined by a distinct gray pyogenic membrane. About the cavity is much fibrous tissue, and it is to this that I especially call your attention. You see it surrounds, and to some extent, limits the cavity; and it is formed from the thickening of the trabeculæ of the lung; it has nothing to do with the pleura.

There are, you see, many small tubercular nodules and peribronchial granulations scattered through the lungs; some caseous nodules as big as peas.

This case illustrates one of the common sequelæ of phthisis, albuminoid degeneration. This occurs usually after chronic suppuration, as in phthisis, bone diseases, and tertiary syphilis. Here we have the spleen and the kidneys affected.

In the spleen only the Malpighian bodies are affected; they are swollen and translucent, looking like boiled sago-grains, whence the name of sago-spleen applied to this condition. In other cases, the process may be more diffused, as in the remarkable case some of you saw last year in the course of these demonstrations. In the kidney, the degeneration usually, as in this case, first affects the Malpighian bodies, and the smallest blood vessels.

Now if you do not recognize this condition with the naked eye, often a very difficult matter, you may definitely ascertain it in one of two ways. You may put a section under the microscope, when the elements will be seen infiltrated with a gelatinous stuff of a waxy look. Or you may apply to a freshly cut surface some fluid which will affect it characteristically. Such a fluid is tincture of iodine. You see when I run some over the surface of this kidney, the healthy tissue is stained a uniform reddish-brown color, while the albuminoid spots become a dark iron or mahogany brown. In the spleen this appearance is even more marked and striking.

The liver in this case was fatty. This is of common occurrence in phthisis, and needs no remark, but you had better examine the specimen sent round carefully, as it is important to at once recognize this common condition.

Now this patient died from acute ulcerative colitis. She complained of great pain, diarrhœa, and dysenteric symptoms. But this does not appear to have been a tubercular colitis at all. The mucous membrane is rough, thick, and studded with countless small ulcers, whose base is hæmorrhagic. The whole gut has a worm-eaten look.

The appendix vermiformis shows an interesting condition in this case. It is large and

dark; presenting no adhesions to other parts. On opening it, the end is distended; half an inch from the end is an ulcer, nearly half an inch in diameter, in the centre of which is a fæcal concretion. The ulcer has sharp, clean cut edges, and look how thin the base is; not much here between the peritoneum and the fæces. Now these little fæcal concretions often form in the appendix. They cause irritation, and inflammation of the lining wall, and this may lead to ulceration and perforation. Within a year, had this woman lived, she would have died from peritonitis from this cause. The result depends greatly on the situation of the appendix. If between the cæcum and the abdominal wall, it is away from the cavity of the peritoneum; and when perforation occurs, not peritonitis, but perityphlitis is set up. But if it hang free in the abdominal cavity, the result is not so fortunate, for general and fatal peritonitis is sure to follow. It is remarkable in what diverse situations the appendix may lie. In one case in which I performed the autopsy, I found that it was adherent to the lumbar vertebrae, that an abscess had been set up here, that the small bowels were adherent to the walls of this abscess, which had opened into them; and the fatal result was due to hæmorrhage from an eroded mesenteric artery. In other cases the bladder has been the site of adhesion and perforation.

V. Another specimen was submitted for examination while fresh, but the remarks upon it were deferred till a future occasion. It was a case of submeningeal extravasation. The man died from the effects of a fall. The base of the skull was fractured. The blood was spread in a thin layer over the surface of the brain, being thicker over the sulci; and there were several spots of extravasation into the substance. In the very centre of the cerebellum was a large clot, the size of a horse-chestnut.

Dr. H. Hagar recommends that tincture of chloride of iron be mixed with simple syrup and then with milk, this mixture not affecting the teeth nor the usual styptic taste being apparent.—(Druggist's Circular.) *Philadelphia Medical Times.*

SUPRA-PUBIC LITHOTOMY.

BY A. GROVES, M.D., FERGUS, ONT.

Having lately performed the supra-pubic operation in two cases of stone in the bladder, I thought it might possibly be of some interest to the members of this association, to give the method of operating, the after-treatment and the results.

It will be found that the text-books are, as a rule, far from giving proper instructions as to the method of operating. This is perhaps easily accounted for, when it is remembered that few, if any, of our best surgical authors have ever performed the operation. This want of explicit directions in ordinary works must be my excuse for a rather minute account of the manner in which I operated.

The usual preparatory treatment having been carried out, and the time for operating having arrived, the patient is placed on a table of convenient height, in a good light, and is thoroughly anæsthetized. The urine is drawn off, and the bladder partly filled with warm water, which may be carbolicized if the operator favours the use of antiseptics. A curved staff—grooved on its concave side to the distance of about two inches, beginning at the extreme point—is now introduced and brought in contact with the stone. Of course the operation must not be proceeded with unless the presence of a stone can be distinctly demonstrated when the staff is passed. The staff is now given into the hands of an assistant; who keeps it in a line parallel with the patient's body, the point directed perpendicularly upwards, and the concavity of the instrument embracing the pubic bone. The supra-pubic region having been previously shaved and oiled, an incision is made in the median line extending upward about three inches from the pubes. The remainder of the cutting should be carried out like a careful dissection—coolly and quietly. After dissecting through any fat that may exist, an opening just large enough to let a finger pass is made through the *linea alba* and *transversalis fascia* close to the pubic bone. The point of the staff can now be felt in the bladder, and by using the finger as a guide and director the incision can be enlarged to any required extent without at all

endangering the peritoneum or exposing it to any rough usage. The finger is now pressed gently upon the bladder immediately over the point of the staff, and staff and finger moved in the direction of the fundus to the extent of an inch and a half. A sharp-pointed bistoury is then passed into the groove of the staff just in front of its extreme point, the cutting edge being directed toward the pubes, and the bladder incised as far as necessary. The finger is then passed into the bladder, and the position of the stone ascertained, the staff withdrawn, and the calculi removed by the forceps or scoop. The bladder is then washed out, a soft rubber catheter passed, the patient placed in bed, and a piece of fine sponge inserted in the wound to absorb any urine that may rise into it.

In describing the after-treatment I cannot do better than transcribe the notes of a case which my friend, Dr. J. G. Mennie, kindly took charge of for the first twenty-four hours after the operation. In this case the patient always chilled after an instrument was passed, and consequently it was thought advisable not to leave one constantly in the bladder.

"The operation was finished at 11 a.m., and patient put to bed. At 12 noon, he recovered from the effects of the chloroform, the wound was then dressed by inserting a fresh sponge moistened with a carbolic-acid lotion,—1.40—and also passed a soft rubber catheter, and drew off the urine, which amounted to about four ounces. He was at this time free from pain. At 1 p.m. drew off about viii . of urine. He was still easy, but had an intense desire to pass urine. Pulse 88, and temp. $99\frac{1}{2}$. At 1.30 changed the sponge in the wound; and at 2 he passed iii . of urine naturally, and took a severe chill which lasted 20 min., during which warm irons and hot water (in bottles) were applied to the lower extremities, and warm drinks administered. Pulse 92, and temp. 99. At 2.30 he had another chill which lasted a few minutes, returning at intervals. Pulse 95, and temp. $99\frac{1}{2}$. At 2.50 he passed ii of urine, which caused considerable pain, resembling that previous to the operation, chills still recurring. At 3.30 passed urine, and having at intervals two or three spoonfuls of milk and water, vomited a considerable quantity of fluid.

Changed the sponge. Pulse 100. At 4.05 he appeared to be somewhat easier, and passed about ziii . of urine. At 4.45 sponge was again changed, and zii . more urine passed. At this time he became fevered, with flushed face and cool hands. Pulse 105, and temp. 100. At 6.00 he passed ziil . of urine, wound was cleaned, and a fresh sponge inserted. Fever continued. Pulse 117, and temp. 101. At 6.30 and 7.00 respectively, he passed zii . of urine. At 7.30 wound was dressed as before. Still much fevered. Pulse 120, and temp. $101\frac{1}{2}$. He was drinking considerable water, and lemon juice—about zii . at a time. At 8.20 passed a little urine, and at 9.00 the sponge was changed, and considerable urine taken from the wound. Fever abating. Pulse 110, and temp. 100. At 10.00 much pain accompanied the passing of a little urine. Administered 20 minims tincture of opium, and dressed wound at 11.00. Between 11.00 and 1.00 a.m., he slept 45 minutes, and passed the usual quantity of urine twice. There was a considerable amount of urine in the wound at 1.00. Wound was dressed, and fever much abated. Pulse 98, and temp. 99. Wound was dressed again at 3.00. He obtained short naps, and passed urine. Fresh sponge inserted and wound cleansed at 4.00. At 5.30 the wound was attended to again. Pulse 89, and temp. normal. At 7.00 the wound was cleansed and dressed, patient free from pain. He slept about half an hour between 7.00 and 8.00. At no time after this did the temperature rise above the normal, and after four days a rubber catheter was left in the bladder until the eighteenth day; when the deeper parts of the wound were healed, and he was able to urinate wholly naturally."

