

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE
MONTREAL MEDICAL JOURNAL.

VOL. XXX.

FEBRUARY, 1901.

No. 2.

Original Communications.

TYPHOID FEVER: SIGNS POINTING TO A PROBABLE
PERFORATION OF THE BOWEL: OPERATION,
ABSENCE OF PERFORATION OR ANY
LESION OF PERITONEUM.*

BY

H. A. LAFLEUR, B.A., M.D.,

Assistant Professor of Medicine and Associate Professor of Clinical Medicine,
McGill University ; Physician to the Montreal General Hospital.

It is a common saying that we learn as much from those occasions on which we are mistaken as from those on which we are right. The following case, I think, illustrates this sufficiently well.

H. C., 39 years of age, unmarried, returned, on October 7th, to Montreal from a ten days' trip to New York. She was in her usual health until October 11th, when she began to have pains in her bones and felt miserable. There was no improvement the next day, and during the afternoon of October 13th she complained of headache and chilliness. On the evening of the same day she felt feverish, and had nausea with a little vomiting. There was no epistaxis. She had no appetite, but great thirst, and the bowels were constipated.

I saw her for the first time on October 15th. At that time the face was flushed, the tongue coated in the middle, the temperature 102° F., and the pulse about 100. There was otherwise nothing to be made out by physical examination, but suspecting typhoid fever, I advised her removal to a private ward in the hospital, in case baths would have to be given. She was removed to the Montreal General Hospital on October 16th. Widal's reaction was present on October 17th and 18th, the diazo-reaction on October 18th, disappearing the next day.

* Read before the Montreal Medico-Chirurgical Society, Nov. 30, 1900.

From the fifth to the seventeenth day the course of the illness was uneventful. For a week the temperature ranged from 103° to 104.5° F., then from 104° to 105° , (once reaching 105.6°). The pulse was at first 100, then 110 to 116. Typical rose spots appeared on the thorax and abdomen, and the spleen became distinctly palpable. The bowels were constipated and the abdomen relaxed and natural. The only symptom was nausea, which, however, did not interfere with the taking of a fair amount of liquid nourishment. The patient's mind was clear, except for a little wandering at night occasionally, and the amount of sleep averaged between five and seven hours. Baths at 80° F., lowered to 70° F., were given every three hours if the temperature reached 102.4° F., and these she bore very well. There was a "urinary crisis" on the 14th, 15th, and 16th days of the illness, the quantity voided on these days being, respectively, 54, 65 and 90 ounces, the average up to that time being 30 ounces.

On October 28th, the 17th day of the disease, she had a bath at 10 a.m., and one hour later complained of severe pain in the lower part of the abdomen, to relieve which an ice bag was applied. At 2 p.m. she had another bath, lasting only five minutes. The pain still continuing, I was notified of the fact and immediately came to see her. I found her looking rather anxious and with a somewhat pinched face. She complained of a good deal of pain in the abdomen, but had no special nausea and no vomiting. There was a little blueness of the finger nails, due to the bath administered half an hour before. The temperature was 104° F., and the pulse 120, rather full and hard. The abdomen was a little distended symmetrically in its lower half, and there was distinct sensitiveness in the right lower quadrant, about the situation of the appendix. There was certainly no rigidity of the abdomen, rather a doughy feel, and the liver dulness was within the normal limits. The white corpuscles were counted and found to number 17,000 per cub. mm. Feeling uncertain as to whether perforation of the bowel had occurred or not, I asked Dr. Armstrong to see the patient, and at 4 p.m., we made a joint examination of the case. A second blood count at this time gave 10,500 leucocytes per cub. mm. The abdominal condition remained the same as above. It was decided to await further developments, and at 6 p.m., a third blood count showed 10,500 leucocytes. I saw the patient again at 9 p.m., and finding the condition unchanged, with the exception that the abdomen seemed a little more distended in the lower zone, I asked Dr. Armstrong to see the patient once more. We came to the conclusion that a perforation was probably present though there was no rigidity, and as ten hours had now elapsed since the onset of the symptoms, we both

felt that if anything was to be done, it would have to be done now. It seemed on the whole more prudent to take the risk of what might turn out to be a purely exploratory operation, than to wait longer until the time for successful intervention would be past.

The patient was accordingly removed to the operating theatre about 10 p.m., and under ether, Dr. Armstrong made an incision about three inches long in the median line about one inch below the umbilicus. On opening the peritoneum, no fluid or gas escaped, and the surface of the bowel seemed normal. Thickenings in the course of the lower part of the ileum, due to the typhoid ulcers, were distinctly felt, but no perforation could be found, or even any sign of local peritonitis. In the angle formed by the junction of ileum and cæcum, there were two very red lymph glands, the size of large hazel nuts, swollen, it seemed, almost to the point of rupture, and standing out prominently from their peritoneal investment. Two quarts of warm normal saline solution were introduced into the peritoneal cavity, after the bowel had been returned, and the abdominal wound was closed. During the operation hypodermics of camphor and strychnine were given, as the pulse was very rapid and weak. Recovery from the operation was uneventful, with exception of a sharp attack of bronchitis with muco-purulent expectoration. From the 33rd to the 41st day of the illness, there was a slight recrudescence of the fever, and November 21st, the patient left the hospital for her home where she made a complete recovery.

I have dwelt at some length upon the details of this case, as it offers a good example of the difficulties that underlie the diagnosis of perforative intestinal lesions. In many instances the diagnosis of perforation is comparatively easy, but many instances occur, such as I have related, in which there seems to be a reasonable probability of perforation. What are we to do in such cases? There seems to be two alternatives—on the one hand to await developments, until possibly the symptoms disappear and the condition is proved not to be a perforative lesion of the bowel, or until absolutely unequivocal signs of perforation and possibly of general peritoneal infection occur, when operative intervention will be too late—or, on the other hand, to operate immediately, even though there may be a reasonable doubt as to the perforation, and the intervention may turn out to be of the nature of an exploratory operation. I believe the latter course to be the proper one, and that the risk should be assumed, provided that skilled surgical assistance can be obtained. On future occasions I shall certainly lay more stress upon the presence or absence of rigidity of the abdominal walls in the diagnosis of perforation in typhoid fever, which is such a valuable sign in perforative appendicitis. I confess I was disappointed by the es-

sistance given by frequent leucocyte counts in this case. I had been led to believe, from a study of recent literature on the subject, that a high leucocyte count was very strong presumptive evidence in favour of perforation in typhoid fever. It is true that before the first count in this case the patient had just had a bath, and the circulation in the extremities was possibly sluggish, which might account for the increase in the white cells. The subsequent counts, however, were still considerably above the normal, especially for typhoid fever. I regret that no count had been made before the onset of the symptoms suggesting perforation, as we should then have had an actual standard of comparison.

TYPHOID FEVER OPERATED ON FOR PERFORATIVE PERITONITIS—WITH NEGATIVE FINDING.

BY

W. F. HAMILTON, M.D.,

Lecturer in Clinical Medicine, McGill University; Assistant Physician to the Royal Victoria Hospital, Montreal.

Since abdominal surgery has made such advancement as marks its present state, operative measures to prevent the almost inevitable lethal ending of perforation of the intestine in typhoid fever are being adopted more and more frequently. While it is true that the results, for obvious reasons, so far achieved in this operation, are not to be compared with those in the cases of perforated gastric ulcer or traumatic perforation, yet they are such as warrant the careful consideration of operative measures in all cases and their adoption in most.

The early diagnosis of intestinal perforation in typhoid fever is of the greatest importance, for there is little hope of obtaining good results in any case of peritonitis after it is well advanced. The difficulties of diagnosis incident to all abdominal conditions, are not infrequently many times increased by the tympany which exists in the course of typhoid fever, as well as by the mental state of the subject; and most clinicians have cast about for some definite data from which an accurate diagnosis may be made. The chief signs and symptoms of this complication, namely, severe and sudden abdominal pain with tenderness and rigidity of the parieties, vomiting, collapse and rapid pulse, are not by any means constantly found, inasmuch as the abdomen may be flat, or the pulse may not be considerably altered, and signs of collapse may be wanting. Even pain may not be complained of. The value of the sign of the obliteration of the liver dulness, it would appear, has been over estimated by some in making this diagnosis, since in not a few non-perforated cases with tympany, the liver dulness could not be made out.

When other complications of typhoid productive of a leucocytosis can be excluded, a marked increase in the white corpuscles in the presence of signs of peritonitis, has been regarded as of value; but this sign cannot be depended upon. With the hope born of the experience of 20 per cent. of recoveries in Keen's series of 83 cases, and 21 per cent. in Finney's 112 cases, every case where signs of perforative peritonitis appear, should be most carefully observed with a view of operative interference. The difficulty of accurate diagnosis is in some

instances so great, that little wonder arises when a mistaken diagnosis is made from time to time. A non-perforated case of typhoid fever operated on has a far better chance of life than a perforative case left alone.

The following case is recorded as one in which a diagnosis of perforation was made, but on operation no perforation was found. Briefly summarized, the report is as follows :—

L. W. St. L., male, aged 18 years, fell ill on December 5, 1900, with headache, dizziness, and general malaise. These symptoms were increasingly severe and troublesome during the next week and, after three days in bed, the patient was admitted to the Royal Victoria Hospital on December 15, 1900.

His condition on admission was that of one with mild typhoid fever, the pulse 100, temperature 102° F., respiration 26. There was slight abdominal distension with tenderness of the left upper quadrant. Rose spots appeared on the following day when the Widal reaction was also present. He was given the bath treatment, but after the fourth bath was taken it was decided to adopt sponging, as he shivered a great deal and often left the bath with weak pulse and cyanosis.

On the evening of December 29th, on the fourteenth day of the disease, he complained of pain in the abdomen, the onset of which was not sudden and which was not attended with collapse, and was more intense over the left side, where the tenderness was most marked. He suffered with increasing intensity throughout the whole of the 20th, diarrhoea being present. On the morning of the 21st (2 a.m.), abdominal pain was very severe, the parietes rigid, with marked tenderness in the left lower quadrant. Liver dulness was obliterated, the pulse 104 to 120, the temperature showed a tendency to rise from four the previous afternoon until the time of examination. In consultation with Dr. Garrow, it was decided that an operation was indicated, as a perforation was believed to have taken place. An examination of the blood made after deciding to operate showed 14,000 leucocytes.

The operation was performed at 4.30 a.m. on December 21st. On opening the abdomen by a median incision below the umbilicus some clear, reddish-coloured fluid was found free in the peritoneum. No inflammatory lymph was seen. The vessels in the visceral peritoneum were turgid and several mesenteric glands were enlarged and deeply congested. The bladder contained twelve ounces of urine. There was no evidence of perforation. The wound was closed with silk worm gut sutures without drainage and the patient made an uninterrupted recovery, the temperature becoming normal on the 28th day of the disease.

CASE REPORTS—WITH SPECIMENS.*

BY

JAMES BELL, M.D.,

Professor of Clinical Surgery, McGill University; Surgeon to the Royal Victoria Hospital, Montreal.

Resection of the Colon.

A. C., aged 30 years, farmer, had always enjoyed good health until October, 1899, when he began to have some obscure pains in the upper part of the abdomen, which were attributed to indigestion. In May, 1900, he had an attack of severe pain in the lower zone of the abdomen, which lasted for three or four days and which was thought to be appendicitis. After this attack a lump was discovered in the appendix region, and throughout the summer he was not able to do hard work and had occasional attacks of pain, but there was no complaint about the digestive functions.

He was admitted to the Royal Victoria Hospital on the 10th of September, 1900. He had lost ten pounds since May (from 153 to 143 pounds). On the 12th of September an incision was made over the tumour and its character made out. The wound was closed without any attempt at removal, as had been agreed with him in case of the condition requiring a serious operation. On the 22nd of September, his consent having been obtained, the mass was removed. The mass included the whole of the cæcum and ascending colon and three-fourths of the transverse colon, with masses of glands from the mesocolon and gastrocolic omentum. The lower end of the ileum was attached to the distal end of the transverse colon by Maunsell's inversion method. A rubber drainage tube was left in the abdominal wound for two days, and then a piece of iodoform gauze was used instead. Everything went well until October 3rd, when the discharge became more abundant. On the 7th of October there was free bleeding through the drainage wound. This continued at intervals, and on the 8th there was found to be a large collection of blood within the abdomen. The patient was weak and in a poor condition, but the wound was reopened and the clots removed. The wound was left open and packed with iodoform gauze. No special bleeding point was discovered, although a couple of points in the omentum close to the stomach were ligated. He made a good but slow recovery as the wound supplicated, and he was discharged on the 26th of November. Recent reports are to the effect that he is well and gaining in flesh. It

* Read before the Montreal Medico-Chirurgical Society, January 11, 1900.

is said that three members of his mother's family died at an early age from intestinal tumours.

Case II.—J. M., aged 45 years, was admitted to the Royal Victoria Hospital on January 8th, 1901. He had always been a strong and healthy man (with the exception of the loss of his eyesight through an accident with molten lead several years ago) until April last, when he began to suffer more or less from a sense of fulness after eating. There were no other symptoms until August, when pyrosis was added, and about three weeks before admission he noticed a hard, movable, painless tumour in the right lower quadrant of the abdomen. He had never suffered from any intestinal symptoms nor from any digestive symptoms except those above noted. His bowels were regular and his general health good. He had not lost weight appreciably. There was no tubercular heredity.

On examination, a tumour as large as a goose egg was seen and felt lying normally in the region of the so-called McBurney's point. It lay close to the abdominal wall; was hard, irregular and painless, and freely movable within an area limited by the middle line internally, and a line about two inches above and another about two inches below the level of the umbilicus. It was clearly not a kidney and could be definitely diagnosed to have no connection with the stomach or gall-bladder. It was clearly either omental or cæcal.

On January 10th, the abdomen was opened over the mass, external to the right rectus muscle, and it was found to be a cancerous growth of the cæcum. It was definitely limited to the cæcum, and there were no enlarged glands except several small shotty masses in the mesentery of the lower part of the ileum. The mass was removed and the lower end of the ileum attached to the colon by Maunsell's method. As only a little more than twenty-four hours have elapsed since the operation in this case I can only say that he is doing typically well.

[The patient has since made an excellent recovery.]

The following is the pathological report by Dr. E. Archibald:—The tumour involved about half of the ascending colon with the hepatic flexure and about two or three inches of the transverse colon. Ulceration has gone on so much, hand in hand, as it were, with overgrowth, that in spite of considerable contraction the lumen has not become materially occluded. Histological sections show the growth to be a carcinoma in which there can still be made out some attempt at preservation of the adenomatous type; that is, one sees here and there an indication of—more or less abortive—tube-formation, lined by several layers of roundish or oval cells, the deepest of which, however, retain the columnar shape. Anaplasia, according to Hausemann's ideas, has not reached its limit.

The second case represents a small, round-celled sarcoma of the cæcum. It is about the size of a Tangerine orange, and involved the concavity formed by the junction of the ileum and colon, bulging out towards the mesenteric side. It rose evidently in the wall of the cæcum, inasmuch as the mucosa was intact save for one small spot of ulceration, while the mucosa was not broken through. Sarcoma of the intestinal tract are rare, but such as do occur choose most frequently the cæcum for their seat. The tumour, histologically, offers nothing of special interest.

Osteomyelitis—Amputation.