The patient in this case was sixty-seven, exceedingly stout—weighing three hundred pounds—and had been a very great drinker. There were six calculi found in the bladder. Five of them measured over an inch each in diameter; the sixth being somewhat smaller. The progress of the case from first to last was most satisfactory—no untoward symptoms arising after the first twenty-four hours.

My next patient was a man of sixty-three; but so broken down and debilitated that he had the appearance of a sickly person of eighty.

His death had been looked for every day during last winter, and his sufferings were very great. In compliance with his most urgent solicitations I operated and removed a stone measuring nearly an inch and a half in its longest diameter. His progress has so far been very good, but the wound is not yet quite healed; as it is only the seventeenth day since the operation.

In concluding this paper, I think I cannot urge too strongly on the members of this Association the advantage of this method of operating. It appears to me that any one who gives it a fair trial will be so satisfied with the results that he will afterward try no other. There are no important structures injured, and no damage incurred in comparison to those of the perineal operation, in which a region filled with veins, arteries, nerves, and lymphatics is cut or torn through. I know that statistics appear to make the supra-pubic a dangerous operation, but on analysing the cases impartially, it will be found that the majority of those who died were most unfavourable ones for any operation, or were those on which the perineal operation had failed; and very many of the minority died from causes not fairly attributable to the method employed. It seems to me that it is not fair to condemn an operation for the unskillfulness of the operator; and for this reason I would eliminate from the statistics those cases of death caused by bursting the bladder by injecting too much fluid into it, also all cases where the peritoneum has been cut, and those where a perineal operation has been performed to allow drainage.

BIRTH MARKS.—The following good story is told of a physician of Dayton, Ohio: The doctor was recently attending a case of labour in the family of one of his patrons, who, though a very excellent man, is a little slow in the payment of his medical bills. Immediately after the birth of the babe, the father nervously asked,—“Doctor, is the baby marked?” “Yes,” quietly replied the doctor, “It is marked ‘C. O. D.’” It is needless to add that the bill for that baby was promptly settled.—*Ohio Medical Journal*.

Selections: Medicine.

SYMPTOMS OF THE INITIAL PERIOD OF GENERAL PARALYSIS.

BY DR. E. REGIS.

A general paralysis often begins by a stage of functional exaltation, during which the organic functions undergo simultaneously, or singly, an increase of activity.

This exaltation is the result, at the same time, of an inflammatory process which is going on at this epoch in the brain: it is proportioned to the intensity and the energy of the irritative action which is occurring in the superficies of the cerebral convolutions. An important character of the cerebral excitation is drawn from a repulsion for work, which becomes more apparent when the patient has been set to a troublesome and prolonged labour.

The apparatus of vegetative life participates in this excitation of the functions. The temperature in these patients is raised to (38.5°) 101.03. The pulse sometimes is 100. The respiratory movements are repeated up to 40 times a minute, and appetite and thirst are increased.

The urine contains no more urea than formerly, but at times we find there a certain quantity of glucose. The author attributes, perhaps correctly, this glycosuria to the fact that the phlogistic action has extended as far as the floor of the fourth ventricle.—(*La Salute*) *L'Union Médicale*.

INOCULATION OF MONKEYS WITH TUBERCLE.—

Some interesting experiments have been performed by M. M. Krishaber and Dieulafoy, on the artificial production of tubercle in monkeys. * * * The conclusions drawn from these investigations are: (1) That human tubercle, when inoculated, kills a monkey in nine out of ten cases, with lesions analogous to those met with in man. 2. The effect of the inoculation varies according to the substance employed; the grey granulation is most, and the pulmonary parenchyma least, infectious. 3. Two monkeys only were found to be insusceptible.—*London Lancet*.

PATHOLOGICAL CHANGES IN THE RETINA ASSOCIATED WITH PROGRESSIVE PERNICIOUS ANÆMIA.—In *Klin. Monats. für Augenheilkunde* (Dec. 1880), Uthhoff describes the changes revealed by the microscope in the retina of six eyes removed after death from four cases of fatal pernicious anæmia. They were, 1, hæmorrhages, limited chiefly to the nerve-fibre and intergranular layers, and situated for the most part near the posterior pole, especially around the disk; 2, varicose hypertrophy of the nerve-fibres, affecting chiefly those of the most internal layers, so as to cause them to intrude upon the vitreous body, and consisting chiefly of the often-described shining, or finely granular masses of spherical, or spindle-shaped or retort-like form; 3, homogeneous colloid, or finely granular masses in the inter-granular layer, present in one case only. It seems from these observations that progressive pernicious anæmia must be added to the list of morbid conditions which give rise to a peculiar varicose hypertrophy of nerve-fibres.—*London Medical Record*.

BOVINE TUBERCULOSIS IN MAN.—Dr. Creighton (of Cambridge), thinks that if the view be once adopted, that bovine tuberculosis is communicable to man, the origin of many cases of human tuberculosis hitherto insufficiently explained will be made clear. Cases of abdominal tuberculosis, of tubercle of serous membranes, of general tubercle resembling in its course typhoid fever, and others, will thus receive a new significance. We may also commend to notice his suggestive inquiry as to whether some of the milk epidemics of supposed typhoid may not have been cases of this nature, an inquiry which has received an apt illustration in an outbreak of "tubercular fever" at a school in Bristol, recorded by Dr. W. H. Spencer.—*London Lancet*.

QUEBRACHO.—The results of recent experience with this drug in Bellevue Hospital have been confirmatory of its value in dyspnoea in all its forms. The fluid extract, in doses of from twenty to sixty drops, every hour or two as called for by the symptoms, has been found useful in our hands also, without regard to the exciting cause of the dyspnoea.—*Independent Practitioner—Therapeutic Gazette*.

M. RENDU, in a paper in *L'Union Medicale* upon scrofula and tuberculosis, thus concludes : 1. The so-called tubercular follicle is not a specific element, it is met with in a number of accidental new-formations, and although incontestably more frequent in tubercular products, it cannot be considered as having any absolute value. 2. Scrofula is a veritable diathesis, characterized by a series of variable manifestations upon which it imprints a special physiognomy. The dominant characters of its lesions are indolence and torpidity. 3. Tuberculosis, on the contrary, is not a diathesis ; it presents itself after the manner of parasitic diseases, always ready to break out when the organism is debilitated. 4. The relations of scrofula and tubercle are nothing else than those of the soil and the seed—scrofula the soil, and tubercle the parasitic germ, so much the more invading as the organic foundation is more sterile.

TYPHOID FEVER WITH LOW TEMPERATURE.
—Frantzel (*Zeit. für Klin. Med.*, Band ii. s. 217) describes severe cases of typhoid fever which attack exhausted individuals, and which run their course with low temperature or without fever, but in which occur general collapse, serious cerebral symptoms, and tendency to gangrene of the extremities, which run a strikingly acute course. Such cases indicate that high temperature is not the only cause of death in typhoid fever, but that cerebral symptoms are of great importance, and that patients even with low temperature must be carefully watched, to preserve them from the many evil consequences of even quiet delirium.—*London Medical Record.*

COMPRESSION OF CAROTID IN TRIGEMINAL NEURALGIA.—Dr. Seifert (*Berlin Klin Wochenschr.*, 1881, No. 11) publishes three cases of trigeminal neuralgia, in which he successfully employed compression of the carotid, as recommended by Gerhardt. The compression was made to last from fifteen seconds to one and a half minutes, and repeated as often as the pain was interrupted, while arsenic and quinine were likewise administered. Gradually, the intervals were lengthened.—*London Medical Record.*

Surgery.

ELBOW FRACTURES.

FRACTURE OF THE CONDYLES OF THE HUMERUS— TREATMENT BY THE STRAIGHT POSITION.

Reported by Bernard Bartow, M.D.

Case 1.—May 14, 1881, A. B., æt. 4, fell from a height of four feet, striking upon her left elbow. I saw the patient six hours afterward and found the left elbow much swollen, the fore-arm flexed at an angle of 30°, the olecranon projecting prominently, as in luxation, the lateral diameter of the joint increased, and movement of the fore-arm accompanied by pain. Further examination showed that the internal condyle was movable, crepitant and displaced. From the character of the crepitus it was evident that the fracture followed, in part, the line of the epiphysis. The attempt was made to crowd the condyle into its place, with the fore-arm extended ; the fore-arm was then placed in the rectangular position, and the whole secured by a piece of belt leather moulded upon the back part and sides of the limb. After 48 hours the splint was removed to examine the joint. The swelling had subsided, but there was a recurrence of the displacement similar to that observed on my first visit. In addition, the muscles contracted, fixing the parts as firmly as if it were purely a dislocation of the fore-arm.

The day following I examined the patient's elbow with the help of an anæsthetic, and then ascertained that both condyles were movable. Crepitus existed between them, as well as between the condyles and the end of the humerus. The diagnosis was, separation, and splitting, of the epiphysis. The spreading of the joint seemed to be due to the crowding apart of the condyles by the flexion of the fore-arm. Firm extension of the fore-arm permitted the easy replacement of the condyles—causing all deformity to disappear. While forced extension of the fore-arm was maintained by an assistant, a piece of moistened belt leather was moulded upon the limb, investing it completely with the exception of a space one inch wide upon its anterior surface. This was secured with a

bandage. The adaptation of the leather to the contour of the limb was perfect; becoming firm in fifteen minutes, all tendency to displacement of the fractured parts was wholly overcome. The limb was maintained in the straight position for two weeks. Strong union having taken place at the end of that time, the fore-arm was flexed to the right-angle position and secured with the same splint, altered to a rectangular one, by cutting a V-shaped piece of leather from its sides opposite the elbow-joint. During the two following weeks the degree of flexion was gradually increased, until the extreme point to which the fore-arm could be bent, was reached. At the end of four weeks the splint was removed, permitting the limb to straighten; a bandage was the only support worn after that time. Six weeks from date of injury the functional recovery of the joint was nearly complete; a loss of about one-fifth of the flexion power was the only impairment of motion. (At the time of writing—four months after the injury—the extent of motion in the elbow-joint of the affected limb, is, in all respects, as perfect as that of its fellow.)

Case 2.—June 21, 1881, R. F., *æt.* 5, fell from a gate upon which he had been swinging, injuring his left elbow. The point upon which the blow was received could not be ascertained. He was attended by Dr. R. H. Hopkins shortly afterward, who diagnosed: fracture of the external condyle, and fracture of the internal epicondyle of the humerus. The line of fracture of the external condyle was partly epiphysial; the epicondyle separation was wholly epiphysial. The displacement of the external condyle was outward and backward; the head of the radius was dislocated and followed the condyle. There was marked increase of the lateral diameter of the joint. The fractured parts were adjusted, the fore-arm flexed at a right angle, and the whole secured with lateral splints of binder's board. Upon examination the second day, the appearance of the joint did not satisfy Dr. H., and he invited me to see the patient with him. The external condyle had become displaced, the head of the radius was prominent, the breadth of the joint was increased, and the fore-arm firmly fixed in its flexed position by the contraction of the mus-

cles. I suggested dressing the fracture with the fore-arm in the straight position. After giving the patient ether, the fore-arm was forcibly extended. This allowed the condyle to be replaced, removing all deformity. While the fore-arm was extended, a leather splint was applied to the entire limb, as in *Case 1*; this secured the fracture perfectly against displacement. On the twelfth day, quite firm union having taken place, the fore-arm was flexed to a right-angle position, and the splint re-applied. The flexion was gradually increased, until the end of the fourth week, when the splint was removed, and a bandage substituted. The motions of the joint were wholly restored at the end of the sixth week. There was no displacement at the points of fracture. In both instances the "carrying function" of the limb was unimpaired.

In a recent paper* Dr. Allis, of Philadelphia, has shown, in a very able manner, why deformity and ankylosis follow the employment of rectangular splints in the treatment of fractures through the condyles of the humerus. He recommends that such fractures be treated with the fore-arm in the extended position, with a view to preventing displacement of the condyles. In the foregoing cases the treatment has been essentially in accordance with his views. The excellent results obtained in both instances is a good illustration of the correctness of his views.

In the matter of an appliance I prefer a leather splint to the "egg-paste" bandage, or adhesive strips, used by Dr. Allis. The leather can be moulded to fit the arm as perfectly as a paste bandage, requires less time and inconvenience, is stronger, and can be sprung off the arm with great ease for examination of the fracture.

In fracture through the condyles, firm union usually takes place in two weeks. It is unnecessary, therefore, to maintain the limb in the straight position beyond that time. (Dr. Allis recommends that the straight position be maintained for thirty days.) Flexion of the fore-arm at the end of two weeks causes no displacement of the condyles; and by loosening the tissues from adhesions, places the joint in a

* *Trans. Anat. Soc.*, Jan., 1880.

better condition to resume functional activity, when all restraint shall have been removed.

SEPARATION OF THE EPIPHYSIS OF THE LOWER END OF THE HUMERUS.

M. H., aged 6, fell from a velocipede, striking upon the left elbow. She was attended at once by a homœopathic surgeon, who obscurely diagnosed an "elbow fracture" and dressed it with an anterior rectangular splint. The patient was seen by Dr. H. R. Hopkins and myself, eighteen hours after the accident. Then the appearance of the elbow closely resembled luxation of the bones of fore-arm, backward. The muscles had contracted, rendering the fore-arm almost immovable. The patient was etherized, and it was ascertained that there was complete separation of the lower epiphysis of the humerus. The fragment followed the movements of the fore-arm. Crepitus could not easily be obtained by flexion or extension of the fore-arm; but, with the fore-arm flexed, it could be produced easily, by grasping the condyles and moving the fragment from side to side. The tendency of the posterior projection to recur, when flexion was relaxed, and the complete disappearance of the signs of dislocation, when the fore-arm was extended and flexed, confirmed the diagnosis. The fore-arm was placed, semi-prone, in the right-angle position, and the limb dressed in a moulded leather splint embracing its posterior and lateral surfaces. After three days the angle was changed to that of extreme flexion, which angle was maintained until the eighth day, when the fore-arm was extended at an angle of 40°. On the fourteenth day union was found to be quite firm, and the fore-arm was brought down to a position of full extension. Passive motion has been practised up to the present time (thirty days from date of injury.) There is no displacement of the epiphysis; flexion and extension are nearly perfect—the only obstacle to free motion being an abundance of inflammatory exudates.

The case is interesting when compared with *Case 1*, in which the epiphysis was split, necessitating a radically different mode of treatment. — *Buffalo Medical and Surgical Journal*.

THE SUBJECT OF WOUND TREATMENT AT THE INTERNATIONAL MEDICAL CONGRESS.

THE most important and best sustained of all the discussions took place on Monday morning "on the causes of failure in obtaining primary union in operation wounds, and on the methods best calculated to secure it." Mr. Savory opened it in a very eloquent and philosophic speech, pointing out that primary union was most likely to occur when fresh surfaces are brought together in their natural state, and maintained so without disturbance. The chief cause of failure he believed to be "meddlesome surgery," and essential principles were rest, cleanliness, and asepsis, which admit of almost endless variation in detail. He asked, when a wound was septic or aseptic, was fever, or pus, or only a smell to be the criterion? Defending his Cork statistics, he claimed that they had not been surpassed, though equally good results were obtained by many different plans of treatment, the actual processes of healing being primarily independent of them all. Mr. S. Gamgee followed, and showed the antiseptic absorbent cotton pads he has used with success. As one proof of their antiseptic power, he showed a piece of meat which had been lying between two of them, but exposed to the air for fifteen seconds every day, and was perfectly sweet at the end of twelve days. The principles he laid stress upon were perfect dryness of the wound, thus removing one of the conditions of putrefaction, rest and infrequent change of dressing, circular compression, and suitable position, with the use of antiseptics, as an important adjunct. Dr. Humphry spoke of the importance of a clean-cut wound in healthy tissues, very accurate apposition of the edges and surfaces with very careful closure of all bleeding vessels. The air acting injuriously both as a direct depressant of the vitality of the tissues, and through agents floating in it, it was only wise to use some form of antiseptic to purify the air. For Professor Verneuil, the disposition of the wound and of the patient are the great factors in the healing process. Professor Esmarch's statistics of his own practice are so remarkable, that they must be given in

full. In 398 great operations (six deaths) 85 per cent. of the cases cured healed by first intention with one dressing, in 15 per cent. the dressing was renewed; and this ratio had improved of late. There were 146 excisions of large tumours, 40 excisions of mamma and axillary glands, 14 castrations, with one death from pericarditis and old syphilis, one from apoplexy, one from fatty heart. Of 51 major amputations (thigh 18, leg 27, arm 5, forearm 1), one died from shock and hæmorrhage, and one from delirium tremens. There were 61 resections; 11 exarticulations; 26 necrotomies; 13 nerve-stretchings, one for tetanus, which was fatal; 8 hernias; 21 large cold abscesses; 42 large wounds; 49 compound fractures. The cases were all dressed with pads soaked in iodoform, and absolute alcohol (10 per cent.), fastened on by an iodoform bandage, over that a large pillow of jute and gauze, a moist bandage, and over all an elastic bandage. Professor Volkmann thought that all suppuration is septic, and that personal peculiarity in the main had nothing to do with the healing of a wound. Other evidence was offered and opinions given which only corroborated the above, and supported various ways of carrying out a dry dressing, with rest and compression combined with antiseptics, as advocated by Mr. Gamgee, whose labours in this direction have perhaps not been sufficiently recognized. Professor Lister wound up the discussion. In reference to Dr. Keith's experience, he stated that he had dissuaded him from using antiseptics in the first instance; in such an operation there is abundant room for effusion and means of absorption, while carbolic acid both increases the one and lessens the other; but on the whole he thought antiseptic ovariectomy had been successful. Referring to the experiments detailed at Cambridge which showed that diluted septic poison may be added without effect to blood serum, though not to diluted blood serum, he further recited more recent experiments which showed that blood-clot in the body is still less favorable to the development of organisms. He expressed his belief that it is "solid bits of dirt" that are the deleterious agents, and that possibly too much attention has been paid to the finest particles floating in the air. His own