Case I.—E. R., aged 31 years, was admitted to the Royal Victoria Hospital on June 11, 1900, with a history of an acute illness without injury thirteen years before, with pain over the lower part of the thigh. Flexion to an angle of 45 degrees occurred at this time, and motion became very limited, even up to the degree of extension. It was incised and pus evacuated, and nine years ago a sequestrum was removed but this did not improve his condition. For the past nine months he has suffered a great deal and was unable to put much weight upon the limb. There was decided abuminuria but no casts. The thigh was amputated in the middle third on the 23rd of June, 1900.

Case II.—A. J. McL., aged 43 years, was admitted to the Royal Victoria Hospital on July 1st, 1900, with a great enlargement and tenderness over the whole femur, and a slight ankylosis in a flexed position of the knee joint. He was a strong, rugged backwoodsman and had injured his thigh by a blow against the picket of a fence in July 1899. There was no wound produced, but swelling began in the middle of the thigh about the end of July with shooting pains, and had continued up to the time of his admission to hospital, disabling him from work all this time. On the 24th of July, the thigh was incised freely, pus evacuated, and sequestra removed from different portions of the bone. Subsequently the wounds were reopened but nothing found. Pain continued, and as there seemed no prospect of a satisfactory result, the thigh was amputated by circular method, November 26, 1901. The upper portion of the femur remaining in the stump was also diseased and contained a sequestrum which was removed, leaving a cavity from the trochanter to the end of the bone. It is probable that this piece of bone will have to be removed before the patient can be considered quite well.

Case III.—H. S., a delicate looking boy, of 11 years, was admitted to the Royal Victoria Hospital on November 20, 1900. The early history of the attack could not be obtained in any satisfactory manner, but the acute onset dated from October 22nd, although the trouble was attributed to an abraded heel from a badly fitting boot, which abrasion

had occurred on the 15th of September, 1900, and had been quite healed some time before the onset of serious symptoms.

He became seriously ill with fever, pain, and swelling of the whole leg (left.) Multiple incisions were made on the 29th of October, and on the 22nd of November, under ether, the whole diaphysis of the tibia was found bared of periosteum and bathed in pus. There was also separation of the upper epiphysis. An attempt was made to drain the leg with the hope of saving the limb, but the patient did not do well, and on the 18th of December the limb was amputated through the condyles of the femur.

All of these cases made uninterrupted recoveries.

The pathological report, furnished by Dr. Edward Archibald, is as follows:—There is here a series of four bones, illustrative of bone inflammation. Of these, three show the results of long-standing, chronic trouble, the other shows a very acute condition. The three are all femora and are very good examples of chronic osteomyelitis, showing as they do, very beautifully, the conditions of osteosclerosis and osteoporosis, which occur so regularly side by side in this disease. In one case the sequestrum was partly intra-articular in the knee. New formation of bone is also well seen.

These bone fragments of the fourth case represent the tibia of a child of eleven. In the fresh specimen both upper and lower epiphyses were entirely destroyed, each articular end being represented merely by a sort of stalactitic framework of bone spicules, in the interspaces of which lay a great deal of dirty, sloughy tissue, largely purulent. In a number of stained smears of the pus, no tubercle bacilli but only staphylococci could be found. The inflammatory process extended from either epiphysis two or three inches along the shaft. The articular cartilage was not perforated at either end, although there were evidences of some inflammatory exudate in both joints.

An interesting point in the case lies in the site of the infection. Text-books teach that in children the majority of tuberculous infections begin in the epiphyses, while the majority of pyogenic infections involve first some portion of the shaft. In the present case the contrary is true—a staphylococcus inflammation evidently arising simultaneously in both epiphyses and involving the shaft only secondarily by contiguous extension.

A REPORT ON THE CASES OF TYPHOID FEVER ADMITTED INTO THE ROYAL VICTORIA HOSPITAL DURING 1900.

BY

D. B. GILLIES, M.D., Senior Resident Physician.

During the year 1900 there were treated in the wards of this hospital 151 cases of typhoid fever, 76 males and 75 females. Of these cases 127 were treated to a conclusion, 10 were taken out by friends before the disease had entirely subsided, and 22 are still under treatment. The latter are not included in the present report.

The mortality was not so high this year as last although the disease during the past four months has been unusually severe. There were in all ten deaths, *i.e.*, 7.7 per cent. Death resulted in three cases from perforation, in three cases from hæmorrhage, and in four cases from profound intoxication, and in one of the last, acute lobar pneumonia was also present. On an average the patients were admitted on the seventh day of the disease.

The following data are the points of interest :—

Age.—The average of all the patients was 24 years, the youngest being 2½ years old and the oldest 61 years. Arranged in decades they are as follows :—

Under 10 years	11
Between 10 and 20.....	35
" 20 and 30....	55
" 30 and 40.....	21
" 40 and 50	4
" 50 and 60 ..	2
" 50 and 60 ..	2
" 60 and 70..	1

Season.—The largest number of cases were admitted during the month of June, the smallest during March.

April, May and June

34.1 per cent.

October, November, and December .

30.3 per cent.

July, August and September

24.8 per cent.

January, February and March.....

10.8 per cent.

Duration of cases.—The average number of days in the hospital was 37.5.

The average duration of the fever was 25 days.

The longest period of fever was 64 days, which occurred in two cases.

The shortest period while under observation was six hours.

The patient came in on the seventh day of the disease with a temperature of 100°F., which steadily declined to normal and remained so until the day of discharge.

Infection.—In two cases milk was regarded as the source of infection.

Three patients were admitted from one house and a fourth also contracted the disease at the same time.

In one case the patient had been nursing her son through a severe attack of typhoid.

Defective sewage was present in the homes of two cases.

Symptoms : Onset and Course.—

In 96 per cent. of the cases the onset was gradual, the most frequent symptoms being anorexia, general malaise, frontal headache, pain in the back and limbs, and chilliness. The first three, *viz.*, anorexia, general malaise and frontal headache were by far the most frequent.

In one case the onset was sudden, the patient having to take to bed immediately; in another the onset simulated pneumonia. A definite rigor occurred at time of onset or during the first week in 12.4 per cent of the cases. In one case chills were frequent during the course of the disease.

Diarrhoea was present at the time of the onset in 25.6 per cent. of the cases, and occurred at some time during the course of the disease in 27 per cent. of the cases.

Vomiting was present at the onset in 26.3 per cent. of the cases. In 13.9 per cent. it occurred during the course of the disease.

Delirium was present during the onset or course in 13.2 per cent. In all except one case it was of a low muttering character. At present there is in the hospital a case of acute mania complicating typhoid fever, occurring during the course of the disease.

Epistaxis occurred during the onset in 24 per cent.

One case was under observation from the first day of the disease, the patient having been admitted to the gynæcological ward 14 days previously.

Eruption.—The characteristic "rose spots" were present in 69 per cent. of the cases. In one case the limbs and trunk were covered with a polymorphous rash, composed of macules, papules and petechiæ. In two cases a diffuse erythema was present; and in four cases a purpuric rash appeared.

The earliest appearance of the rash was on the third day of the disease.

The latest appearance of the rash was on the 69th day, being present only during a relapse.

The shortest duration of the rash was two days. The longest duration was 28 days; the average duration was twelve days.

Spleen.—The spleen was palpable in 61.2 per cent. of the cases. The fourth day was the earliest in which the spleen was palpable. In one case it was not palpable until the 31st day of the disease. On the average the spleen remained palpable for fourteen days. In two cases the spleen was palpable only for four days. In one case it was palpable for 29 days.

Relapse.—A definite relapse occurred in 5.4 per cent. of the cases.

The longest duration of the relapse was 22 days.

The shortest duration of the relapse was 11 days.

The average duration of the relapse was 16 days.

In one case the relapse was more severe than the original attack.

In one case the patient had been discharged from the hospital three months previously having recovered from an attack of typhoid fever. In only one other case was there a previous history of typhoid fever.

Fever.—The highest temperature recorded in any of the cases was $105 \frac{1}{5}^{\circ}$ F.

In one case the maximum temperature was 100° .

The average maximum temperature was 104.1° .

The temperature reached 105° or over in 4.7 per cent. of the cases.

Complications : *Digestive System.*—Meteorism was present in 20 per cent. of the cases.

Jaundice was present in two cases; in one of these definite evidence of cholecystitis developed three days later.

Perforation of the bowel occurred in four cases. In another case perforation was simulated very closely but exploratory laparotomy showed no evidence of such.

The following is a synopsis of the case :—

Patient was admitted on the fifth day of the disease suffering from frontal headache, malaise and anorexia. The temperature varied between 102 and 104° . A diffuse rash developed on the tenth and the eleventh day of the disease, and on the eleventh day the Widal reaction was positive. Spleen was not palpable at any time.

On the 15th day of the disease the patient complained of abdominal pain during the course of the day, and in the evening it increased in severity. On examination, there was great tenderness, more marked over the left inguinal region and slight rigidity over this area. There was slight increase in distension and the liver dulness was obliterated. The temperature curve was unaltered, 102.4 to 103° . The pulse rate was not increased more than it had been, 98 to 104. Six hours later the pain was more intense and general throughout the abdomen; tenderness

was marked all over the abdomen, more so on the left side, and distension slightly increased. Rigidity was present over the lower part of the abdomen and liver dulness obliterated. Temperature and pulse remained unchanged. Operation was decided upon with the above mentioned result.

In three cases of perforation death resulted. In one case, still in hospital, operation was performed within 17 hours of the time of perforation, which occurred on the 12th day of the disease. The patient is up to the present time, 12 days after the operation, doing well.

Intestinal hæmorrhage occurred in 12 cases. In two which were fatal it was only an evidence of a general hæmorrhagic disposition of the disease. In three cases hæmorrhage was the direct cause of death. In eight cases recovery ensued.

Circulatory System.—In 11 cases systolic murmurs were audible during the course of the disease, but disappeared previous to discharge in all but one case.

In five cases the disease was complicated by chronic endocarditis.

In two cases acute dilatation of the heart occurred.

In seven cases femoral phlebitis occurred, in five on the left and two on the right side. In one case brachial phlebitis occurred.

Respiratory System.—Acute bronchitis was present at onset in 18.5 per cent. of the cases, and developed during the course of the disease in 11.6 per cent.

Two cases of pleurisy with effusion developed, and two cases of dry pleurisy also occurred.

Tuberculosis was present in one case.

Acute lobar pneumonia was present in two cases.

In one case, bronchitis, broncho-pneumonia and pleurisy occurred during the course of the disease.

Other Systems.—Hæmaturia occurred in the two cases of hæmorrhagic typhoid.

Febrile albuminuria was present in 10 per cent.

Acute nephritis developed in three cases.

Suppurative otitis media developed in four cases. In two, in which a bacteriological examination was made, staphylococci only were present.

Abscesses occurred in six cases.

Periostitis occurred in three cases. In one case it developed on the 24th day.

Arthritis developed in one case.

In two cases the disease was present in epileptics. Fits increased in number and severity in one case after the fever subsided, in the other no attacks occurred while in hospital.

Superficial gangrene developed in two cases.

Tender toes occurred in ten cases.

Widal Reaction.—This test has been employed in all cases but the result is not stated in four cases. In only one case was it negative throughout the course of the disease. In one case the reaction appeared on the fourth day, and in another it was not positive until the 33rd day of the disease.

The reaction was tried in 96 cases on the day of discharge from the hospital and was found present in all but six.

Erlich's reaction was found present in 34 per cent. of the cases.

Synopsis of Nine Fatal Cases.

Typhoid with Obstinate Pyrexia, Marked Cardiac Weakness, Death.

Case I.—D. O'G., aged 13, female. Case No. 4892.

The patient was admitted to the hospital on April 24, 1900, complaining of headache, loss of appetite and general malaise. The latter had been present for about two weeks, but the headache did not set in until a week later and was accompanied by anorexia. Diarrhoea was present about the same time, but ceased within forty-eight hours. Three days before admission the patient had rather severe epistaxis.

On examination, the patient was found to be a well-nourished girl, skin hot and dry, finger nails cyanosed, and mentally she was rather dull and irritable. Rose spots were present over the abdomen, which was distended and tender. The spleen was palpable, and the Widal reaction was positive. Temperature, 101°; pulse, 126; respiration, 32. A few fine crepitant râles were present at the bases of both lungs.

The subsequent events were as follows:—The temperature rose steadily after admission and the following day sponges were ordered, but the temperature was little influenced by them. The next day tubs were given instead of sponges. This method was more effectual, the temperature dropping two and four degrees after each bath.

For two weeks after admission the temperature varied between 103°, which it reached daily, and 98.2°, to which it dropped on one occasion. The pulse during this time was rapid, remaining between 112 and 136. During the third week the temperature reached 104° daily except the last two days, when it ranged between 103 and 97.1°. The pulse remained persistently rapid, the rate being from 96 to 144. Marked cyanosis was present at times. The following week, the fourth after admission, the temperature subsided and remained below 102° with the exception of the first two days, when it reached 102.4° and 103.1°. The pulse was more rapid than during the preceding week varying between

120 and 148. Toward the latter part of the week tender toes were complained of.

On the evening of the 37th day of the disease the patient had a very sudden attack of dyspnoea with marked cyanosis. The former passed off within an hour, but the latter never entirely disappeared. The following day abdominal pain was present, referred especially to the epigastrium. The pulse during these two days ran between 112 and 132. The cardiac dulness had increased slightly to the left. The next day the pulse was very weak and more rapid. Its rate varied between 126 and 144. Through the night the patient became very weak, the cyanosis increased, and with it the pulse gradually became weaker until she died the following evening.

Typhoid with Perforation previous to admission to the Hospital.

Case II.—H. T., aged 16, male, Case No. 4924.

The patient entered the hospital on May 4th, 1900, in a condition of collapse and was unable to give an account of his present illness. From his physician the following history was obtained. The patient had left school two weeks previously on account of headache, malaise and anorexia. He had kept up on his feet for the following week although the weakness steadily increased, and feverishness had developed. The temperature reached 102° about the middle of the week. He went to bed one week before admission, and three days later diarrhoea set in and was troublesome for three days.

At 10 a.m. on the day he entered the hospital the temperature was 104°. There was no abdominal pain. The spleen was palpable and the respiratory rate slightly increased. The chest, on examination, showed nothing abnormal. Two hours later he complained of sharp pain in the abdomen which steadily increased in spite of local applications. At 6 p.m. he was admitted. Temperature, 101°; pulse, 126; respiration, 56.

On examination, delirium and subsultus were very pronounced. There was slight flushing of the cheeks with pallor about the mouth and chin. The forehead and trunk were covered with a cool perspiration but the feet were cold and clammy. The abdomen was distended and rigidity was marked throughout. The liver dulness was diminished and the note in the flank was dull. Over the base of the right lung resonance was impaired and diminished breath sounds were heard over this area.

The patient did not rally although free stimulation was employed, and died in less than five hours after admission.

Typhoid Fever with Repeated Hæmorrhages and Uncontrollable Vomiting.

Case III.—K. S., aged 34 years, female. Case No. 4968.

Admitted May 16, 1900, complaining of headache, anorexia, which had persisted with steadily increasing severity for ten days. There had been no nausea or vomiting. The bowels were regular. In the personal history there was nothing worthy of note other than that she had suffered for several years from mucous colitis.

On admission, the patient was found to be a poorly nourished woman of markedly neurotic disposition. The tongue was coated with a moist yellowish fur, the appetite was poor, and the bowels regular. The abdomen was not distended. There were no rose spots nor was the spleen palpable. The Widal reaction was present. The urine contained a trace of albumin.