results, however, were so good that he shrank from giving up any one of the details of the treatment by which he obtained them, although he quite admitted that he too might at some future time be able to say "*fort mit dem spray*"; at present he could not accept irrigation as a substitute for the spray. He denied that there was any ground for the charge that he disregarded the general condition of the patient or his hygienic surroundings. Were this true, his results being so good as admitted by all, what a strong argument it afforded to the efficacy of his merely local treatment! There was no time for Professor Lister to touch upon the many points raised by previous speakers. If we were to attempt to give in a few words the general impression produced by the debate, we should say that the value of antiseptics was clearly recognized by all, that it was made evident that Professor Lister's aim may be attained by means other and simpler than his; that in particular the value of the spray is considered very doubtful; but more than all, that antiseptic treatment only answers one of the requirements of wound treatment, and that he only is a scientific surgeon who enlarges his views and practice to embrace all.—*The Lancet*.

TREATMENT OF GONORRHOEA BY INJECTIONS OF SULPHURIC ACID AND WATER.—In the *Lancet* for September we find an article on the above subject by W. B. Wilson, M.B., Surgeon-Major. Dr. Wilson has treated sixteen cases of gonorrhœa by injections into the urethra of sulphurous acid and water, diluted 1 to 15, three times a day. Should there be much pain or chordee he uses the injection but once or twice daily. Relapses were few. The majority of cases treated were second attacks. The injection should be superintended by the surgeon lest it might be improperly performed. The purulent discharge soon becomes scanty, and in three days becomes thin and gleet. When this watery condition ensues he employs the remedy but once in twenty-four hours. The patient should be kept quiet, and placed on a moderate diet. Recovery takes place in about six days. Of course the acid should be examined before dilution to know if it is pure.—*Pittsburgh Medical Journal*.

HANDY METHOD OF APPLYING NITRIC ACID AS AN ESCHAROTIC.—A Dr. Spiers, having occasion to destroy a nævus, took a two-ounce vial and breaking off the body close to the neck, inverted the latter over the nævus, pressing the rim of glass firmly down upon the skin. This had the effect of forcing the tumor well up into the neck of the vial; and when the acid was applied by means of a pipette, it acted freely upon the whole surface of the nævus. Before removing the vial neck, Dr. Spiers carefully mopped out all excess of acid with some cotton wool on a probe. He then had the satisfaction of seeing a well-defined, circular slough, rather depressed, but with clean-cut edges, as if a punch had been used. The child suffered very little pain, and was easily pacified by being put to the breast. The action of the acid was found to have been entirely confined to the tumor, which was completely obliterated. No cicatricial contraction of the eyelid ensued, and the operation was completely successful.—*New Remedies.*

EARLY DIAGNOSIS OF FELONS.—Dr. Adinell Hewson, senior, in a paper in the *College and Clinical Record*, makes use of Delarue's idea of a conical tube, to view the tissue by transmitted light, to aid in the early diagnosis, of felons. In the healthy finger, a bright pinkish red is seen; if engorged the redness deepens; if there is pus in the cellular tissue, the tint will be reddish yellow. If firmer pressure of the finger against the tube remove the reddish colour, and leave it of a more positive yellow, the pus is in the theca of the tendons only, and if the tint under such pressure is of a dirty, or opaque, yellow, the pus is at the bone or periosteum. He uses anæsthesia, produced by rapid breathing, to enable the patient to support the pain of the examination.—*Southern Practitioner.*

SUN AND AIR.—When a pert young woman met Sydney Smith on the Downs, at Brighton, she exclaimed, "I have come out to get a *little sun and air.*" "But, madam," replied the mischievous wit, "how is this, I do not see your husband."

Midwifery.

OBSTETRIC APHORISMS.

Dr. H. Webster Jones, of Chicago, as Chairman of the Committee on Obstetrics, closed his report to the Illinois State Medical Society, with the following valuable and suggestive sayings. With these as his guide, the practice of the obstetrician of to-day would furnish less work for the gynecologist: 1, an intelligent confidence once established between patient and physician does much to banish the terrors of the lying-in room; 2, it is possible to foresee and prevent the occurrence of the almost fatal form of eclampsia gravidarum; 3, cleanliness is especially next to godliness in the case of the accoucheur, its absence renders one liable to professional homicide; 4, the modern midwifery must not be meddling, but must be mediatorial in the sense of palliating suffering, expediting nature's processes by well-proven means, and removing scientifically all inexplicable, accidental, or morbid states and conditions—idleness is no longer an approved qualification for a degree in obstetrics; 5, the hand is the best uterine dilator; 6, the forceps should never be employed until the os uteri is dilated or dilatible, and then not unless the membranes have been ruptured, and labour delayed unnaturally for at least an hour; every practitioner should become skilful in their use, and they should never be left at home for fear of temptation; 7, unnecessary and unavoidable delays in labour are fruitful sources of gynecological practice, they promote inflammation and sepsis; 8, the patient's hopeful confidence, and the physician's industrious attention, actually contribute to the physiological elements of labour; anæsthetics here are, to say the least, superfluous; 9, bi-manual aid in effecting the deliverance of the placenta is not only proper, but advisable; skilfully rendered, the cry of "uterine inversion" becomes no longer a bugbear; 10, the continuous and intelligent counter-pressure over the fundus uteri during the child's exit, the delivery of the placenta and the period of frequent oscillation, be that a shorter or a longer time, is a safeguard never to be neglected; 11, pursuant to the same end,

the application of the bandage, and its continuance, as long as the uterine globe can be felt and embraced by it above the pubis, contributes not only to comfort, but to speedy involution; after the seventh day, close pressure must be interdicted; 12, puffiness of one ankle, with tenderness of the corresponding groin, and an abnormally quickened pulse, with or without copious sweating, noticed within the first ten days after labour, betoken the pressure of phlebitis, and the possibility of embolism or thrombus, and resultant sudden death; 13, the duties of an obstetrician are not concluded until a careful examination, from six to eight weeks after parturition, proves the integrity of the organs involved.—*Medical Record.*

TREATMENT OF POST-PARTUM HEMORRHAGE.—(*Lyon Med.—Boelz, of Tokio, Japan.*) The method proposed by the author has, over all other known means, the advantage of being very simple and apparently very efficacious. It consists of tamponing the vagina with the clenched fist, whilst with the other hand we apply the labia majora like a cuff, tightly around the wrist, so that not a drop of blood flows out. During this time an assistant compresses the uterus from above downwards through the abdominal wall, or else applies the vulva around the wrist of the operator, whilst the latter with the free hand compresses the uterus. The method is simple, rapid, may be applied in all cases and really seems to be of great efficacy. Records of numerous cases follow.—*Detroit Lancet—Ohio Medical Journal.*

PUERPERAL ECLAMPSIA.—Dr. D. A. Walden, of Beatrice, Neb., writing to the *Chicago Medical Journal and Examiner*, recommends the sulphate of quinine in ten grain doses every two hours, for puerperal convulsions. He reports three cases in which it proved successful after the failure of chloroform by inhalation, chloral in sixty grain doses every two hours, bromide of potash in thirty grain doses every three hours, and morphia sulph. in one grain doses.

THE CANADIAN
Journal of Medical Science,

A Monthly Journal of Medical Science, Criticism,
and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by forwarding reports of the proceedings of their Associations.*

TORONTO, NOVEMBER, 1881.

CLINICS IN TORONTO GENERAL
HOSPITAL.

We are glad to find that a systematic and complete plan of giving clinical instruction is now being carried out at this Hospital. By an arrangement between the lecturers of the two Schools, which is receiving the active and hearty co-operation of the medical superintendent, two hours and a-half each day, during five days in the week, (from 1 to 3.30 p.m.) are devoted to clinical teaching, a regular programme having been made out, by which certain hours are allotted to the lecturers from the Schools who are on the Hospital Staff. We understand that, with few exceptions, the teachers are making special efforts to prepare and deliver clinics which will be useful and valuable to the students, and are at their posts at the proper time. The want of regularity and punctuality, which was so conspicuous in the past, is, we hope, gone forever. It is not pleasant to call to mind the indifference which has been so frequently shown in the past, by the so-called clinical teachers, towards the students who paid a good price for clinical instruction *which they did not get.* A simple allusion to such injustice will, we trust, place the teaching of the future in a still more favourable light from the marked contrast it will present when compared with the past.