The subsequent course of events was as follows:—Two days later rose spots appeared on the abdomen. The patient was frequently nauseated but did not vomit. The bowels moved freely during this time, the stools being liquid but containing no trace of blood. Ten days after admission the patient passed a small clot of blood with a stool. Diarrhœa was present during the next three days during which time the bowels moved from five to seven times in the twenty-four hours. The amount of blood passed was very small until the twelfth day after admission when the patient passed twenty-four ounces of bright red blood during the day. On the same day she vomited frequently. The next day hæmorrhage recurred, about five ounces being lost. Vomiting was again troublesome. On the fourteenth day after admission no blood was passed, but vomiting occurred several times although no nourishment was given by the mouth. The following day the pulse was very weak and rapid, 128, and the temperature 100.3°. A stool containing no blood was passed in the morning. Delirium was present for a few hours during the night. The next day there was no vomiting and no melæna; the delirium increased; the pulse became weaker and remained constantly above 120; temperature, 100°. Fæces and urine were passed involuntarily on the following day. The delirium was almost constant. This condition persisted for thirty-six hours during which the patient became progressively weaker and died.

*Typhoid Fever of Severe Type with Perforation on the Eleventh Day:
Operation: Death.*

Case IV.—J. J., aged 18 years, male. Case No. 4970.

The patient was admitted May 10, 1900, complaining of pain in the abdomen, anorexia, and feverishness. For four days previous to admission the patient had been confined to bed but he had suffered from malaise and chilly sensations for a week and a half. The bowels were regular. No epistaxis and no vomiting had been present.

On examination, the patient was found to be a well nourished young man. The lips were dry, the tongue dry and brown. There was no delirium but tremor of the hands was very pronounced. Temperature, 101° pulse, 106 respiration, 20. The abdomen was somewhat distended and slightly tender throughout. Rose spots were numerous and the spleen palpable.

The patient was ordered tubs the following evening as the temperature had remained persistently elevated between 101.2 and 103.3°. During the succeeding forty-eight hours he was bathed every three hours. The temperature after the baths dropped from 1.2 to 4 degrees, but always rose above 102.2° within three hours. The temperature during the next forty-eight hours ranged between 99 and 103°. The pulse rate varied between 98 and 132. The baths were not given quite so frequently. The following day, the tenth day of the disease, the patient had two tubs. The pulse remained at about 112 and the temperature ranged between 97 and 103°.

On the morning of the 11th day of the disease he complained of some pain in his abdomen about 11.30 a.m., when being lifted into the tub. The distension of the abdomen, which had been present throughout the course of the disease, increased. Tenderness was present all over the abdomen. The patient had vomited some curdled milk during the morning. At 7 p.m. he vomited and again an hour later. The pulse was now 112 and temperature 100°. He was perspiring freely and the pain in the abdomen had increased. The abdomen was rigid and much distended. The liver dulness was encroached upon. Perforation was regarded as the cause of his condition and operation was decided on, which was performed at midnight.

On opening the abdomen free fluid, which was purulent and of faecal odour, escaped. General peritonitis was present. The perforation was found and closed. The patient rallied fairly well from the operation, the pulse, however, increased in frequency, 152, and was weak and running in character. Sixteen hours after operation the patient died.

Typhoid Fever with Lobar Pneumonia.

Case V.—A. B., aged 32 years, male. Case No. 4751.

The patient was admitted March 17, 1900, complaining of pain in the right side and shortness of breath. For about ten days previous to admission he had been suffering from headache, anorexia and general malaise. Three days previously the pain in the side set in and also slight cough. There was no definite rigor but chilly sensations were felt during the first two days.

On admission, the patient was seen to be a rather poorly nourished

man. The face was flushed and the tongue moist and coated with a yellowish fur. No delirium. Temperature, 103°; respiration, 32. Examination of the chest showed consolidation of the right lower lobe. The abdomen was not distended. No rose spots were visible nor was the spleen palpable.

For three days after admission the course of the disease remained favourable and the case was regarded as simple pneumonia. On the third day, however, diarrhœa set in and the following day the abdomen was distended and general tenderness was present. His mental condition was markedly impaired and the pulmonary lesion did not account for the condition of the patient. The Widal reaction was positive on the fifth and again on the sixth day after admission. The temperature declined somewhat but the pulse remained rapid. Delirium set in and was of a low muttering type. Distension of the abdomen increased and the spleen could not be palpated. The patient gradually became weaker, delirium continued, and the seventh day after admission he died.

Typhoid Fever with Persistent Hæmorrhages.

Case VI.—B. C., aged 33 years, female. Case No. 5026.

The patient was admitted to the hospital on June 2, 1900, complaining of weakness and hæmorrhage from the bowel. The following history was obtained: The weakness and diarrhœa had been present for three weeks. Four days previous to admission she had a slight hæmorrhage and had passed varying quantities of blood daily with stool since that time. There had been no headache nor epistaxis. Anorexia was present.

On admission she was found to be a poorly nourished woman. Face not flushed and mental condition fair. The abdomen was not prominent. There were no rose spots present and the spleen was not palpable. Temperature, 100.2°; pulse, 120; respirations, 28.

The subsequent events were as follows:—Almost immediately after admission the patient passed a stool containing blood, and twice during the evening involuntary stools were passed containing blood. The following day the patient's bowels moved frequently and each time blood was present. The Widal reaction was present on this day. The next day the patient passed blood several times; ten ounces were lost on one occasion. The temperature remained between 99.4 and 96°, and the pulse varied between 100 and 120. Hiccough was present for short intervals. The following day hæmorrhage recurred four times, and also on three occasions the day after. During the afternoon of this day the patient had a stool that was free from blood for the first time since admission. The mental condition was poor the pulse weak and the tongue dry and brown. The following day diarrhœa but no blood was present in the

stool. The patient rallied slightly but in the evening she vomited. The diarrhoea could not be controlled and was present the following day. The extremities were cold and clammy and the pulse became very weak. Vomiting occurred several times during the afternoon and in the evening the patient died.

Typhoid Fever with Slight Hæmorrhage and Profound Intoxication.

Case VII.—A. B., aged 54 years, male. Case No. 5275.

The patient was admitted to the hospital on September 15, 1900, complaining of weakness and vomiting. For the past three weeks he had suffered from general malaise which had progressively increased. Ten days previous to admission the patient began to vomit, and for eight days was unable to retain nourishment of any kind. The bowels were regular. There was no chill nor epistaxis at onset.

On examination the patient was seen to be a poorly nourished man with a dull and apathetic mental condition. The tongue was dry and brown and the skin hot and dry. The abdomen was distended and slight tenderness was present. Numerous rose spots were present over the abdomen and lower part of the thorax. The spleen was not palpable. The Widal reaction was present.

The subsequent events were as follows:—Nourishment was taken poorly, and the day after admission the patient vomited twice. The temperature was moderate and did not rise above 101.4° at any time while under observation. The pulse was weak and rapid and the heart sounds were faint. On the 19th day of the disease the patient had a stool containing bright blood in small quantity. During the succeeding two days the condition of the patient remained unchanged. On the 22nd day of the disease there was a recurrence of the hæmorrhage, but very small in amount. The patient was very weak and the mental condition was poor. Temperature, 100.1°; pulse, 98. The following day the temperature became normal but the pulse rate increased. From this time the temperature remained subnormal till a few hours before death when it rose to 100°.

Two days before death vomiting set in and the patient was fed per rectum. The pulse became very feeble. The mental condition was much impaired, the patient being stuporose. Urine was voided involuntarily. The weakness increased and the patient died on the thirtieth day of the disease.

Typhoid Fever of Comparatively Mild Type During the First Three Weeks with Sudden Increase in Severity; Perforation; Death.

Case VIII.—J. B., aged 8 years, male. Case 5392.

The patient entered the hospital on October 25, 1900, the sixth day of

the disease, complaining of headache, feverishness, loss of appetite and general malaise. Diarrhoea was present the day previous to admission and also epistaxis.

On admission the patient was found to be a poorly nourished boy but the mental condition was good. The tongue was moist and slightly coated. The abdomen was flaccid, the spleen was not palpable, nor were rose spots present. The Widal reaction was negative. Temperature, 103.2° ; pulse, 130; respiration, 32.

Two days later the Widal reaction was positive. The temperature varied between 99.4 and 104° during the first six days after admission, when it dropped and remained below 102° for the following seven days. The pulse also became less frequent and the general condition steadily improved. This condition continued until the 23rd day of the disease, when the temperature rose to 103.4° , and the pulse became more frequent, 112 to 116. The following day the temperature reached 104° , and the two succeeding days 105° . The pulse rate now ranged between 120 and 132. The abdomen became distended and tense. The following week the daily temperature range was very great, on one occasion there being a variation of nine degrees in twenty-four hours. The pulse remained very rapid, 110 to 130, and the distension of the abdomen persisted in spite of all the measures employed to relieve the tympanites.

On the 35th day he complained of severe abdominal pain. No definite rigidity was present, but tenderness increased. He suddenly became collapsed and did not rally through the night and died the following morning.

Hæmorrhagic Typhoid Fever.

Case IX.—V. D., aged 21 years, female. Case No. 5076.

Patient was admitted June 10, 1900, complaining of headache, pain in the back, and loss of appetite. For six days the above conditions had been present and had steadily increased in severity. At the time of onset of illness there had been a definite rigor. There was no epistaxis and bowels were regular.

On examination the patient was found to be well nourished but mental condition dull. The lips were dry and the tongue dry and brown. The face was flushed and the skin hot and dry. The abdomen was slightly prominent and somewhat tender. Rose spots were present and spleen palpable. Temperature, 100° ; pulse, 98; and respiration, 22.

For a week after admission the case presented nothing of special interest. The abdomen remained distended and somewhat tender. The bowels moved daily. There was no delirium. The temperature was comparatively moderate and pulse never above 120. On the eighth day

after admission an area of subcutaneous hæmorrhages was seen over the abdomen about the umbilicus. The following day the distension was less. On June 29th the patient had two intestinal hæmorrhages, and over the left side of the back from the shoulder to the buttock purpuric patches appeared. The following night epistaxis was present and also hæmorrhages from the lips and gums, and on June 30th hæmaturia was present. A blood count taken on this day showed 13,000 leucocytes. The following day the temperature, which had declined somewhat during the twenty-four hours previously, continued to drop and the maximum temperature was 101°, pulse, 160; respiration, 28. Hæmaturia was still present and the area of subcutaneous hæmorrhages increased. On July 2nd the pulse was extremely weak and rapid and a few hæmorrhagic patches appeared on the lower extremities. During the night the pulse became almost imperceptible the temperature became subnormal and the patient died the following morning.

"OBITER SCRIPTA," VIII.*

BY

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

AND

F. T. TOOKE, M.D.

Notes on Tuberculosis.

The study of internal medicine presents but few chapters of greater variety and interest than those dealing with the manifold and protean manifestations of pulmonary tuberculosis. The obvious necessity of an early diagnosis and its importance to prophylaxis—the greater recognition of the diagnostic value of tuberculin—the benefits accruing from a prompt climatic treatment instituted in the early stages of the affection—have all combined to awaken in the responsible physician a sense of the importance of what may be called the more modern view of pulmonary tuberculosis.

While it is a matter of common observation that the incipient stages of the disease are often obscure, that the necessity of examining the lungs in all doubtful cases is imperative; and while too it is duly recognized that the mildest of minor ailments may arouse in us the suspicion of pulmonary infection, we are nevertheless tempted to recall a few instances of this kind, at the risk of inflicting possible platitudes on this society.

The opportunity having presented in the past few weeks of observing an unusual number of what might be termed atypical tubercloses, has urged us to examine in a casual way more of the records of tuberculous individuals who have entered the wards of the Royal Victoria Hospital for treatment. Not only do patients themselves imagine their ailment slight, but in a very large proportion of the cases a pulmonary infection was not suspected by the physician previously in attendance, or, at all events, the lungs had evidently not indicated the need of examination.

Perhaps the most insidious cases are those which have run to a well advanced infiltration with practically no cough whatever and very little or no expectoration. Such cases in our findings have proved to be not very uncommon, not only in senile cases but in patients, too, in early adult life. One of these cases, a young and intelligent professional man, stated that he had no cough whatever and merely a slight irritation of the throat which was relieved by very slight hacking and productive of practically no expectoration. And yet examination of the lungs revealed distinct consolidation of one apex with characteristic symptoms.

* Read before the Montreal Medico-Chirurgical Society, Jan. 11, 1901.

while a week or so later in a small amount of the grey mucus—presumed to be from the back of the throat—tubercle bacilli were found.

In an elderly man a similar condition was observed. He never had had a cough, there was rarely even a hacking of the throat, and his main complaints were abdominal. Physical signs in the left lung were those of extensive infiltration, while his diurnal variations of temperature often exceeded 3° of fever. One morning in his sputum mug we detected a single expectoration of muco-pus which contained an unusually large number of tubercle bacilli. His disease progressed rapidly and after four weeks he was moribund and was removed to his home where he died shortly after. Nor did his case indicate in any way that his condition was one of caseous pneumonia, rather that of ulcerative phthisis. Towards the last 10 days of his sojourn there was, from time to time, expectoration, which again ceased later on, the sputum being either swallowed or retained through extreme weakness.

The same condition obtained and indeed seems to have been far from uncommon in those of our cases which were admitted for hæmoptysis. Not a few patients were to all evidences in excellent health and free from cough or expectoration when the initial hæmorrhage called for an examination of the lungs,—the *phthisis ab hæmoptæ* of older writers. In some of these cases the physical signs were absent and no evidence of the pulmonary origin could at first be detected. Such an experience is we believe by no means unusual and often with the hæmorrhage itself the condition seems to cease for a greater or less length of time. In others, there was distinct involvement and infiltration of both lungs. In two medical men that we know of, the initial hæmorrhages were disregarded, the one being attributed to bronchitis, the other to laryngitis; in both instances a repetition of the hæmorrhage and subsequent development proved the condition in each case to be tuberculosis and both gentlemen have since made an excellent recovery. In one other instance, a male æt. 21 years, developed from the outset of his disease blood tinged sputum which persisted for three weeks while he continued his daily routine as a laborer. Suddenly profuse bleeding supervened and he was obliged to take to his bed.

While these few notes are not intended to include any discussion of the nature of hæmoptysis, we cannot resist the temptation of stating how frequently patients with slight hæmoptyses have been allowed unwisely to continue occupations and go untreated, or when kept at rest have been permitted, too soon to again resume their daily routine, an error which is most often due to lack of appreciation of the real source and significance of the hæmorrhage.

A word of digression apropos of the nature of the sputum may be of

interest. A large number of microscopic examinations of all varieties of cases must lead any one to believe that the naked eye appearances of the sputum in general are in every sense of the word unreliable. Gray-green, thick, purulent sputum has frequently been present in non-tuberculous bronchitides and, *par contra*, in the most innocent looking, thin, transparent sputa we have found what seemed like pure cultures of the bacillus tuberculosis.

In three or four cases the signs of tuberculosis were for a time completely obscured by a coincident chronic bronchitis and emphysema, all the cases being in elderly people. The lesions were in three merely those of the latter diseases and the sputum alone revealed the presence of the coincident affection. In one of these, a female *et.* 62, careful examination of the sputum revealed nothing and the simpler disease was diagnosed. Slight fever however persisted for some weeks and the patient returned to her home. Some months later she was again admitted to the hospital having lost but little flesh and with signs but little altered. The fever was still present and after repeated examinations Dr. Cushing found bacilli of tuberculosis in the sputum.