So far as appearance, position, arrangement of different parts and executive management are concerned, this Hospital is, without doubt,

the best in Canada, and being situated in what some are pleased to call the "intellectual capital" of the Dominion, the public and the profession will naturally expect the character of the clinical teaching given within its walls to be at least equal to that of any other hospital in the country, and if the teaching staff will make the effort there is no reason why those indulging in such expectations should be disappointed.

While there is so much to commend in our Hospital management, we regret to have to notice two grave defects. First: There are no hospital records, or none deserving such a name. We think that no other hospital in the world of the same standing is in such a position. We have not space to dilate on the importance of such records. This must be evident to the laity as well as the profession. We have reason to think that the trustees appreciate this fact, and we know that the medical superintendent is very anxious to have reports taken and kept of all the cases; but he has been compelled to leave this duty in the hands of the attending physicians, who have often tried to have the work done by students, but thus far with very indifferent success, or, rather, with no success at all.

Second: Which is intimately associated with the first; the students do little or no practical work in the way of surgical dressing or watching and taking careful notes of medical cases. In consequence of this we are ashamed to state that many of our graduates, who have received their instruction in the medical schools and hospitals, are unable to put on the simplest kind of bandage properly when they receive their degrees.

We have associated these two drawbacks, because we think a remedy for the second defect would afford the means of a remedy for the first. If our students did the principal part of the surgical dressing, and visited all patients daily, the regular assistants might spend a portion of their time in keeping records of all the cases; or half the assistants (say two, supposing four to be employed) might attend to this duty while the others look after the dressings or direct the students who have charge of them. In the Montreal Hospital the plan recently

adopted is something like this, and we learn it is working admirably. Unfortunately it has been found impossible heretofore to get our students to attend to such duties properly, and, therefore, it has been considered unsafe to invest them with such responsibilities. If the students are so blind to their own interests as to neglect such valuable opportunities, and we fear the majority are, we hope the Ontario Medical Council will follow the example of the Royal College and kindred institutions in the Old Country, and require a certificate of having acted for three months in the capacity of clinical clerk, and for the same period as surgical dresser, before allowing them up for the final examinations. As the Council is entitled to the credit of inaugurating practical examinations in Ontario, we hope that it will not be too much to expect this further advance.

We believe the students of this year are as good, if not better, than the average; but we fear a large proportion of them do not properly appreciate the advantages placed at their disposal. As a rule all who happen to live between Parkdale and Leslieville will rush to the hospital to see a major amputation, while but a small proportion of them will spend fifteen minutes in examining a case of pneumonia or measles. And yet our general practitioners will have many more cases of pneumonia than amputation under their care. We were somewhat recently amazed to see a class of fifteen students, who had followed the physician somewhat hurriedly through a couple of wards, leave, in a body, while a simple fracture of the leg was being dressed, and a few weeks after we had the opportunity of discovering at an examination that not three of them knew how to bandage an ankle. The students should remember that no details of practical treatment are so trifling as to be unworthy of their careful study, and as practical examinations at the bedside have been instituted by both the University of Toronto and the Medical Council of Ontario, a knowledge of practical work which is learned in hospitals is necessary to enable them to pass the dreaded examinations, as well as to prepare them for the more remote, and also more important duties thereafter of alleviating the pains of suffering humanity.

OPENING OF THE MEDICAL SCHOOLS.

The two medical schools of this city began their winter courses on the 3rd October, when an unprecedentedly large number of students entered upon the course.

With the longer established of the sister schools, the Toronto School of Medicine, introductory lectures have never found much favour, and this year, as is their wont, the individual lecturers entered at once upon the subject of their courses, after saying a few words of welcome, explanation, exhortation, and admonition to the separate classes. The school is in excellent trim throughout, and the greatest enthusiasm prevailing both amongst teachers and students, a most pleasing vista of unbounded future possibilities of utility and attainment opens before it in this last decade of the first half century of its existence.

At Trinity Medical School an introductory lecture was delivered to a large class of students, former students, and a sprinkling of ladies, in the presence of the faculty, Rev. Arthur Baldwin, Rev. Prof. Jones, and Dr. J. H. Burns. The proceedings were opened with prayer by Rev. Mr. Baldwin, after which the Dean, Dr. Geikie, made a few felicitous and felicitatory remarks introducing the lecturer, Dr. Fulton. The lecturer said that in accordance with custom it devolved upon him to deliver the introductory address. He deemed it proper that such an address should partake of a general character, and should not be devoid of advice to students. He would impress upon the younger men the necessity for diligence, application, and unremitting toil for the competition they would meet with in their vocation would be found to be unparalleled in other callings. The facilities for acquiring knowledge were, however, of late, greatly increased. There were numerous qualifications, and different degrees, of success. He commended the motto of Lady Montague, "Hold your ground, and push ahead." It was his duty to admonish his audience, however, that failure was possible in spite of all. He advised concentration, and the avoidance of versatility. He quoted from Michael Fotses's late address at the International Congress, the

instance of Haller filling many chairs simultaneously, and showing that the progress of science had rendered such a thing no longer possible. Independence, self-reliance, punctuality, and regularity with economy of time, were to be sedulously cultivated, and the evil of procrastination shunned. * The faculties of observation, thought, and reason, would need to attain their highest possible development. Amongst the subjects of the course anatomy was pre-eminently necessary, and the lecturer hoped that "the slaughter of the innocents" last spring would serve to emphasize the fact. No branch, however, could be neglected with impunity. Powers of clinical observation were of prime importance, and in this respect he advised the students to take Louis as a model. To the final men he would recommend the acquirement of tact, a knowledge of human nature, the quality of decision and presence of mind and a pleasing manner and address. They would find it highly necessary to accommodate themselves to circumstances. The lecturer quoted an aphoristic comparison of talent and tact from Scargill, and pointed the moral of a dissociation of the two by an allusion to Sir James McIntosh's failure in life. Pliableness and versatility were necessary. Politeness, attention to trifles, absence of dogmatism, frankness, cordiality, good humour, and cheerfulness were powerful auxiliaries of success. Syme's well-known advice was approvingly reiterated. Temperance, perseverance, and a recognition of the sweet uses of adversity were important qualities, and their value was illustrated by the citation of points in the lives of Napoleon, Wellington, Webster, Cooper, and Bulwer. If any entered the profession for the sake of money making they would find that medicine was a miserable trade. Valentine Mott advised his students on going out into the world to have two pockets made; a small one for fees, and a large one for abuse. Self-respect was to be inculcated, and a just valuation of self not to be depreciated. Every man owed a debt to his profession, and should maintain its honour and dignity intact, not being carried away by the easy imposition of charlatans upon those who should know better. Trials, difficulties, and responsibilities abounded, but a

good conscience, a good courage, a good training and application would overcome them all. The lecturer concluded an eloquent address by a quotation of the still more eloquent peroration of Sir James Paget's opening speech at the recent International Medical Congress. We deem it a pity that our medical orators on such occasions while striving to imitate his "blanda oratio" and eloquence of diction, do not at the same time seek to cultivate the polished periods, the finished delivery, the gracefulness of manner, and the charm of utterance which have secured to the profession in the old land the honour of a leader whom all men recognize as one of the most brilliant speakers in the nation.

In the attainment of such a purpose these annual addresses might be made to play a no insignificant part. We desire, moreover, to see a perpetuation of such lectures, as serving to show the student that his teachers are acquainted with the trials and perplexities that beset his path, and are in a position to suggest the means of overcoming the one and avoiding the other. Besides, we hold it true, with a recent writer in the *London Lancet*, that it is not wasted time to try at the outset of a career to temper the zeal of youth with the discretion of experience.

AN EXAMPLE WORTHY OF IMITATION.—In the City of Brussels, whenever a birth is registered the Registrar hands to the parent, gratuitously, a little pamphlet of five pages containing short and plain directions for the management of children. In Paris the mortality amongst infants is so enormous that it is proposed to introduce a similar practice there.

T. W. MILLS, M.D., L.R.C.P., who was for some time Resident Physician in the Hamilton General Hospital, and recently spent a year in London, England, has returned to Canada, and will live in Montreal. He has been appointed assistant to Dr Osler, Professor of Physiology, in McGill University.

OPENING OF MEDICAL SESSION OF MCGILL UNIVERSITY.—Dr. F. Buller, Lecturer on Ophthalmology and Otology, delivered the opening lecture on Monday, Oct. 3rd.

TYPHOID FEVER.

The unusual incidence and prevalence of typhoid fever the world over, so early in the autumn, has, of course, not escaped lay observation and comment, and many are the queries and suggestions dinned into ears medical on all sides, anent the cause and reason thereof. To satisfy public curiosity in the matter, the city editor of the *Globe* has issued post cards, containing a series of questions as to the number of cases seen by each individual practitioner, the locality of their occurrence, the character of the water used—city or well—etc., etc.

We do not believe, however, that any considerable number of the profession, in the absence of any assurance that the data so collected will be weighed and sifted by a competent authority, will entertain sufficient faith in the value or utility of deductions made therefrom to justify them in the very *outré* proceeding of furnishing such information to the secular press. Had the system of disease registration, so zealously inaugurated and energetically pursued by Mr. Monk, continued in satisfactory operation, which we regret to acknowledge is not the case, simply and solely through the absence of the active co-operation of the profession in a matter in which they profess *and feel* a lively interest, we should now be in possession of an accumulation of facts which, properly investigated and judiciously handled, might serve to throw a gleam of light, as far as our Province is concerned, upon the local causes and prevention of a disease whose prevalence is a standing stigma upon the sanitary science, or rather practice, of every community. So far as our city is concerned, our personal observation leads us to believe that the central portions have not suffered in anything approaching a similar proportion to the periphery and outskirts, and if the fact be true it probably is not devoid of interest from an etiological consideration. It is the experience of certain English writers that, during the occurrence of typhoid fever in the cities, diphtheria is unusually rife in the rural districts. We do not know whether the observation be applicable to Canada or not; but certain it is that, although at the present time the mortality in Great Britain and in France from diphtheria frequently

exceeds from week to week the death-rate from enteric fever, we do not in Canada have to bewail a similar experience. Late reports from Greece inform us that in Athens, out of seventy thousand souls no less than four thousand are suffering from typhoid fever. But the reason for this epidemic is not far to seek, it being related that the streets of Athens—proverbially the dustiest and windiest of European capitals—are daily sprinkled with water in which the foul linen of the soldiery and prison-inmates has been washed. Germs of disease being thus sown broadcast on the streets and disseminated by the winds to every quarter, all wonder dies that a fifteenth portion of the population should pay tribute to the avenging Nemesis of municipal madness and outraged common sense.

But in our very midst, though, perhaps on a smaller scale, similar egregious sanitary crimes are daily enacted. In not a few instances this summer have we found, while searching for the cause of individual cases of typhoid, that the infected persons have been living in the immediate proximity of foul privies, that in some the privies were overflowing upon the yards and under the houses; that in some there was reason to believe that milk from an infected dairy was the chief etiological factor; and that in some well water was habitually used, a fact of which, in a city, we are always suspicious, although in these cases no analysis was made. This then is the old story of filth fever; and given the meteorological conditions favourable to the development of zymotic germs, such as we have had this summer in the long drought, it would, to our minds, be strange indeed if enteric fever were not rampant in our midst. Now for the reasons why central portions of the city should suffer less than others. In the first place, privies are less abundant, wells not used, scavenging more thorough; in the second place, city water is more generally employed, and in the third place more lavishly used for all purposes, thus contributing to the constant flushing of the sewers. In a dry season, solid putrescible matters collect at various points in sewers not subject to frequent flushing, and afford a very suitable nidus for the development of germs of all sorts, which then require merely a favouring breeze to waft them

to a soil whose kindly nurture will abundantly attest their deadly character and power.

With regard to the character of the cases in this epidemic, we may add that our experience would lead us to describe them as presenting mild but long-continued fever, considerable prostration, slow pulse, an absence of, or little troublesome diarrhoea, a tendency to epistaxis and intestinal hæmorrhage, and almost constant bronchial complication, but attended with a low death-rate, and satisfactory but prolonged convalescence, except in the cases of short duration which have manifested a liability to relapse.

MESSRS. J. STEVENS & SON, SURGICAL INSTRUMENT MAKERS.—Mr. Stevens, Jun., the Toronto member of this well known firm, has recently been in England, and since his return has largely increased his stock of instruments. We are glad to learn that Mr. Stevens has received sufficient encouragement to induce him to take such a step, and we hope that our readers will not forget that the best class of instruments, of all kinds, can be obtained from this establishment. We have considered it advisable to specially note this fact, because we know that many Physicians and Surgeons, who for years tried in vain to buy suitable instruments in Toronto or other places in Canada, have lately sent to New York or the Old Country for what they required. (See new advertisement in this issue.)

ERRATA.—In our commutation rates published last month, the New York Medical Journal marked "weekly" should be "monthly." The Canadian Journal of Medical Science and American reprint of the London Lancet, will be given for "six dollars" instead of "six and a-half."

DEATH OF PROFESSOR JAMES P. WHITE.—It is with deep and heartfelt regret that we record the death of this eminent and distinguished member of the profession, which occurred in Buffalo, on the 28th September.

The Annual Dinner of the Toronto School of Medicine, will be held at the Queen's Hotel, on Thursday evening, the 10th of November. Messrs. Knill, Coulter, and Draper will act as Chairman and Vice-Chairmen.

The Annual Dinner of the Trinity Medical School, will be held on Thursday evening, November 3rd. Mr. Nattress will act as Chairman.

Book Notices.

Transactions of the Medical Association of the State of Missouri, 24th Annual Session at Mexico, Mo., 1881.

Ovariectomy during Pregnancy. By H. P. C. WILSON, M.D., Baltimore. (Reprint from *Gynecological Transactions, Vol. V.*)

Uterine Massage as a means of treating certain forms of Enlargement of the Womb. By A. REEVES JACKSON, A.M., M.D., Chicago, Ill. (Reprint from *Gynecol. Trans., Vol. V.*)

The Physician's Visiting List for 1882. Lindsay & Blakiston, Philadelphia.

This well-known Visiting List is at hand, and we have only to say it suits us admirably. It is well arranged, neat, compact, and a good shape for our breast pocket; and so far as we know, our breast pocket is the kind usually worn by our physicians.

The Compend of Chemistry, &c. By HENRY LEFFMANN, M.D. Philadelphia: C. C. Roberts & Co., 1881.

The author has faith in the excellence of his little book, and boldly puts it forth upon the world upon its merits, for the sole reason that it suits his pleasure so to do. It appears to be accurate in general, and in detailed descriptions clearness is joined to conciseness. It will, no doubt, prove acceptable to students who have failed to attend carefully to their lectures, or who are cramming for an examination.

Transactions of the American Gynecological Society, Vol. V., for the Year 1880. Boston: Houghton, Mifflin & Co.

As a body of Scientific and Practical Gynecologists this society has no superior in any part of the world; in fact, we think it the best in existence. This volume contains the address of the President, Dr. J. Marion Sims, the various papers read by members, together with the discussions, and a complete index to the Gynecological and Obstetric Literature of the year 1879. We must congratulate the able and energetic Secretary, Dr. James R. Chad-

wick, and the publishers, on the general appearance and character of the book in the form in which it is presented to the profession.

A Medical Formulary, based on the United States and British Pharmacopœias, together with numerous French, German, and Unofficial Preparations. By Lawrence Johnson, A.M., M.D., New York: Wm. Wood & Co.

This is the May No. of Wood's Library Series for 1881. The design of the work is to present, in a manner convenient for ready reference, the drugs and preparations in common use, together with formulæ illustrating the manner in which they are combined by good practitioners of the present day. Though based on the U. S. and British Pharmacopœias, all the drugs and preparations contained in them are not included, some of the less important having been omitted, and their place supplied by an account of new therapeutic agents. The preparations introduced from the French Codex, and the German Pharmacopœia, are from the last editions of those works, while the unofficial formulæ are derived mainly from recent sources, many of them having been furnished by their authors expressly for this work.

A Treatise on the Continued Fevers. By JAMES C. WILSON, M.D., Physician to the Philadelphia Hospital, and to the Hospital of Jefferson Medical College, Lecturer on Physical Diagnosis at Jefferson Medical College, etc. Wood's Library of Standard Medical Authors. New York: William Wood & Co. Toronto: Willing & Williamson.

The author includes among the Continued Fevers, Simple Continued Fever, Influenza, Cerebro-Spinal Fever, Enteric Fever, Typhus Fever, Relapsing Fever, and Dengue. The "Introduction" is written by Dr. DaCosta, who takes for his subject "The Management of Fever," and contains many valuable practical hints on treatment. A work on this subject must necessarily interest the general practitioner, especially at the present time, when continued fever is becoming a scourge to so many communities in this country. In connection with each form of fever we have here historical sketches, discussions on etiology, des-

cription of clinical history, and hints on treatment which are in every case interesting as well as valuable. We feel assured that the book will be one of the most popular (and deservedly so) in this excellent series.

Coulson on the Diseases of the Bladder and Prostate Gland. Sixth edition; revised. By WALTER J. COULSON, F.R.C.S., Surgeon to St. Peter's Hospital for Stone, etc. New York: William Wood & Co. Toronto: Willing and Williamson.