That other cases again commence as acute bronchitis and present its classical features, we have also found in two instances. Indeed our records have shown that in very many cases the history of repeated so-called "bad colds" which persisted unusually long, might have more early aroused the suspicion of tuberculosis, just as do the many cases of protracted influenza *soi disant*.

In contradistinction to what might have been expected, there seem to have been but few cases of pulmonary tuberculosis masked by the mere symptoms of chlorosis. In one instance, a recent case, a young girl of 16 with typical signs of chlorosis, presented a slightly impaired note in the left apex. The stethoscope revealed very slight prolonged expiration and an occasional rale after coughing, heard only at long intervals. There was marked accentuation of the pulmonary second sound however and she was given tuberculin. A marked reaction followed and a day or two later crepitations in the apex became more distinct. Within the usual time the fever then subsided and the patient has since been doing well.

The unfortunate tuberculous patients who have been faultily treated for mere neurasthenia seem to have been few. Two such cases have come to our notice—one patient being confined to bed in her home for two months for "nervousness" though the temperature seems to have varied for a number of weeks during that time. Cough had been present but there was no expectoration.

The very close association of tuberculosis of the lungs with gastric

diseases is too common a matter of every day observation to deserve much reference in these few notes. By far the larger number of what might be called masked pulmonary tuberculososes came for treatment of the alimentary canal and liver. Pains in the stomach and diarrhoea were most common—while the frequent error of the Poles in particular who mentally place their stomach in the thorax, is of course notorious. Anorexia if persistent should always make a chest examination imperative, this digestive symptom being among the commonest of the earliest signs. The presence of chronic diarrhoea likewise implies the great possibility of pulmonary disease and a secondary focus in the bowels. In five of our patients within the past two years the diarrhoea had quite masked any other complaints. Cough was either quite absent or so insignificant as to attract the attention of neither patient nor physician. Nor was the diarrhoea associated with fistula in ano in more than one of these instances, though fistula is so common in victims of pulmonary tuberculosis that its mere presence should suggest the advisability of a pulmonary examination. Pain after eating has been rather uncommon except when associated with other gastric disturbances. Vomiting occurred in a number of cases; in four it was the first symptom complained of, had been present for some time before cough was prominent and was fairly frequent and usually accompanied by anorexia and weakness. One instance was of particular interest inasmuch as with the gastric complaints there had been no other sign except weakness. There had been no actual cough though with an irritation of the pharynx a slight hacking occurred and bacilli were found in the small amount of mucous thus produced. During the few days of the patient's sojourn in the hospital there was no fever and yet examination revealed advanced involvement of one lung.

With reference to the temperature of tuberculous patients, while irregular fever is so characteristic a feature, we have been struck with the frequency of normal temperatures in patients whose pulmonary condition is advanced—this being doubtless due in a large part to the rest obtained in the hospital wards. In such cases a week or more of normal temperature has been superseded by a day's fever and again the normal would be resumed for many days. Even patients at times whose condition was becoming progressively worse and in whom cough, expectoration and loss of flesh were from week to week more pronounced, the temperature did not rise above the normal for weeks at a time. Such a condition is undeniably uncommon and its exceptional occurrence does not necessarily invalidate the diagnostic significance of daily slight fever in pulmonary and other forms of tuberculosis. Doubtless where marked involvement of the lungs occurs any moderate exercise would, as

in other cases, have raised the temperature above the normal; where the healing process is active and the patients are under favorable conditions the fever certainly seems less easily raised.

The necessity however of repeated observations on the temperature and at varying times of the day is obvious. In one of our cases the temperature at 4 o'clock was almost daily one to two degrees higher than at 6 o'clock when it frequently returned from about 100° to 98° or 99°.

Nor has it been our invariable experience to find that patients with fever would constantly lose in weight—our records in this respect have been made with considerable care and have shown that patients who have proper food and rest may often gain from week to week even though the temperature shows marked daily excursions of fever.

Not infrequently do patients come to hospital stating that though they have morning cough and expectoration, they have in other respects never enjoyed better health and have even put on flesh. Examination however proves the contrary and such patients not only have some fever but likewise have extensive disease of one or both lungs. The fact that a patient appears in excellent health is often found to be a fallacious criterion of the condition of the lungs and unless careful examination be made there is a liability to error in one's diagnosis.

Abstract of Medicine.

PREVENTIVE MEDICINE AND THERAPEUTICS IN THE NINETEENTH CENTURY; AN ABSTRACT OF A PORTION OF PROFESSOR OSLER'S ARTICLE IN THE NEW YORK SUN OF JANUARY 27TH, 1901.

Preventive Medicine.

The following are some of the diseases which have been remarkably controlled through preventive medicine :

Smallpox.—While not a scourge of the first rank like the plague or cholera, at the outset of the century variola was one of the most prevalent and dreaded of all diseases. Few reached adult life without an attack. To-day, though outbreaks still occur, it is a disease thoroughly controlled by vaccination. The protective power of the inoculated cowpox is not a fixed and constant quantity. The protection may be for life, or it may last only for a year or two. The all-important fact is this : That efficiently vaccinated persons may be exposed with impunity, and among large bodies of men (e. g., the German Army), in which revaccination is practised, smallpox is unknown. Of 100 vaccinated persons exposed to smallpox, possibly one might take the disease in a mild form ; of 100 unvaccinated persons so exposed, one alone might escape, from twenty-five to thirty would die. To be efficient, vaccination must be carried out systematically, and if all the inhabitants of this country were revaccinated at intervals, smallpox would disappear (as it has from the German Army) and the necessity for vaccination would cease. The difficulty arises from the constant presence of an unvaccinated remnant, by which the disease is kept alive. The Montreal experience in 1885 is an object lesson never to be forgotten.

For eight or ten years vaccination had been neglected, particularly among the French-Canadians. On Feb. 28, 1885, a Pullman car conductor, who came from Chicago, where the disease had been slightly prevalent, was admitted into the Hotel Dieu. Isolation was not carried out, and on the 1st of April a servant in the hospital died of smallpox. Following her death the authorities of the hospital sent to their homes all patients who presented no symptoms of the disease. Like fire in dry grass the contagion spread, and within nine months there died of smallpox 3,164 persons. It ruined the trade of the city for the winter and cost millions of dollars. There are no reasonable objections to vaccination, which is a simple process, by which a mild and harmless disease is introduced. The use of the animal vaccine does away with the possibility of introduction of other disorders, such as syphilis.

Typhus Fever.—Until the middle of the present century this disease prevailed widely in most of the large cities, particularly in Europe, and also in jails, ships, hospitals and camps. It was more widely spread than typhoid fever and much more fatal. Murchison remarks of it that a complete history of its ravages would be the history of Europe during the past three centuries and a half. Not one of the acute infections seems to have been more dependent upon filth and unsanitary conditions. With the gradual introduction of drainage and a good water supply, and the relief of overcrowding, the disease has almost entirely disappeared, and is rarely mentioned now in the bills of mortality, except in a few of the larger and more unsanitary cities. The following figures illustrate what has been done in England within sixty years: In 1838 in England 1,228 persons died of fever (typhus and typhoid) per million of living. Twenty years later the figures were reduced to 918; in 1878 to 306 of typhoid and to 36 of typhus fever. In 1892 only 137 died of typhoid fever and only 3 of typhus per million living!

Typhoid Fever.—While preventive medicine can claim a great victory in this disease also, it is less brilliant, since the conditions which favor its prevalence are not those specially relating to overcrowding as much as to imperfect water supply and the contamination of certain essential foods, like milk. It has been repeatedly demonstrated that with a pure water supply and perfect drainage, typhoid fever almost disappears from a city. In Vienna after the introduction of good water, the rate of mortality from typhoid fever fell from 12 per 10,000 of the inhabitants to about 1. In Munich the fall was still more remarkable, from above 29 per 10,000 inhabitants in 1857 it fell to about 1 per 10,000 in 1887. That typhoid fever in this country is still a very prevalent disease depends mainly upon two facts: First, not only is the typhoid bacillus very resistant, but it may remain for a long time in the body of a person after recovery from typhoid fever, and such persons in apparent good health may be a source of contamination. With many of the conditions favoring the persistence and growth of the bacillus outside the body we are not yet familiar. The experience in the Spanish-American War illustrates how dangerous is the concentration together of large numbers of individuals. But, second, the essential factor in the widespread prevalence of typhoid fever in the United States, particularly in country districts, is the absence of anything like efficient rural sanitation. Many counties have yet to learn the alphabet of sanitation. The chief danger results from the impure water supplies of the smaller towns, the local house epidemics, due to infected wells, and the milk outbreaks due to the infection of dairy farms.

The importance of scrupulously guarding the sources of supply was never better illustrated than in the well-known and oft quoted epidemic in Plymouth, Pa. The town, with a population of 8,000, was in part supplied with drinking water from a reservoir fed by a mountain stream. During January, February and March, in a cottage by the side of and at a distance of from sixty to eighty feet from this stream, a man was ill with typhoid fever. The attendants were in the habit at night of throwing out the evacuations on the ground toward the stream. During these months the ground was frozen and covered with snow. In the latter part of March and early in April there was considerable rainfall and a thaw, in which a large part of the three months' accumulation of discharges was washed into the brook not sixty feet distant. At the very time of this thaw the patient had numerous and copious discharges. About the 10th of April cases of typhoid fever broke out in the town, appearing for a time at the rate of fifty a day. In all about 1,200 were attacked. An immense majority of the cases were in the part of the town which received water from the infected reservoir.

The use of boiled water and of ice made from distilled water, the systematic inspection of dairies, the scrupulous supervision of the sources from which the water is obtained, an efficient system of sewage removal, and, above all, the most scrupulous care on the part of physicians and of nurses in the disinfection of the discharges of typhoid fever patients—these are the factors necessary to reduce to a minimum the incidence of typhoid fever.

Cholera.—One of the great scourges of the present century made inroads into Europe and America from India, its native home. We have, however, found out the germ, found out the conditions under which it lives, and it is not likely that it will ever again gain a foothold in this country or Great Britain. Since the last epidemic, 1873, the disease, though brought to this country on several occasions, has always been held in check at the port of entry. It is communicated almost entirely through infected water, and the virulence of an epidemic in any city is in direct proportion to the imperfection of the water supply. This was shown in a remarkable way in the Hamburg epidemic of 1892. In Altona, which had a filtration plant, there were only 516 cases, many of them refugees from Hamburg. Hamburg, where the unfiltered water of the Elbe was used, had some 18,000 cases with nearly 8,000 deaths.

Yellow Fever.—The cause of this disease is still under discussion. It has an interest to us in this country from its continued prevalence in Cuba, and from the fact that at intervals it makes inroads into the Southern States, causing serious commercial loss. The history of the disease in the other West India Islands, particularly Jamaica, indicates

the steps which must be taken for its prevention. Formerly yellow fever was as fatal a scourge in them as it is to-day in Cuba. By an efficient system of sanitation it has been abolished. The same can be done (and will be done) in Cuba within a few years. Gen Wood has already pointed out the way in the cleansing of Santiago.

The Plague.—One of the most remarkable facts in connection with modern epidemics has been the revival of the bubonic plague, the most dreaded of all the great infections. During the present century the disease in Europe has been confined almost exclusively to Turkey and Southern Europe. Since 1894, when it appeared at Hong Kong, it has gradually spread, and there have been outbreaks of terrible severity in India. It has extended to certain of the Mediterranean ports, and during the past summer it reached Glasgow, where there has been a small outbreak. On this hemisphere there have been small outbreaks in certain of the South American ports, cases have been brought to New York, and there have been to Nov. 1, twenty-one cases among the Chinese in San Francisco. Judging from the readiness with which it has been checked and limited in Australia, and in particular the facility with which the recent outbreak in Glasgow has been stamped out, there is very little risk that plague will ever assume the proportions which gave to it its terrible reputation as the "black death" of the Middle Ages. As I have already mentioned, the germ is known, and prophylactic inoculations have been made on a large scale in India with a certain measure of success.

Tuberculosis.—In all communities the *white plague*, as Oliver Wendell Holmes calls it, takes the first rank as a killing disease. It has been estimated that of it 120,000 people die yearly in this country. In all mortality bills tuberculosis of the lungs, or consumption, heads the list, and when to this is added tuberculosis of the other organs, the number swells to such an extent that this disease equals in fatality all the other acute infective diseases combined if we leave out pneumonia. Less than twenty years ago we knew little or nothing of the cause of the disease. It was believed to be largely hereditary. Koch discovered the germ, and with this have come the possibilities of limiting its ravages.

The following points with reference to it may be stated. In a few very rare instances the disease is transmitted from parent to child. In a large proportion of all cases the disease is "caught." The germs are widely distributed through the sputum, which, when dry, becomes dust, and is blown about in all directions. Tubercle bacilli have been found in the dust of streets, houses, hospital wards and much-frequented places. A single individual may discharge from the lungs countless myriads of germs in the twenty-four hours. Dr. Nuttall estimated from

a patient in the Johns Hopkins Hospital, who had only moderately advanced consumption, that from one and a-half to four and a-third billions of germs were thrown off in the twenty-four hours. The consumptive, as has been well stated, is almost harmless, and only becomes harmful through bad habits. The germs are contained in the sputum, which, when dry, is widely scattered in the form of dust, and constitutes the great medium for the transmission of the disease. If expectorated into a handkerchief, the sputum dries quickly, particularly if it is put into the pocket or under the pillow. The beard or mustache of a consumptive is smeared with the germs. Even in the most careful the hands are apt to be soiled with the germs, and in those who are dirty and careless the furniture and materials which they handle readily become infected. Where the dirty habit prevails of spitting on the floor, a room, or the entire house, may contain numbers of germs. In the majority of all cases the infection in tuberculosis is by inhalation. This is shown by the frequency with which the disease is met with in the lungs, and the great prevalence of tuberculosis in institutions in which the residents are restricted in the matter of fresh air and a free, open life. The disease prevails specially in cloisters, in jails and in asylums. Infection through milk is also possible; it is doubtful whether the disease is transmitted through meat. So widespread are the germs that post-mortem examination has shown that a very large number of persons show slight signs of the disease who have never during life presented any symptoms; in fact, some recent investigations would indicate that a very large proportion of all persons at the age of 40 have somewhere in their bodies slight tuberculous lesions. This shows the importance of the individual predisposition, upon which the older writers laid so much stress, and the importance of maintaining the nutrition at its maximum.

One of the most remarkable features of modern protective medicine is the widespread interest that has been aroused in the crusade against tuberculosis. What has already been accomplished warrants the belief that the hopes of even the most enthusiastic may be realized. A positive decline in the prevalence of the disease has been shown in many of the larger cities during the past ten years. In Massachusetts, which has been a hotbed of tuberculosis for many years, the death rate has fallen from 42 per 10,000 inhabitants in 1853 to 21.8 per 10,000 inhabitants in 1895. In the city of Glasgow, in which the records have been very carefully kept, there has been an extraordinary fall in the death rate from tuberculosis, and the recent statistics of New York city show, too, a similar remarkable diminution.

In fighting the disease our chief weapons are: First, education of the

public, particularly of the poorer classes, who do not fully appreciate the chief danger in the disease. Secondly, the compulsory notification and registration of all cases of tuberculosis. The importance of this relates chiefly to the very poor and improvident from whom, after all, comes the greatest danger, and who should be under constant surveillance in order that these dangers may be reduced to a minimum. Thirdly, the foundation in suitable localities by the city and by the State of sanatoria for the treatment of early cases of the disease. Fourthly, provision for the chronic, incurable cases in special hospitals.

Diphtheria.—Since the discovery of the germ of this disease and our knowledge of the conditions of its transmission, and the discovery of the antitoxin, there has been a great reduction in its prevalence and an equally remarkable reduction in the mortality. The more careful isolation of the sick, the thorough disinfection of the clothing, the rigid scrutiny of the milder cases of throat disorder, a more stringent surveillance in the period of convalescence, and the routine examination of the throats of school children—these are the essential measures by which the prevalence of the disease has been very markedly diminished. The great danger is in the mild cases, in which the disease has perhaps not been suspected, and in which the child may be walking about and even going to school. Such patients are often a source of widespread infection. The careful attention given by mothers to the teeth and mouth of children is also an important factor. In children with recurring attacks of tonsillitis, in whom the tonsils are enlarged, the organs should be removed. Through these measures the incidence of the disease has been very greatly reduced.

Pneumonia.—While there has been a remarkable diminution in the prevalence of a large number of all the acute infections, one disease not only holds its own, but seems even to have increased in its virulence. In the mortality bills pneumonia is an easy second to tuberculosis. It attacks particularly the intemperate, the feeble and the old, though every year a large number of robust, healthy individuals succumb. So frequent is pneumonia at advanced periods of life that to die of it has been said to be the natural end of old men in this country. In many ways, too, it is a satisfactory disease, if one may use such an expression. It is not associated with much pain, except at the onset, the battle is brief and short, and a great many old persons succumb to it easily and peacefully.

We know the cause of the disease; we know only too well its symptoms, but the enormous fatality (from 20 to 25 per cent.) speaks only too plainly of the futility of our means of cure; and yet in no disease has there been so great a revolution in treatment. The patient is no

longer drenched to death with drugs, or bled to a point when the resisting powers of nature are exhausted. We are not without hope, too, that in the future an antidote may be found to the toxins of the disease, and of late there have been introduced several measures of great value in supporting the weakness of the heart, a special danger in the old and debilitated.

Hydrophobia.—Rabies, a remarkable, and in certain countries a widespread, disease of animals, when transmitted to man by the bite of rabid dogs, wolves, etc., is known as hydrophobia. The specific germ is unknown, but by a series of brilliant observations Pasteur showed (1) that the poison has certain fixed and peculiar properties in connection with the nervous system; (2) that susceptible animals could be rendered refractory to the disease, or incapable of taking it, by a certain method of inoculation, and (3) that an animal unprotected and inoculated with a dose of the virus sufficient to cause the disease may, by the injection of proper anti-rabic treatment, escape. Supported by these facts Pasteur began a system of treatment of hydrophobia in man, and a special institute was founded in Paris for the purpose. When carried out promptly the treatment is successful in an immense majority of all cases, and the mortality in persons bitten by animals proved to be rabid, who have subsequently had the anti-rabic treatment, has been reduced to less than one-half per cent. The disease may be stamped out in dogs by careful quarantine of suspected animals, and by a thoroughly carried out muzzling order.

Malaria.—Among the most remarkable of modern discoveries is the cause of malarial fever, one of the great maladies of the world, and a prime obstacle to the settlement of Europeans in tropical regions. Until 1880 the cause was quite obscure. It was known that the disease prevailed chiefly in marshy districts, in the autumn, and that the danger of infection was greatest in the evening and at night, and that it was not directly contagious. In 1880 a French army surgeon, Laveran, discovered in the red blood corpuscles small bodies which have proved to be the specific germ of the disease. They are not bacteria, but little animal bodies resembling the amoeba—tiny little portions of protoplasm. The parasite in its earliest form is a small, clear, ring-shaped body inside the red blood corpuscle, upon which it feeds, gradually increasing in size and forming within itself blackish grains out of the colouring matter of the corpuscle. When the little parasite reaches a certain size it begins to divide or multiply, and an enormous number of these, breaking up at the same time, give off poison in the blood, which causes the paroxysms of fever. During what is known as the chill, in the intermittent fever for example, one can always find these dividing

parasites. Several different forms of the parasites have been found, corresponding to different varieties of malaria. Parasites of a very similar nature exist abundantly in birds. Ross, an army surgeon in India, found that the spread of this parasite from bird to bird was effected through the intervention of the mosquito. The parasites reach maturity in certain cells of the coats of the stomach of these insects, and develop into peculiar thread-like bodies, many of which ultimately reach the salivary glands, from which, as the insect bites, they pass with the secretion of the glands into the wound. From this as a basis numerous observers have worked out the relation of the mosquito to malaria in the human subject.

Briefly stated, the disease is transmitted chiefly by certain varieties of the mosquito, particularly the *Anopheles*. The ordinary *Culex*, which is present chiefly in the Northern States, does not convey the disease. The *Anopheles* sucks the blood from a person infected with malaria, takes in a certain number of parasites, which undergo development in the body of the insect, the final outcome of which is numerous small, thread-like structures, which are found in numbers in the salivary glands. From this point, when the mosquito bites another individual, they pass into his blood, infect the system, and in this way the disease is transmitted. Two very striking experiments may be mentioned. The Italian observers have repeatedly shown that *Anopheles* which have sucked blood from patients suffering with malaria, when sent to a non-malarial region, and there allowed to bite perfectly healthy persons, have transmitted the disease. But a very crucial experiment was made a few months ago, mosquitoes which had bitten malarial patients in Italy were sent to London and there allowed to bite Mr. Manson, son of Dr. Manson, who really suggested the mosquito theory of malaria. This gentleman had not lived out of England, and there is no acute malaria in London. He had been a perfectly healthy, strong man. In a few days following the bites of the infected mosquitoes he had a typical attack of malarial fever.

The other experiment, though of a different character, is quite as convincing. In certain regions about Rome, in the Campania, malaria is so prevalent that in the autumn almost every one in the district is attacked, particularly if he is a newcomer. Dr. Sambron and a friend lived in this district from the 1st of June to the 1st of September, 1900. The test was whether they could live in this exceedingly dangerous climate for the three months without catching malaria, if they used stringent precautions against the bites of mosquitoes. For this purpose the hut in which they lived was thoroughly wired, and they slept with the greatest care under netting. Both of these gentlemen at the end of the period had escaped the disease.

The importance of these studies cannot be overestimated. They explain the relation of malaria to marshy districts, the seasonal incidence of the disease, the nocturnal infection, and many other hitherto obscure problems. More important still, they point out clearly the way by which malaria may be prevented: First, the recognition that any individual with malaria is a source of danger in a community, so that he must be thoroughly treated with quinine; secondly, the importance of the draining of marshy districts and ponds in which mosquitoes breed, and, thirdly, that even in the most infected regions persons may escape the disease by living in thoroughly protected houses, in this way escaping the bites of mosquitoes.

Venercal Diseases.—These continue to embarrass the social economist and to perplex and distress the profession. The misery and ill health which they cause are incalculable, and the pity of it is that the cross is not always borne by the offender, but innocent women and children share the penalties. The gonorrhoeal infection, so common, and often so little heeded, is a cause of much disease in parts other than those first affected. Syphilis claims its victims in every rank of life, at every age and in all countries. We now treat it more thoroughly, but all attempts to check its ravages have been fruitless. Physicians have two important duties: the incessant preaching of continence to young men, and scrupulous care in every case, that the disease may not be a source of infection to others, and that by thorough treatment the patient may be saved from the serious late nervous manifestations. We can also urge that in the interests of public health venereal diseases like other infections shall be subject to supervision by the State. The opposition to measures tending to the restriction of these diseases is most natural; on the one hand from women, who feel that it is an aggravation of a shocking injustice and wrong to their sex; on the other, from those who feel the moral guilt in a legal recognition of the evil. It is appalling to contemplate the frightful train of miseries which a single diseased woman may entail, not alone on her associates, but on scores of the innocent—whose bitter cry should make the opponents of legislation to feel that any measures of restriction, any measures of registration, would be preferable to the present disgraceful condition, which makes of some Christian cities open brothels and allows the purest homes to be invaded by the most loathsome of all diseases.

Leprosy.—Since the discovery of the germ of this terrible disease systematic efforts have been made to improve the state of its victims and to promote the study of the conditions under which the disease prevails. The English Leprosy Commission has done good work in calling attention to the widespread prevalence of the disease in India and in

the East. In this country leprosy has been introduced into San Francisco by the Chinese, and into the North-western States by the Norwegians, and there are foci of the disease in the Southern States, particularly Louisiana, and in the Province of New Brunswick. The problem has an additional interest since the annexation of Hawaii and the Philippine Islands, in both of which places leprosy prevails extensively. By systematic measures of inspection and the segregation of affected individuals the disease can readily be held in check. It is not likely ever to increase among native Americans, or again to gain such a foothold as it had in the Middle Ages.

Puerperal Fever.—Perhaps one of the most striking of all victories of preventive medicine has been the almost total abolition of so-called childbed fever from the maternity hospitals and from private practice. In many institutions the mortality after child birth was 5 or 6 per cent., indeed sometimes as high as 10 per cent., whereas to-day, owing entirely to proper antiseptic precautions, the mortality has fallen to 3 to 4 per cent. The recognition of the contagiousness of puerperal fever was the most valuable contribution to medical science made by Oliver Wendell Holmes. There had been previous suggestions by several writers, but his essay on the Contagiousness of Puerperal Fever, published in 1843, was the first strong, clear, logical statement of the case. Semmelweis, a few years later, added the weight of a large practical experience to the side of the contagiousness, but the full recognition of the causes of the disease was not reached until the recent antiseptic views had been put into practical effect.

THE NEW DISPENSATION IN TREATMENT.

The century has witnessed a revolution in the treatment of disease, and the growth of a new school of medicine. The old schools—regular and homœopathic—put their trust in drugs, to give which was the alpha and the omega of their practice. For every symptom there were a score or more of medicines—vile, nauseous compounds in one case; bland, harmless dilutions in the other. The new school has a firm faith in a few good, well-tried drugs, little or none in the great mass of medicines still in general use. Imperative drugging—the ordering of medicine in any and every malady is no longer regarded as the chief function of the doctor. Naturally, when the entire conception of the disease was changed, there came a corresponding change in our therapeutics. In no respect is this more strikingly shown than in our present treatment of fever, say of the common typhoid fever. During the first quarter of the century the patients were bled, blistered, purged and vomited, and dosed with mercury, antimony and other compounds to meet special

symptoms. During the second quarter, the same, with variations in different countries. After 1850 bleeding became less frequent, and the experiments of the Paris and Vienna schools began to shake the belief in the control of fever by drugs. During the last quarter sensible doctors have reached the conclusion that typhoid fever is not a disease to be treated with medicines, but that in a large proportion of all cases diet, nursing and bathing meet the indications. There is active, systematic, careful, watchful treatment, but not with drugs. The public has not yet been fully educated to this point and medicines have sometimes to be ordered for the sake of the friends, and it must be confessed that there are still in the ranks *antiques* who would insist on a dose of some kind every few hours.

The battle against poly-pharmacy, or the use of a large number of drugs (of the action of which we knew little, yet we put them into bodies of the action of which we know less) has not yet been fought to a finish. There have been two contributing factors on the side of progress—the remarkable growth of the sceptical spirit fostered by Paris, Vienna and Boston physicians, and above all the valuable lesson of homœopathy, the infinitesimals of which certainly could not do harm, and quite as certainly could not do good; yet nobody has ever claimed that the mortality among homœopathic practitioners was greater than among those of the regular school. A new school of practitioners has arisen which cares nothing for homœopathy and less for so-called allopathy. It seeks to study rationally and scientifically the action of drugs, old and new. It is more concerned that a physician shall know how to apply the few great medicines which all have to use, such as quinine, iron, mercury, iodide of potassium, opium and digitalis, rather than a multiplicity of remedies the action of which is extremely doubtful.

The growth of scientific pharmacology, by which we now have many active principles instead of crude drugs, and the discovery of the art of making medicines palatable, have been of enormous aid in rational practice. There is no limit to the possibility of help from the scientific investigation of the properties and action of drugs. At any day the new chemistry may give to us remedies of extraordinary potency, and of as much usefulness as cocaine. There is no reason why we should not, even in the vegetable world, find for certain diseases specifics of virtue fully equal to that of quinine in the malarial fevers.

One of the most striking characteristics of the modern treatment of disease is the return to what used to be called the natural methods—diet, exercise, bathing and massage. There probably never has been a period in the history of the profession when the value of *diet* in the prevention and the cure of disease was more fully recognized. Dyspepsia, the

besetting malady of this country, is largely due to improper diet, imperfectly prepared and too hastily eaten. One of the great lessons to be learned is that the preservation of health depends in great part upon food well cooked and carefully eaten. A common cause of ruined digestion, particularly in young girls, is the eating of sweets between meals and the drinking of the abominations dispensed in the chemists' shops in the form of ice cream sodas, etc. Another frequent cause of ruined digestion in business men is the hurried meal at the lunch counter. And a third factor, most important of all, illustrates the old maxim, that more people are killed by overeating and drinking than by the sword. Sensible people have begun to realize that alcoholic excesses lead inevitably to impaired health. A man may take four or five drinks of whiskey a day, or even more, and think perhaps that he transacts his business better with that amount of stimulant; but it only too frequently happens that early in the fifth decade, just as business or political success is assured, Bacchus hands in heavy bills for payment, in the form of serious disease of the arteries or of the liver, or there is a general breakdown. With the introduction of light beer there has been not only less intemperance, but a reduction in the number of the cases of organic disease of the heart, liver and stomach caused by alcohol. While temperance in the matter of alcoholic drinks is becoming a characteristic feature of Americans, intemperance in the quantity of food taken is almost the rule. Adults eat far too much, and physicians are beginning to recognize that the early degenerations, particularly of the arteries and of the kidneys, leading to Bright's disease, which were formerly attributed to alcohol, are due in large part to too much food.

Nursing.—Perhaps in no particular does nineteenth century practice differ from that of the preceding centuries more than in the greater attention which is given to the personal comfort of the patient and to all the accessories comprised in the art of nursing. The physician has in the trained nurse an assistant who carries out his directions with a watchful care, and who is on the lookout for danger signals, and with accurate notes enables him to estimate the progress of a critical case from hour to hour. The intelligent, devoted women who have adopted the profession of nursing are not only in their ministrations a public benefaction, but they have lightened the anxieties which form so large a part of the load of the busy doctor.

Massage and Hydrotherapy have taken their places as most important measures of relief in many chronic conditions, and the latter has been almost universally adopted as the only safe means of combating the high temperatures of the acute fevers.

Within the past quarter of a century the value of *exercise* in the education of the young has become recognized. The increase in the

means of taking wholesome out-of-door exercise is remarkable, and should show in a few years an influence in the reduction of the nervous troubles in young persons. The prophylactic benefit of systematic exercise, taken in moderation by persons of middle age, is very great. Golf and the bicycle have in the past few years materially lowered the average incomes of the doctors of this country as derived from persons under 40. From the senile contingent—those above this age—the average income has for a time been raised by these exercises, as a large number of persons have been injured by taking up sports which may be vigorously pursued with safety only by those with young arteries.