This is the July volume of Wood's Library of Standard Authors, and the sixth edition of the work. Although the general plan is the same as that of the fifth edition, which was published more than twenty years ago, numerous additions have been made, and most of the old chapters have been re-written. In the portion devoted to the bladder, which includes nearly the whole book, the author first gives anatomical and physiological considerations, next methods of making examinations, and after a chapter on abnormalities, goes on to give a description of the various injuries and diseases, together with appropriate treatments, which is thoroughly comprehensive and exhaustive. In addition to his own views on various questions, he quotes largely from all the recognized authorities in this department. While according a hearty approval to everything written respecting the bladder, we regret we cannot say so much for the few short chapters on Affections of the Prostate Gland, which are meagre and common-place in every respect.

A Practical Treatise on Impotence, Sterility, and Allied Disorders of the Male Sexual Organs. By SAMUEL W. GROSS, A.M., M.D., with sixteen illustrations. Philadelphia: H. C. Lea's, Son & Co. Toronto: Hart & Co.

This little *brochure* of 170 pages is conceived and executed in a scientific spirit, and may do good service in directing attention to the fact that in a considerable proportion of unfruitful marriages the husband is really the delinquent; our author estimates it at "at least one instance in every six." The subject of impotence is first considered, being introduced by an account of the physiology of erection. Impotence is divided into four classes: Atonic, psychical,

symptomatic, and organic. Amongst these the author's experience accords an overwhelming preponderance to the first class, viz.: Out of 153 cases, 149 atonic, 1 psychical, 1 symptomatic, 2 organic. The pathological condition most frequently met with is hyperæsthesia, or subacute inflammation of the prostatic urethra. Masturbation is assigned as the chief etiological factor, and an interesting account of its effects is given. Sterility, spermatorrhœa, and prostatorrhœa are afterwards ably discussed; and we cheerfully accord the author full credit for the scientific spirit and method displayed, as well as for patient learning and research; but on the whole we feel bound to place the book in the category of little needed works, whose perusal fails to establish clearly a satisfactory *raison d'être*.

A System of Surgery, Theoretical and Practical, in Treatises, by various Authors. Edited by T. HOLMES, M.A., Cantab. First American from Second English Edition. Thoroughly Revised and much Enlarged by JOHN H. PACKARD, A.M., M.D., of Philadelphia, assisted by a large corps of the most eminent American Surgeons. In 3 Vols., with many Illustrations. Philadelphia: H. C. Lea's, Son & Co. Toronto: Hart & Co., 1881.

Holme's System of Surgery is too well known the whole world over to need commendation at the Reviewer's hands. But the English Edition, in Five Volumes, was a formidable and expensive work; and in the ten years which have elapsed since its appearance, the rapid progress of science had made it, in some respects, already old. It is a subject for congratulation, therefore, that the idea of an American Edition, incorporating all recently acquired knowledge and experience, should have been conceived, and its execution entrusted to such able hands as Packard's. The Second English Edition is shorn of none of its merits or its beauties being reproduced entire, the additions and emendations made by the revising editors being interpolated, within brackets, in the text. The names of Simes, Roberts, Longstreth, Conner, Morton, Ashurst, Stinson, Hunt, Jewell, Bartholow, Hodgen, and Packard's other coadjutors, in the edition of the 1st Volume which has come to hand, and

treats of General Pathology, Morbid Processes, Injuries in General, Complications of Injuries, and Injuries of Regions, afford a sufficient guarantee that the work has not only been brought fully up to date, but also that it has been accomplished in that same large, thorough and scientific spirit, which characterized the contributions to the original edition. It would manifestly be impossible, within the limits of our space, to criticize the separate articles in detail; but we gladly bear testimony to the fact that the American Revisers have not sought self-prominence by making unnecessary additions or captious emendations. The half-Russia binding makes a most handsome book. Messrs. Hart & Co., of King Street West, are Sole Agents for Ontario.

Meetings of Medical Societies.

UNION MEETING OF NEWCASTLE AND TRENT MEDICAL ASSOCIATION WITH QUINTE AND CATARAQUI MEDICAL ASSOCIATION.

Both the above Associations held a joint meeting at Napanee, on 5th October. The Quinte and Cataraqui Association adopted a constitution, and the Newcastle and Trent passed minutes of last meeting at Campbellford, when the two associations went into joint session, with the following practitioners present: Drs. Platt, Wright, Evans, jun., Picton; Dr. Burdett, Eakins, Belleville; Dr. Bowerman, Bloomfield; Dr. Hamilton, Port Hope; Dr. Leonard, Ward, Ruttan, Bristol, Cowan, Clark, Edwards, Brown, Napanee; Drs. M. Lavelle, C. H. Lavelle, Metcalfe (Rockwood Asylum), Henderson, Oliver, Kingston; Dr. Beeman, Centreville; Drs. Day, McLellan, Trenton; Dr. W. A. Lavelle, Newburgh; Drs. Beeman, Meacham, Odessa; Dr. Riddle, Baltimore; Dr. Knight, Tamworth; Dr. Clinton, Millpoint. Dr. Bredin, Milford, telegraphed regrets at inability to attend.

Dr. M. Lavelle was called to the chair, and Dr. HAMILTON made Secretary. Dr. Ruttan reported a case of

BRIGHT'S DISEASE.

Mrs. ———, aged 64, had œdema of limbs for

some time, but whether albuminuria was present at first or not is unknown, but is suspected. She is anæmic. About six weeks ago she had diphtheria, when the boiled urine became almost solid from albumen. Under the use of tinct. ferri perchlor, muriate of ammonia, and steam baths, the albuminuria had nearly wholly disappeared, as did the œdema. Lately she has had a relapse. There is some emaciation. The urine has sp. gr. of 1020. The presence of albumen in abundance was demonstrated. Casts had been found.

POST PARTUM HEMORRHAGE.

Dr. M. I. Beeman, Centreville, read a short practical paper, giving his treatment and experience of flooding after labor as managed by hot water injections. He had injected it as hot as about 110° to 115° F., judging by sensation of heat to his own hand, or about as hot as could be borne. He had resorted to it three times, and felt confident reliance in it. Thus, J. H., aged 30, multipara, natural labor, the placenta removed and binder applied. In half an hour she bled profusely. He gave plumoi acet, and applied continuous cold. The flow still being too free a pint of hot water was injected controlling it at once. Fifteen months after he attended the same case, finding child born on arrival, and placenta in vagina. He gave ergot and lead, but had again to resort to the water. P. H., Multipara, had been in labor many hours: forceps delivery. Shortly after removing placenta flooding began. Again gave lead, and sent for syringe. Hot water stopped it instantly. Her recovery was good, although there was evidence of some irritation. He would prefer it to either the internal or external application of cold. External cold, if used, he would prefer the ether spray.

Dr. Ruttan thought retention of part of placenta was the most usual cause of flooding. He thoroughly removed placenta, and after that had not found it necessary to resort to anything beyond usual remedies, not even lead. He had however given a drachm of lead acetate in hemoptysis. He had used perchloride of iron locally in post-partum hemorrhage, not in solution but dry. He carried as much as a nasal polypus forceps would grasp of the dry salt up to the fundus, and opening the forceps allowed it to be

there deposited. It produced firm contraction immediately, and had the advantage of leaving the cervix open. If the pulse falls after labor there will be no hemorrhage. If the pulse runs high we should not leave the patient.

The Chairman, being called on, stated that he had lost but two cases from hemorrhage immediately after the child was born and before delivery of placenta. He thought it was the sudden cases which were fatal. He had no experience with hot water. He gave a ʒi. dose of fluid ext. ergot when the head appeared at the vulva and if no response another dose. He brings away the placenta as soon as detached. He was decidedly in favor of plumbi ac. in ʒss —i. doses, where ergot fails. He gave it in either solution or powder using the pure crystals kept in well stoppered bottles, and no other. He has given ʒss. every four hours for 48 hours. He had never known it to fail. True, it might produce vomiting and even violent diarrhœa, but it still has its specific effect on uterus. It acts through the sympathetic system on involuntary fibre. Its promptness was remarkable. We must have complete condensation of uterine tissue before we have the hemorrhage completely controlled. He thought the inward application of cold improper, except by insertion of a piece of ice. He would condemn the injection of solution of perchloride of iron. He had seen serious results from it and other astringent injections. He had relied on lead too in hæmorrhage from the bowels in [typhoid?] fever.

Dr. Platt believed that pressure upon the pudic nerves, where they crossed the ascending rami of ischia, would cause contraction of the uterus and expulsion of placenta, and could be utilized in flooding. He would expect much from the procedure known as "knuckling the uterus." What he had seen in consultation was not in favor of the use of perchloride of iron. The chief objection was the prolonged suffering it caused the patient.

On experience with the hypodermic use of ergot being asked for, Dr. Oliver reported favourable effects from its use in hæmoptysis.

Dr. Bristol had seen but one fatal case. He preferred to rely on stimulating the uterus to contract by introducing the hand, which was more reliable than ergot.

A vote of thanks was tendered Dr. Beeman for his paper.