Of three departures in the art of healing brief mention may be made. The use of the extracts of certain organs (or of the organs themselves) in disease is as old as the days of the Romans, but an extraordinary impetus has been given to the subject by the discovery of the curative powers of the extract of the thyroid gland in the diseases known as cretinism and myxœdema. The brilliancy of the results in these diseases has had no parallel in the history of modern medicine, but it cannot be said that in the use of the extracts of other organs for disease the results have fulfilled the sanguine expectations of many. There was not, in the first place, the same physiological basis, and practitioners have used these extracts too indiscriminately and without sufficient knowledge of the subject.

Secondly, as I have already mentioned, we possess a sure and certain hope that for many of the acute infections antitoxins will be found.

A third noteworthy feature in modern treatment has been a return to psychical methods of cure, in which *faith in something* is suggested to the patient. After all, faith is the great lever of life. Without it man can do nothing; with it, even with a fragment, as a grain of mustard seed, all things are possible to him. Faith in us, faith in our drugs and methods, is the great stock in trade of the profession. In one pan of the balance put the pharmacopœias of the world, all the editions from Dioscorides to the last issue of the United States Dispensatory; heap them on the scales as did Euripides his books in the celebrated contest in the "Frogs;" in the other put the simple faith with which from the days of the Pharaohs until now the children of men have swallowed the mixtures these works describe, and the bulky tomes will kick the beam. It is the *aurum potabile*, the touchstone of success in medicine. As Galen says, confidence and hope do more good than physic—"he cures most in whom most are confident." That strange compound of charlatan and philosopher, Paracelsus, encouraged his patients "to have a good faith, a strong imagination, and they shall find the effects" (Burton). While we often overlook or are ignorant of our own faith cures, doctors are just a wee bit too sensitive about those performed out-

side our ranks. They have never had, and cannot expect to have, a monopoly in this panacea, which is open to all, free as the sun, and which may make of every one in certain cases, as was the Lacedemon of Homer's day, "a good physician out of Nature's grace." Faith in the gods or in the saints cures one, faith in little pills another, hypnotic suggestion a third, faith in a plain, common doctor a fourth. In all ages the prayer of faith has healed the sick, and the mental attitude of the suppliant seems to be of more consequence than the powers to which the prayer is addressed. The cures in the temples of Esculapius, the miracles of the saints, the remarkable cures of those noble men, the Jesuit missionaries, in this country, the modern miracles at Lourdes and at St. Anne de Beaupré in Quebec, and the wonder-workings of the so-called Christian Scientists, are often genuine and must be considered in discussing the foundations of therapeutics. We physicians use the same power every day. If a poor lass, paralyzed apparently, helpless, bed-ridden for years, comes to me, having worn out in mind, body and estate a devoted family, if she in a few weeks or less by faith in me, and faith alone, takes up her bed and walks, the saints of old could not have done more, St. Anne and many others can scarcely to-day do less. We enjoy, I say, no monopoly in the faith business. The faith with which we work, the faith, indeed, which is available to-day in everyday life, has its limitations. It will not raise the dead; it will not put in a new eye in place of a bad one (as it did to an Iroquois Indian boy for one of the Jesuit fathers), nor will it cure cancer or pneumonia or knit a bone, but in spite of these nineteenth century restrictions, such as we find it, faith is a most precious commodity, without which we should be very badly off.

Hypnotism, introduced by Mesmer in the past century, has had several revivals as a method of treatment during the present century. The first careful study of it was made by Braid, a Manchester surgeon, who introduced the terms hypnotism, hypnotic and nervous sleep; but at this time no very great measure of success followed its use in practice, except perhaps in the case of an Anglo-Indian surgeon, James Esdaile, who, prior to the introduction of anæsthesia, had performed 261 surgical operations upon patients in a state of hypnotic unconsciousness. About 1880 the French physicians, particularly Charcot and Bernheim, took up the study, and since that time hypnotism has been extensively practised. It may be defined as a subjective psychological condition, what Braid called nervous sleep, resembling somnambulism, in which, as Shakespeare says, in the description of *Lady Macbeth*, the person receives at once the benefit of sleep and does the effects or acts of watching or waking. Therapeutically, the important fact is that the individual's natural susceptibility to suggestion is increased, and this may

hold after the condition of hypnosis has passed away. The condition of hypnosis is usually itself induced by suggestion, requesting the subject to close the eyes, to think of sleep, and the operator then repeats two or three times sentences suggesting sleep, and suggesting that the limbs are getting heavy and that he is feeling drowsy. During this state it has been found that the subjects are very susceptible to suggestion.

Too much must not be expected of hypnotism, and the claims which have been made for it have been too often grossly exaggerated. It seems, as it has been recently well put, that hypnotism "at best permits of making suggestions more effective for good or bad than can be done upon one in his waking state." It is found to be of very little use in organic disease. It has been helpful in some cases of hysteria, in certain functional spasmodic affections of the nervous system, in the vicious habits of childhood, and in suggesting to the victims of alcohol and drugs that they should get rid of their inordinate desires. It has been used successfully in certain cases for the relief of labor pains, and in surgical operations, but on the whole, while a valuable agent in a few cases, it has scarcely fulfilled the expectations of its advocates. It is a practice not without serious dangers, and should never be performed except in the presence of a third person, and its indiscriminate practice by ignorant persons should be prevented by law.

One mode of faith-healing in modern days, which passes under the remarkable name of Christian Science, is probably nothing more than mental suggestion under another name. "The patient is told to be calm, and is assured that all will go well; that he must try to aid the healer by believing that what is told him is true. The healer then quietly, but firmly, asserts and reiterates that there is no pain, no suffering, that it is disappearing, that belief will come that the patient is getting well." This is precisely the method which Bernheim used to use with such success in his hypnotic patients at Nancy, iterating and reiterating, in a most wearisome way, that the disease would disappear and the patient would feel better. As has been pointed out by a recent writer (Dr. Harry Marshall), the chief basis for the growth of Christian Science is that which underlies every popular fallacy. Oliver Wendell Holmes outlined very clearly the factors concerned, showing (a) "how easily abundant facts can be collected to prove anything whatsoever; (b) how insufficient, 'exalted wisdom, immaculate honesty and vast general acquirements,' are to prevent an individual from having the most primitive ideas upon subjects out of his line of thought, and, finally, demonstrating 'the boundless credulity and excitability of mankind upon subjects connected with medicine.'"

RETROSPECT OF CURRENT LITERATURE.

Medicine.

UNDER THE CHARGE OF JAMES STEWART.

On Some of the Cerebral Complications of Whooping Cough.

For a long time it has been recognized that various forms of cerebral paralysis may arise during the course of whooping cough. The explanation usually given has been the occurrence of a hæmorrhage into either the substance of the brain or into the meninges. There is, however, not only strong clinical evidence but also anatomical proof in a few cases that in a certain number of cases of cerebral paralysis coming on during the course of whooping cough, the cause is an encephalitis and not a hæmorrhage.

At a recent meeting of the Berlin Medical Society (*Berliner Klin. Woch.* No. 52, 1900.) Arnheim related a case of cerebral diplegia which he considered to be of this nature. The subject was a boy four years old of healthy parents. The child, with the exception of a slight otorrhœa, had been previously healthy. About a month after the onset of whooping cough he had repeated attacks of convulsions followed by vomiting and somnolence, which progressed after some days to complete coma. The symptoms were those of a meningitis. There was rigidity of the muscles of the neck and extremities, slight fever, and a slow pulse. There was no motor paralysis or disturbance of sensation. A few cubic centimetres of cerebro-spinal fluid removed by lumbar puncture did not show any organisms. After a period of coma lasting forty days the child gradually regained consciousness. He was then found to be aphasic and to have lost power in all the extremities. After four or five months both speech and power in the extremities very slowly and gradually returned. When the child was presented to the Berlin Medical Society, nearly a year after the onset of the whooping cough and about eleven months after the advent of the nervous symptoms, he was found to be still somewhat weak in all the extremities, and more or less ataxic also. The speech was very imperfect, resembling closely the disturbance of speech (dysarthria) seen in cases of apoplexy.

The muscles were soft and wasted but did not show the reaction of degeneration. The fundi were normal and the deep reflexes also.

Paralysis, cerebral in its origin, is not an infrequent complication during the course of whooping cough. In the great majority of cases described it is hemiplegic and not diplegic as in the instance above described. Arnheim considers that the cause in his case was an encephalitis and not a hæmorrhage. Until recently it was the rule to ascribe all such forms of cerebral paralysis to hæmorrhage consequent on the rupture of a blood vessel during an attack of coughing. Several cases of paralysis of similar distribution have been reported recently where a post-mortem was held and where no sign of rupture of blood vessels was met with. Even in cases of hemiplegia it has been found that the cause of the paralysis in several instances has not been due to hæmorrhage. In a few cases no changes whatever could be detected, in a few an encephalitis has been found.

Clinically, the difference between an encephalitis (non-suppurative) and a hæmorrhage into the membranes or substance is generally very marked. The encephalitis presents the symptoms of a meningitis, while a hæmorrhage usually brings about a very sudden onset and is not progressive in its course. The distinction is of practical importance, as recovery either complete or partial is the rule in encephalitis and the contrary in hæmorrhage.

In the discussion which followed the reading of Arnheim's paper, Rothmann related the details of a case of evidently bilateral hæmorrhage into either the membranes or substance of the brain. The paralysis came on immediately after an unusually severe coughing spell. Eighteen months afterwards the limbs were still paretic and ataxic. There was also a very marked intention tremor. The tremor was first noticed a few weeks after the onset of the paralysis, resembled in its features closely the tremor seen in insular sclerosis, and pointed to the probable presence of sclerotic patches in the subcortical areas.

In the discussion, Boginsky referred to another grave cerebral complication in the course of whooping cough, *viz.*, the appearance of severe mental disturbance. He has seen a number of cases where a condition resembling idiocy has set in and which passed away completely after lasting a few weeks or months. He considers that the active cause in such a state is positively a toxic poisoning.

The Epidemic of Arsenical Neuritis in England.

The serious epidemic of arsenical poisoning in Manchester, Liverpool, and neighbouring towns from beer contamination has been very carefully studied by different observers. It has been clearly shown that the adulteration occurred through the use of an impure sulphuric acid

(prepared from arsenical pyrites) in the manufacture of glucose which was supplied to the brewers. The contamination of the beer would appear to have commenced early last summer, and for some time it was thought that the frequent cases of neuritis reported from various quarters were due to alcohol. It was, we believe, Dr. Reynolds, of Manchester, who first showed that it was arsenical in its origin. The epidemic would appear to have been mainly confined to the very poor people who drink the cheapest kind of beer.

In a recent number of the *British Medical Journal* (Jan. 5, 1901), Drs. Raw, Barendt, and Warrington, of Liverpool, give an account of the more important symptoms met with in some 70 cases studied by them in the Mill Road Infirmary in Liverpool. It has been shown that in some beers the contamination with arsenic would amount to about one-fifth of a grain of arsenic for each glass. Several poisonings have been noticed in persons who have only taken a glass or two of beer for a short time. The symptoms of the poisoning did not differ very essentially from those met with in alcoholic neuritis, with the exception of the staining of the skin in the former. This would appear to have been a very frequent and very marked symptom. The pigmentation was generally diffused throughout the body but more marked in certain parts, as the flexures of the joints and internal aspects of the limbs. It was also very deep where the covered and uncovered skin meet, and over the areas where the clothes pressed especially. It was noticed that the cases where the pigmentation was very intense and conjunctivitis marked rarely showed conspicuous symptoms of peripheral neuritis. In persons who were considered to be moderate drinkers of beer or stout, disturbance of sensation was the most obtrusive symptom. They were mainly of a subjective nature such as numbness and tingling in the hands and feet. In some cases all that was complained of was a burning sensation in the soles, which prevented them from walking. Pain on moving the joints and on pressing the muscles was usually very marked. Objective disturbance of sensibility was rarely present. In several cases the soles of the feet presented a red flushed appearance (erythromelalgia). The motor symptoms varied much in different cases but did not as far as could be observed differ from the same symptoms met with in alcoholic neuritis. In a number of the cases it was a question whether alcohol was not also a factor in the causation of the neuritis. No distinct disorder of coördination was observed in any of the cases.

Only one case proved fatal, while in a number recovery would likely be imperfect owing to the depth of the motor paralysis.

James Stewart.

Surgery.

UNDER THE CHARGE OF GEORGE E. ARMSTRONG.

Cocaine Anæsthesia.

MATAS. "Local and Regional Anæsthesia with Cocaine and other Analgesic Drugs, including the Subarachnoid Method." *Phil. Med. Jour.*, Nov. 3, 1900.

FOWLER. "Cocaine Analgesia from Subarachnoid Spinal Injection." With report of forty-four cases. *Ibid.*

GOLDAN. "Intraspinal Cocainization for Surgical Anæsthesia." *Ibid.*

MARN. "Analgesia in Obstetrics produced by Medullary Injections of Cocaine." *Ibid.*

PHELPS. "Subarachnoid Injections of Cocaine as a substitute for General Anæsthesia." *Ibid.*

DUMONT. "Intra-arachnoid Injections of Cocaine." *Correspondenzbl. f. Schweiz. Aerzte*, Oct. 1, 1900.

GOLLAV. "The Risk of Injection of Cocaine into the Spinal Cavity." *Bull. et. Men. de la Soc. de Chir. de Bucarest*, No. 5, 1900.

The history of cocaine since the announcement of its analgesic properties to the medical world in 1884 by the Heidelberg student Kolber, has certainly been remarkable. It was enthusiastically and very generally received and widely used. Its analgesic properties were soon found to be definite and positive, and its toxic power equally decided. It has probably caused more deaths among patients and anxiety to operators than will ever be credited to it in this world. Since Schleich and Heinze demonstrated that very weak solutions were analgesic, the unfortunate accidents resulting from its use have become almost unknown.

On two previous occasions our readers have been given the results of Bier's experiments in the use of intraspinal injections, and a statement of Tuffier's operation work using intraspinal injections of cocaine instead of general anæsthesia. A considerable experience in the use of the drug by different operators has now been published, and while it is perhaps too soon to pronounce upon it yet, it is evident that there are decided objections to its introduction into the spinal canal. From published reports it is evident that the technique of intraspinal injections is difficult. If heated above 80° F., cocaine is decomposed. It is in this respect inferior to eucaine B, which can be sterilized by boiling

without impairment of its therapeutic power. There is no obvious reason why the spinal canal might not be infected during the intraspinal injection of cocaine, through some defect in technique or imperfect sterilization of the cocaine solution. It is indeed reported that one of Kocher's cases died subsequently of meningitis.

An almost constant sequence has been the result of the toxic property of the cocaine even in doses of 1-5 of a grain. The evidences of this are the pallor, cold perspiration, and shabby pulse, with total relaxation of the sphincters at the time of use, and the severe headache which follows and persists for several days afterwards in a very considerable percentage of cases, and often is accompanied by vomiting.