Dr. Day opened the subject: "The Relation of the Medical Council to the Profession," which led to a pretty general discussion, as to the doings of the Council, and the interest of the profession therein. Five or six members of the Council resided within the district.

Dr. M. Lavelle gave an historical retrospect of the constitution of the Council, and some difficulties it had to meet. It was considered best to take no immediate action in the matter, but having opened it now to more fully ventilate it at the next meeting of the Association.

The annual fees, increased territorial representation, cost of holding the Council's examination, the utility of a proposed museum, the purchase of the Council's hall, its debt, and the proposal to hold the University of Toronto examination in lieu of that of the Council, as the University has the confidence of the country, is supported by it, and is not a teaching body as regards medicine, but only an examining one. All of these were discussed, and brought out opinions *pro* and *con*.

TORTICOLLIS.

Dr. Ward presented a plumber and tinsmith, aged 32, who had been exposed to cold, after which he began to complain last January of pain in the back, which was called lumbago. Soon it was noticed that his head was turned to the left side. There is no spasm during sleep. He has had a chair made with head-rest, in which he was presented. The sterno-cleido-mastoid of the right side is notably hypertrophied. When left to himself spasm is moderate, but in presence of several, as at time of presentation, the amount of spasmodic contortion is almost painful to witness. He had been in the hands of both regulars and quacks. A regular had cupped and blistered, after which he was worse. Later, the same practitioner had given quinine, which was of apparent benefit. Later still he came under the care of Dr. Hammond, of New York, whose treatment Dr. Ward was still carrying out under Dr. H.'s supervision. He was given one half to two grains of bromide of zinc, combined with 20 to 40 grains of bromide of sodium three times a day, and hypodermic injection.

tions of atropia, once a day. The Faradaic current was applied to the left sterno-cleido-mastoid. Bénéfit was also derived from the direct galvanic current applied to the muscle affected with spasm. About the 20th of July there was great improvement, at the time an eruption appeared on face and chest, believed to be due to the atropia. His general condition requiring it, he was, with Dr. H.'s consent, put on quinine and iron, but grew worse, when the former treatment was resumed. About 1st of September, the muscles of the neck, back, and even the groin and left leg, became affected.

DINNER

Was had at the Campbell House, where an abundant and sumptuous repast had been prepared for all present, by the resident practitioners in Napanee.

After this, Dr. Ruttan took the chair, when Dr. Hamilton gave his method of treating

EPISTAXIS,

Which was to treat the matter surgically and mechanically, rather than by local medicaments, which were irritating, disagreeable, and apt to be unsatisfactory in result. As to general treatment, ergot and sulphate of soda were mentioned. Of local treatment, main reliance was to be placed on arterial compression made upon both superior and inferior maxillary bones. This could be readily and safely done by any only half-intelligent nurse, as occasion might arise. Even in prolonged cases it was hardly conceivable that it should be insufficient until the arrival of the surgeon. So far, since adopting this plan, he had found it all-sufficient. In more serious cases, plugging the posterior nares might have to be resorted to. Few of us have a Bellocq's canula, considered the *ne plus ultra* instrument for this. The posterior nares could be plugged, however, readily, by tying a small plug of styptic cotton with string, which was to be threaded through a eustachian catheter, by means of wire, and then by aid of the catheter from before backwards, placed *in situ*, with thread protruding from the nostril. A second, or even third small plug was to succeed the first if need be. Lastly, a plug in front made all secure. A piece of sheep's intestine, as Gross suggested, or that of fowl, might be

tied at one end and inserted; and then either inflated with air, or filled with water. So might a toy balloon. He had been compelled to resort to plugging before learning the compression "wrinkle," not since.

Dr. Oliver had used rather fine stove-pipe wire, bent double and inserted through the nostril as a substitute for Bellocq's canula. The end, on impinging against posterior wall of pharynx, would bend down around the soft palate, until the cord the wire carried could be reached by way of the mouth. This cord was then made the means of drawing a plug into the posterior nares in the usual way.

Dr. Ruttan had succeeded by throwing cold water behind the soft palate with a syringe, and allowing it to flow forward. This was to be repeated as often as necessary.

Dr. Metcalf had used astringents thrown in like manner by an ordinary enema.

Dr. Brown reported a case of complete

INVERSION OF UTERUS.

The case was that of a woman delivered of her fourth child, after which there presented what gave the impression of being an enormous placenta, slowly impelled outward by expulsive efforts. Soon the afterbirth was expelled, and was quite large. A large part of the protruding mass was then found to be the uterine body in a state of complete inversion. He, on examination, considered it such, gave an opiate, and called a consultation, when, by means of pressure, steadily exerted by soft cloths, success crowned efforts at replacement. The vagina was then plugged to prevent possible recurrence. The recovery was good.

ADJOURNMENT.

The Q. and C. Association then adjourned to meet at Belleville, on first of February, and extended an invitation to their sister N. and T. Association to hold a joint meeting again (at Belleville), which was accepted.

McGILL MEDICAL SOCIETY.—At the annual meeting, held October 8th, the following were elected: President, Dr. Molson; 1st Vice-President, Mr. Duncan; 2nd Vice-President, Mr. Shaw; Secretary, Mr. Loring; Treasurer, Dr. Gardner; Librarian, Mr. Cameron; Council, Dr. Buller, Messrs. Smith, and Gooding.

REPORT OF THE TORONTO MEDICAL SOCIETY.

The Society met on July 14th, the President in the chair. The minutes of the last meeting were read and approved. Dr. Sheard exhibited a specimen of aneurysm of the abdominal aorta, also the heart from the same case, weight nineteen ounces; it was hypertrophied and dilated, with vegetations on the aortic and mitral valves, and atheroma of the aortic arch. The patient from whom this specimen was taken was syphilitic, the kidneys were congested, and the liver nutmeg. The same gentleman also exhibited a portion of the lower end of a femur, which showed a spiculum of bone projecting from the internal condyloid ridge, just where the femoral artery passes into the popliteal space. There had also existed in the same case an aneurysm of the popliteal artery, supposed to have been brought about by the artery having been punctured by the spiculum of bone.

The discussion of Dr. Graham's paper on Leucocythæmia was then taken up, which partook of a conversational form.

Dr. J. S. King was then elected a member of the society.

Dr. Workman then read a paper upon "Animal Magnetism." He spoke of the functions which the various nervous systems played in the hypnotised person. He gave the methods of inducing and relieving hypnotism, and spoke of its relation to hysteria. He mentioned some very interesting experiments, as performed by Charcot and others, and spoke of the effect of hypnotism upon the senses, its application to surgery in place of ether and chloroform was not successful. He also related some of the phenomena produced by suggestion in the hypnotised person.

The Society met on the 22nd September, the President in the chair. After the reading of the minutes, Dr. Sheard exhibited a liver in which there existed two large hydatid cysts, the right one the larger of the two, communicated with the duodenum. The patient, prior to her death had been passing hydatids by the bowels. In the same patient, in the region of the right ovary there existed an independent cyst, having no communication with the other

cysts in the liver or any of the viscera. It contained hydatids in its interior.

Dr. Nevitt then showed a fleshy mole; it was a perfect cast of the uterus, and consisted of fibrine. There was no muscular tissue in its composition.

Dr. Nevitt then read a paper upon Pertussis. He related the history of the disease and the derivation of the name, he thought it to be one of the most contagious and fatal of diseases, and referred to the early age at which the disease may occur. He referred to a case in his own practice where the disease showed itself shortly after birth. He thought there existed a distinct ratio between the prodromic stage of the disease and the disease itself. He gave instances where death occurred from complications. The treatment is by the administration of belladonna, chlorate of potash, chloral hydrate, and quinine, with the exhibition of inhalations and maintaining the strength.

Drs. Workman, Covernton, Canniff, and others, took part in the discussion upon the paper.

Dr. Oldright mentioned a case of atrophy of the scapular muscles, in which he ordered tonics and electricity; and also of incontinence of urine, where the administration of belladonna to its full effect had failed to prove serviceable.

Dr. Geo. Wright mentioned a case of chancre of the lip, in which the patient neglected the treatment ordered, and secondary symptoms showed themselves.

Dr. Cameron referred to a case of lacerated wound of the face, from the kick of a horse, also an extensive saw-wound of the hand, where primary union had taken place under the lead and spirit lotion dressing.

Dr. Macdonald mentioned a case of parturition in which there was complete rupture of the perineum extending into the rectum, which united without any surgical interference.

Dr. Canniff having resigned his position on the active staff of the Toronto General Hospital Dr. J. H. Burns has been appointed in his place.

Births, Marriages and Deaths.

MARRIAGE.

On the 4th inst., at Montreal, Henry Yarwood Baldwin, Esq., M.D., C.M., to Adele Gertrude Mary Pineseault, youngest daughter of the late Alfred Pineseault, Esq.

DEATH.

In Galt, on Thursday, the 13th inst., Agnes C. Graham, beloved wife of Dr. J. P. Brown, aged 36 years.