Lesser objections to the intraspinal injection of cocaine are the uncertainty of its action, particularly in chronic alcoholics, the indefinite duration of its analgesic action, the danger of intraspinal hæmorrhage when used in patients suffering from arteriosclerosis, the fact that the patient is conscious of an operation being performed, rendering its use in children impossible, and the fact that it does not produce muscular relaxation. Above all, is the increasing testimony as to its danger to life. In Roumania, where it has been used very extensively, death has resulted not infrequently. Tuffier in 125 cases had 5 deaths, although in 4 he claims that the deaths were not due to cocaine. There is evidence that its use within the spinal canal is followed by a larger mortality than either chloroform or ether. These results fully sustain Bier in the conservative attitude that he has maintained since he first introduced the method for surgical purposes in 1898. He holds that the problem is not to use cocaine in the manner which he first described, and for which he predicts no great future, but to devise means of rendering cocaine harmless and of preventing its unpleasant after-effects, or to discover some non-toxic substance.

Certainly at present one can hardly feel justified in injecting cocaine into the spinal canal unless under very unusual circumstances.

Operation without Touching the Wound with Finger or Hand

KÖNIG. "Aseptik der Hände. Operation ohne disekte Berührung der Wunde mit Finger und Hand." *Centrallblatt f. Chirurgie*, 1900, No. 36.

The numerous methods described in medical journals during the past few years for rendering the hands aseptic, the attempts at getting some "lacquer," and the adoption by many surgeons of gloves composed of various textures, demonstrate the danger of infection from the hands of the operator and his assistants, and the practical difficulty in avoiding it.

König therefore suggests that operating surgeons take a lesson from some of the skilled workmen in the trades and learn to operate without handling the wound directly with the fingers. He refers to the blacksmith, who shoes a horse without touching the hoof or shoe with his hands, and to the gold or silver smiths who do fine artistic work by means of instruments or tools. Let the surgeon then learn to handle the tissues indirectly through instruments and thus, by avoiding direct contact with the fingers, avoid infection.

This may be done with great advantage in, for example, joint operations. The joint may be opened, a loose body found and removed, without allowing the fingers to enter the joint at all. The writer has adopted this course with most satisfactory results. The same may be said of joint resections or the suturing of a fractured patella.

With patience and practice an operation for the radical cure of hernia could be carried out without direct contact of the fingers. The same may be said of very many of the operations performed upon the extremities, upon the spine, upon bones, and upon the skull.

The performance of abdominal operations presents greater difficulties. It is then imperative that the fingers be introduced into the cavity for the acquirement of information and the carrying out of the details of the operation. Even when operating within the abdomen, however, manual manipulations may sometimes be lessened by the use of a good light, sterile gauze pads, and retractors. Certainly, the less tissues are handled with fingers and hands, the less the danger of infection.

G. E. Armstrong.

Reviews and Notices of Books.

THE PRINCIPLES OF TREATMENT AND THEIR APPLICATIONS IN PRACTICAL MEDICINE. By J. MITCHELL BRUCE, M.A., M.D., F.R.C.P., Physician and Lecturer on the Principles and Practice of Medicine, Charing Cross Hospital. Young J. Pentland, Edinburgh and London, 1899.

We have read with much pleasure this very interesting volume, and regard it as one of the most useful and thoughtful of recent works on therapeutics. The first half of the book is devoted to purely general considerations and discusses the indications for rational treatment, which may be gained from the study of the etiology, the pathology and the clinical characters and cause of disease. A chapter is devoted to the influence which the personal factor should exert on treatment. The various therapeutic means at ones disposal are then considered and the value of proper food, exercise, and rest, is emphasised.

The author lays down the following rules as applicable to the management of all cases of disease; we would commend them to the earnest attention of every young medical practitioner.

The line of treatment adopted at the commencement must be adhered to for a sufficient length of time to test it fairly; vacillation is one of the worst of weaknesses in a practitioner.

If the case be doing well, let well alone. During the progress of a case, an effort should be made to interrupt vicious circles. Treatment, the author says, often consists in opportunely throwing a weight into nature's side of the scale; afterwards she may be left to right herself. It is not necessary to do everything that is to be done; frequently, it is sufficient to start recovery on the right line by relieving the diseased organ of arrears of work, which hamper it. The interdependence of all the bodily organs, however, on which the formation of vicious circles depends, must never be forgotten. The most judicious medical men are those who will take the body as a whole, the good and bad, observing all the different functions, and by simple methods rule and guide the whole organism, so as to bring it to a proper adjustment. (Wilks.)

Lastly, the author urges that in many instances it is wise to be content with a moderate result. To attempt to secure complete recovery may not infrequently be more than unsuccessful; and actually harmful.

The second part is devoted to the illustrations of these principles in the treatment of the various diseases.

The author writes in a charming style; every page may be read with pleasure and profit. We can cordially recommend the work not only to every student, but to every practitioner of medicine. *A. D. B.*

PATHOLOGY AND SURGICAL TREATMENT OF TUMOURS. By N. SENN, M.D., Ph.D., LL.D., Professor of Practice of Surgery and of Clinical Surgery. Rush Medical College, etc., etc. W. B. Saunders, Philadelphia. J. A. Carveth & Co., Toronto. Price, \$6.00.

While this work is most valuable from a surgical point of view and gives us the opinions and methods of one who has deservedly obtained the reputation of being one of the most brilliant American surgeons, we are forced to point out as we did in a previous edition, that it cannot be recommended as affording an adequate discussion of the pathology of tumours, indeed it should not pretend to be a treatise on this subject. Dr. Senn's definition of what constitutes a tumour proper is one in which we find ourselves inclined thoroughly to agree. It is not, therefore, that we disagree with his views. Our objection is that very much has been written upon this subject since the first edition came out, but to this there is very little reference; scarce anything is said, for example, with regard to the studies of Hansemann and Ribbert (to mention but the two leading German workers during the last ten years); the parasitic theory which has attracted so much attention of late is dismissed almost contemptuously, and although we ourselves have some sympathy with the author in this matter, nevertheless the arguments of those holding this theory together with the few facts which they have determined with so much labour, should have been brought forward and seriously discussed. We should have expected a fuller study of the endo- and peritheliomata; while, lastly, we should have expected some admission that the embryological method of classification is imperfect and out of date, and that gliomata, for example, cannot be classified among the mesoblastic tumours. *J. G. A.*

SAUNDERS' MEDICAL HAND ATLASES—ATLAS AND EPITOME OF GENERAL PATHOLOGICAL HISTOLOGY, WITH AN APPENDIX ON PATHO-HISTOLOGICAL TECHNIQUE. By DR. H. DURCK of Munich. Edited by LUDWIG HEKTOEN, M.D. W. B. Saunders & Company, Philadelphia, 1900. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$3.00.

This volume of the Munich Medical Hand Atlases has been translated for the American Edition by Professor Hektoen of Chicago, who has added here and there to the German letter press, and so has materially improved it. It is the first of three volumes upon general and special morbid histology. Like all the other works of this series the

illustrations are the main feature, and these colored representations of sections of different organs and tissues in varying conditions of disease are almost uniformly excellent. We congratulate the publishers and the translator upon bringing so exquisite a work before the medical public at so moderate a price. But the medical student, who would gain the most instruction from it, is, from our experience, unlikely to invest in what is an extra text-book, while the laboratory worker is apt to prefer the study of the material direct, nor does he need illustrations of the more common processes. It is the man in practice who desires to keep abreast in pathological histology, and the teacher in subjects other than pathology, who will find this little handbook a most valuable work of reference and to them it can be cordially recommended.

J. G. A.

A TEXT-BOOK OF PATHOLOGY. By ALFRED STENGEL, M.D., Professor of Clinical Medicine, University of Pennsylvania. Third Edition, revised. Pp. 873. 372 illustrations. Philadelphia and London, W. B. Saunders & Co., 1900. Canadian Agents, J. A. Carveth & Co., Toronto, Ont. Price, \$5.00.

We are pleased to see that this excellent work is gaining the appreciation it deserves. As a text-book of special pathology of the various systems, we know of nothing which in the same number of pages brings forward so clearly and concisely the main facts of special pathology and those well up to date. In this new edition an attempt has been made to discuss more fully what it is usual now to speak of as pathological physiology, and to make the work not so purely one upon morbid anatomy. Even more attention it seems to us might be given to this most important branch of the subject. In regard to the first portion of the work, that upon general pathology, we still think that this is inadequately treated. So far as it goes, however, it is very clear and sound. For our own part we hold strongly that the full consideration of the general processes of disease is essential for a broad and sound comprehension of these processes as they affect the individual tissues.

J. G. A.

A TEXT-BOOK OF EMBRYOLOGY FOR STUDENTS OF MEDICINE. By J. C. HEISLER, M.D., Professor of Anatomy, Medico-Chirurgical College, Philadelphia. Pp. 405; 190 illustrations; 26 colored. Philadelphia, W. B. Saunders, 1899. Price, \$2.50.

We cordially welcome the appearance of this clear and most useful text-book of embryology, designed as it is specially for the use of students of medicine. While possibly we may differ from the author with re-

gard to one or two points, the arrangement of the work is so excellent and the information is given in so clear a style, that it fills a gap among the text-books and should become immediately popular. There has long been a need for a work of this nature. Minot's and the larger text-books are all too large and too detailed for the ordinary medical student, the sections upon embryology in Quain's and other anatomies are altogether too condensed. This work appears to strike the happy mean and to contain all that is essential to the ordinary student, placed in such a way as he can readily grasp it, while the abundant illustrations most materially aid in comprehending the succession of changes which occur in the development of each part and system of the body.

A TEXT-BOOK UPON THE PATHOGENIC BACTERIA, FOR STUDENTS OF MEDICINE AND PHYSICIANS. By JOSEPH McFARLAND, M.D., Professor of Pathology, Medico-Chirurgical College, Philadelphia, and Pathologist to Medico-Chirurgical Hospital, Philadelphia. Third Edition, revised and enlarged. Pp. 621; 124 illustrations. Philadelphia, W. B. Saunders & Co., 1900. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$3.25.

This work shows a steady improvement in each of its rapidly succeeding editions, and can be recommended as one of the most satisfactory text-books upon bacteriology for the use of the ordinary medical student. Considerable new matter is introduced in the chapters on tuberculosis, diphtheria, tetanus and plague; the illustrations, largely reproductions of microphotographs, are uniformly clear and good and the style most lucid.

In his preface the author states that "in criticising the book one should not forget that it is upon the pathogenic bacteria * * and should not condemn it if it does not contain matter outside of its logical limitations." But to the student, after all, it is not so much what is logical as what is practical, that appeals. We cannot but think that the bacteriological laboratory is the place in which, not only the pathogenic schizomycetes, but also pathogenic microbes of animal origin, are to be studied; that the course in bacteriology is the course in which these, and the pathogenic moulds as well, are most properly dealt with; and that a text-book in bacteriology should not, merely on account of nomenclature and for the sake of logic, fail to include a description of pathogenic microbes in general. Is a separate text-book to be written and obtained by the student upon these other pathogenic microbes? Or where else is the ordinary student to gain his information concerning them? The work needed by the student is not a text-book upon the pathogenic bacteria alone but upon the pathogenic microbes, and the work which best fills the needs of the student is that which includes in

its scope a description of all the most important minute forms of life which are factors in the production of disease. We continue to hope that Dr. McFarland will take this into consideration and will in the next edition add these other chapters, even if logical considerations lead him to alter the title of the work.

J. G. A.

A MANUAL OF MATERIA MEDICA AND PHARMACOLOGY.—Comprising all Organic and Inorganic Drugs, which are, and have been official in the United States Pharmacopeia, together with Important Allied Species, and Useful Synthetics. Especially Designed for Students of Pharmacy and Medicine. By D. M. R. CULBRETH, Ph. G., M.D., Professor of Botany, Materia Medica, and Pharmacognosy in the Modern College of Pharmacy. Second Edition, enlarged and thoroughly revised. Lea Bros. & Co., Philadelphia and New York.

This work treats of Materia Medica and Pharmacognosy, rather than of Pharmacology, as we, at present, use these terms. The descriptions of the appearance of drugs, their physical properties, and chemical composition are exactly given; their therapeutic applications only in the briefest possible manner. The illustrations are very clear and distinct. While we can cordially recommend the volume to all students of pharmacy, it does not strike us that it will be equally serviceable to the medical student, whose object is to acquaint himself with the physiological action, rather than with the physical properties of remedial agents.

A. D. B.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By ROBERTS BARTHOLOW, M.A., M.D., LL.D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia. Tenth Edition, revised and enlarged. New York, D. Appleton & Co., 1899.

The tenth edition of a work, which has for the past twenty-four years occupied the position of one of the authoritative volumes in this department of medicine, calls for few remarks from the reviewer. The information it conveys is of an eminently practical character; and, while we differ from it as to the value of some of its therapeutic suggestions, we regard the present volume as well able to hold the position gained by its predecessors as one of the most useful which a general practitioner can consult.

The present edition contains a full account of all the more important new synthetic remedies, and is fully up to date on all the subjects on which we have consulted it.

A. D. B.

DISEASES OF THE TONGUE.—By HENRY C. BUTLIN, F. R., C.M.S., D.C. L., Surgeon to St. Bartholemew's Hospital, and WALTER G. SPENCER, M.S., M.B., Lond., F.R.C.S., Surgeon to the Westminster Hospital. Cassell and Company, Ltd., London, Paris, New York, and Melbourne, 1900. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$3.25.

This is a valuable addition to surgical literature. As evidence of the appreciation of the thoroughness with which the author has dealt with his subject, may be mentioned the fact that the first edition has been translated into French and German.

The development of the tongue and its vascular and nerve supply are given in the first chapter. The author then gives a very clear description of the congenital defects of the tongue and of the accidents to which the tongue is exposed, together with the proper treatment for these conditions. A protest is entered, very properly, against the all too common division of the frænum in cases of supposed tongue-tie, and mention is made of the unfortunate results from such treatment. Numerous cases have died from after-hæmorrhage, asphyxia from the tongue falling back into the pharynx and obstructing the entrance of air, and from sepsis. Operation for tongue-tie is occasionally required and should then be performed by qualified practitioners only. Many of the accidents have occurred in hands of midwives.

Mr. Butlin's work on the tongue is well known. He is strongly in favour of thorough removal of all lymphatic glands likely to receive infection in all cases, although he advises that this be done at a second operation. He also advocates the removal of half the tongue only in suitable cases. We can cordially recommend the book to all practitioners as well as surgeons.

G. E. A.

ESSENTIALS OF MEDICAL DIAGNOSIS.—By SOLOMON SOLIS-COHEN, M.D., and AUGUSTUS A. ESINER, M.D. Second Edition, Revised and Enlarged. W. B. Saunders, Philadelphia. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$1.50.

The fact that this book appears in its second edition in so short a time indicates its popularity with the students for whom the writers claim it was primarily designed. Although published as one of Saunders Question Compends, it is a cap. octavo of 417 pages. While there can be but little doubt that when such compends are properly used they may be helpful, yet there is reason to fear that the advice to depend upon the "more elaborate works" is unheeded, under the influence of the temptation to follow categorically the record of signs and symptoms of disease so briefly set down. If we accept any compend, we would be

glad to recommend this to students; but in view of the valuable text-books upon the practice of medicine quite brief enough to be considered consistent with accuracy, it scarcely seems to us that this book is needed.

W. F. H.

ORIGIN AND CHARACTER OF THE BRITISH PEOPLE.—By Nottridge Charles MacNamara, London. Smith, Elder & Co., 1900.

This most instructive work by a well known surgeon is of interest to everyone who delights in anthropology. The author endeavours to show why the nations of the south and west of Ireland differ as regards their character both from Englishmen and Scotchmen. He thinks that the shape of the human skull is the best and only reliable test of race, and he believes with Professor Rhys that "skulls are harder than consonants; and that races lurk behind when languages slip away."

In Great Britain there is a community of the original Iberian population speaking English. He holds that the original inhabitants of Britain were Iberians from the North of Africa, then before the Bronze Age they were invaded by what he calls the Celtic Aryans, and during the Bronze Age a multitude of short, dark, broad-skulled Mongolians from Central Europe emigrated into Great Britain from France. Much later, in the ninth century, the Germanic tribes poured into the south-west of England. These he calls the Teutonic Aryans, for they are of the same Aryan stock which had been for centuries settled in Northern Europe. The Romans did not change the racial character of the inhabitants, though they brought their language, laws and civilization into Britain.

There is one point he dwells on which strikes us as very important at the present time, and the want of which we have felt in Canada, and that is the necessity for having a common language to weld together a nation. He says, "it is a means to a better and fuller understanding between individuals forming the race, it is all-important they should be able to think through the medium of a common language"—and again, "we cannot help feeling that if the inhabitants of the Transvaal and Orange Free State had been thoroughly acquainted with the English language and so with out real sentiments and ideas, they would never have been led by interested persons into the terrible conflict in which they are now engaged." It looks very much as if, when the settlement of affairs in South Africa takes place, the same mistake will be made which was made in Canada, *viz.*, the retention of a dual language.

Mr. MacNamara's book is full of interest and instruction, and well repays perusal. He advances many theories and suggests many new ways of looking at things which "give us pause for thought." The typo-

graphy is excellent and the illustrations clear and good. Every medical man should read this book. F. J. S.

LEA'S SERIES OF POCKET TEXT-BOOKS.—OBSTETRICS, A MANUAL FOR STUDENTS AND PRACTITIONERS. By DAVID JAMES EVANS, M.D., Lecturer on Obstetrics and Diseases of Infancy, McGill University, Montreal, Canada; Fellow of the Obstetrical Society, London, England.

In his preface the author states that in writing this "pocket" text-book his aim has been to supply a short concentrated treatise on the science and art of obstetrics, a work that the student and junior practitioner may find of use in attendance on lectures or in every day practice."

A somewhat careful examination of the work enables us to say with confidence that the author's modest claim has been amply borne out, and that his work is an admirable example of *multum in parvo*. We feel confident that to the medical student of to-day, struggling with his over-crowded curriculum, it is certain to be a great boon so far as his obstetrics is concerned.

The first chapters are devoted to a sketch of menstruation, ovulation and the development of the embryo. The embryological part seems to us especially excellent for the space devoted to it. In the pathology of pregnancy one naturally turns to the chapters of the subjects on which our knowledge is somewhat hazy and practice uncertain. As regards the nausea and vomiting, the author gives a sketch of his views of its exciting cause advanced in a paper read before the Montreal Medico-Chirurgical Society some months ago, and published in this Journal. The cause of this distressing and sometimes dangerous symptom, Dr. Evans believes to be the physiological uterine contractions. In support of his theory the author relates a number of facts in the physiological condition of the gravid uterus, mainly regarding its vascular and nervous supply, and advances certain ingenious arguments. We trust the author will pardon us if we think the question has not yet passed beyond the polemical stage. The medical, regiminal, and what may be called the minor surgical treatment of pernicious vomiting, are admirably sketched, but we think the author somewhat optimistic when he says, "in rare cases it is necessary to induce abortion in order to save the patient's life"; while we agree with him completely when he says that "it is a difficult question to decide just when one is justified in terminating the pregnancy." We believe that the doing of this operation is often too long delayed. This is probably easily explained when one remembers that the majority of cases are first pregnancies and the desire for offspring is intense.

In the pathology of eclampsia the recent views most generally accepted, that a toxæmia is the cause, are briefly but clearly discussed, and the experiments of Bouchard related. It will be remembered that by these experiments Bouchard demonstrated the absence of the normal toxicity of the urine and the presence of toxics in the blood of eclamptics, apparently proving the inefficiency of the liver in the destruction, and of the kidneys and skin in the elimination, of these poisons.

In the treatment of puerperal septic infection we are pleased to note that the author speaks with no uncertain sound concerning serum therapy. It has always seemed to us that the reports of recoveries from this grave condition have proved nothing as regards the efficacy of antistreptococcus serum, and Dr. Evans very truly remarks. that "recent statistics seem to prove that the results thus far obtained by the employment of the serum are not more favourable than those by other methods of treatment." We venture further the opinion that it is by no means free from danger. If employed at all it must be confined to cases proved by bacteriological examination to be purely streptococcus infection. Mention is made of Hirst's proposal to employ nuclein, with a view of producing an artificial leucocytosis, which he thinks gives promising results. From the brevity of the notice with which the author dismisses the subject of hysterectomy in puerperal infection, we conclude that he is not enthusiastic about this drastic practice.

Each of the obstetric operations is described briefly but with admirable clearness. For guidance in the performance of each of the various forceps operations, no obstetrician or gynecologist need go beyond this little volume. In high forceps operations, we notice that the author endorses the value of the Walcher position.

In his general rules governing the selection of obstetric operations in cases of obstructed labour, we do not think Cæsarean section is allotted a field large enough to please the modern abdominal surgeon. In cities with well equipped hospitals or wherever operators of skill and experience are available, we do think the symphysiotomy and embryotomy should be much more restricted than they have been in favour of Cæsarean section.

In this notice it will be seen that we have touched upon a few only of the subjects treated. We have, nevertheless, examined the whole work, and must repeat that we have nothing but praise for such an admirable combination of conciseness and lucidity. We must confess to have been strongly of the opinion that this class of text-book is much overdone, and have been uncharitable enough to believe, that the necessities were much more of the author's than of the already well cared for student and general practitioner. Dr. Evan's book amply dispels all such feeling so far as he is concerned.

The publishers' part of the work is well done. Our only criticism refers to the great weight of the book, which of course is due to the loaded paper on which it is printed. The illustrations number one hundred and forty-nine and are well selected. W. G.

AN AMERICAN TEXT-BOOK OF PHYSIOLOGY.—By Several Writers. Edited by WILLIAM H. HOWELL, Ph.D., M.D., Professor of Physiology in Johns Hopkins University, Baltimore, Md. Second Edition, Revised. Vol. I. Philadelphia, W. B. Saunders & Company, 1900. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$6.00.

This work first appeared in 1896, and for its contents ten of the leading physiologists of the United States, all of them professors in the medical schools of the great republic, were responsible.

The book was avowedly written for students as well as practitioners, and was the first experiment of the kind in the English language, at least, for hitherto all physiological works for students had been the products of the efforts of one, or at most two authors. It is manifestly no easy task, even with so good an editor in chief as Professor Howell, to blend the labours of ten different writers into such a whole as will produce the effect intended on the reader's mind, especially when that reader is an undergraduate student. Such works illustrate admirably the advantages and disadvantages of specialism.

However, the editor states in the preface to the second edition that the work has been a success; but that many teachers have suggested that the size of the work when issued in a single volume was such as to render it inconvenient for daily consultation in the lecture room or laboratory; accordingly, the work will now appear in two volumes, though the total amount of reading matter remains about the same.

The principal change is in the chapter on the nervous system which, with that on muscle and nerve, has been transferred to the second volume; but minor changes, necessary even after the lapse of so short a period as five years, have been made in the several chapters. The editor also considers that he was justified in introducing a brief presentation of some of the elementary conceptions of physiological chemistry, owing to the large part that these views are taking in current discussions in physiological and medical literature.

The index has been revised and amplified, a table of contents has been added to each volume, and many new figures have been introduced. In the first edition, numerous references to the literature were appended in the form of foot-notes, and while they are continued, some of the writers have seen fit to omit references to papers published prior to a certain somewhat recent date. Is not this an arbitrary and doubtful procedure?

About the value of such a book as this for the practitioner and the advanced student there can be no question.

The general make-up of the work is excellent. The fact that such large type has been used deserves especial commendation, we think, seeing how frequently such an important matter is ignored in medical publications, the authors of which are supposed to know the danger to vision of the constant use of reading matter putting an undue strain on the eyes even of the young.

The American Text-Book of Physiology in its present form will unquestionably be more acceptable than ever. W. M.

SAUNDERS' MEDICAL HAND ATLASES.—Atlas and Epitome of Gynæcology. By DR. OSCAR SCHLÉFFER, Privat-Dozent of Obstetrics and Gynæcology in the University of Heidelberg. Authorized Translation from the Second Revised and Enlarged German Edition. Edited by Richard C. Norris, A.M., M.D., Surgeon in charge. Preston Retreat, Philadelphia, etc. With 207 coloured illustrations on the 90 plates, and 62 illustrations in the text. Philadelphia, W. B. Saunders & Company, 1900. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$3.50.

This is the volume devoted to gynæcology in the Saunders' reproduction of the celebrated Lehmann Medicinische Handatlanten. Volumes devoted to other departments of medicine have already been noticed in the columns of this Journal.

The editor claims that "the value of this atlas to the medical student and to the general practitioner will be found, not only in the concise explanatory text but in the illustrations." A careful examination of the work, in our opinion, completely justifies the contention. The coloured plates are reproductions of water colour drawings of morbid appearances in the living subject, specimens from operations, and in the autopsy room. The author was at one time an assistant to Prof. Winckel at the Munich Gynæcological Clinic, and warmly acknowledges a debt of gratitude to his former chief for permission to use material and for stimulating counsel. Those who know of Professor Winckel's work on the pathology of the female sexual organs, as shown in his celebrated atlas of photographs, will readily understand this.

To the present second edition new material from the Heidelberg Clinic and Pathological Institute has been added in considerable quantity. While struck with the wonderful fidelity to nature of these pictures, one marvels at the beauty and perfection of the process whereby they can be so accurately reproduced.

Of the morbid conditions thus illustrated may be enumerated, the

displacements and lesions of vagina and uterus, the results of parturition, the various evidences of metritis as shown in the cervix, cancer, sarcoma, myoma and tuberculosis of the uterus. Myoma in its various forms gets a large share of attention. The same may be said of the malignant diseases of the external genitals and of the cervix and body of the uterus. The uterine appendages, however, do not secure quite so much attention, though, considering the size of the work, doubtless the best possible has been done. For the same reason the minute structure is not as well exemplified as is desirable.

All that is claimed for the text is that it is an epitome. It is terse and concise, and so in an admirable way much is said in a few words. In the chapters on treatment the author is distinctly conservative. This seems somewhat remarkable, as one does not usually expect this as a result of a medical education in the atmosphere of continental European clinics. As might have been expected, in a number of instances the methods of treatment advised have a distinctly German character. In such cases the American editor supplements the text with brief descriptions of English and American methods. At the end of the book will be found a therapeutic table, which consists of an alphabetically arranged list of remedies and their uses. To this, no doubt, a young practitioner may often usefully turn.

In all confidence we can most strongly recommend this little book as certain to be most valuable to students and practitioners of the diseases peculiar to women. The fact that it is so cheap will further strongly recommend it.

W. G.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION.—Volume the Eighteenth. Edited by DeForest Willard, M.D., Ph.D., Recorder of the Association. William J. Dornan, Philadelphia, 1900.

The Transactions of the American Surgical Association are always of interest. The annual volume contains the papers of a group of earnest scientific workers who are doing their full share of work, looking towards the advancement of the science of surgery. These papers may be taken as exponents of the most recent views of American surgeons.

The present volume is very largely given up to the surgery of the stomach and duodenum. In his Presidential Address, Dr. Robert F. Weir dealt very fully with "Perforating Ulcer of the Duodenum." Dr. Weir not only gave his own personal experience with this lesion, but the published results of other surgeons. Among others may be mentioned a paper on "Hæmorrhage from Non-perforating Gastric Ulcer," by Rodman, one on "Perforating Gastric Ulcer," by Finney; "Benign Obstruction of the Pylorus," by Kammerer; "The Surgical Treatment

of Simple Dilatation of the Stomach and of Gastropnoia," by Curtis; "The Diagnosis of Cancer of the Stomach," by Hammeter.

Professor Keen read a most instructive paper on "Nephrectomy for a large Aneurysm of the Right Renal Artery with a Résume of twelve formerly reported cases of Renal Aneurysm," and Professor Warren a most complete and thoughtful paper on "Peritoneal Infection in Typhoid Fever."

The report of Professor White on the present medico-legal status of X-rays is of interest and value to physicians as well as surgeons.

The volume is neatly gotten up and printed on good paper.

G. E. A.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS.—With Especial Reference to the Application of Remedial Measures to Disease, and their Employment upon a Rational Basis. By HOBART EMERY HARE, M.D., B.Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Eighth Edition, enlarged, revised and largely rewritten. Lea Bros. & Co., Philadelphia and New York.

In the present edition, this well known work has been thoroughly revised. A description of all the newer therapeutic drugs of value has been added, and a number of wood cuts illustrating the physiological action of the more important drugs have been introduced.

In its present form, this work is one of the most serviceable with which we are acquainted, both for the student, and for the physician. The illustrations, which have been added to the present volume, will, we think, prove of service in fixing many practical facts in the student's mind.

A. D. B.

APPENDICITIS AND ITS SURGICAL TREATMENT WITH REPORT OF ONE HUNDRED AND EIGHTY-FIVE OPERATED CASES. By H. COMAN MYNTER, M.D. (Copenhagen), Professor of Clinical Surgery in the University of Buffalo, New York. Third Revised Edition. Philadelphia, J. B. Lippincott Company, London, 1900.

That a third edition of this book has appeared in less than two years after the first is evidence of its usefulness and popularity. The present edition, after giving an interesting historical introduction, takes up the anatomy, histology, etiology and pathology of the appendix and its alterations in disease. The diagnosis is clearly discussed, as well as the symptoms which should enable one to differentiate it from other possible pathological lesions.

The author is a firm believer in early operation, anticipating when possible wide spread infection of the peritoneal cavity. Cathartics are rightly ruled out in all acute cases. They never do any good but sometimes much harm. Dr. Mynter's practice of giving opium in sufficient quantities to relieve pain is deserving of some criticism. It is only in rare instances that the pain is not almost wholly relieved by rest, abstinence from food, and ice or heat, preferably the former, locally. Opium disguises the condition of the patient and, more important still, gives such a feeling of comfort that delay is asked for, or indeed, operation is refused until serious extension of the infective process has occurred. Opium is permissible or allowable only when the pain is unusually severe, or when given for the purpose of arresting peristalsis and thus the diffusion of the poison in cases of perforation, during the time necessary to prepare for operation.

The book is carefully written, deals with the most common and fatal of acute surgical diseases, and is well worthy of a place in every medical library.

G. E. A.

AN AMERICAN TEXT-BOOK OF DISEASES OF EYE, EAR, NOSE AND THROAT. Edited by G. E. DE SCHWEINITZ, A.M., M.D., and B. ALEX. RANDALL, A.M., M.D., Ph.D. W. B. Saunders, Philadelphia. Canadian Agents, J. A. Carveth & Co., Toronto. Price, \$7.00.

The section of this work devoted to diseases of the nose and throat is, in its entirety, most thorough and complete; each of the subjects being written by authors who are quite conversant with the subject under consideration and generally each article is quite abreast of the work of the present period.

In the chapter devoted to the anatomy of the upper air passages, including the histology and embryology, there are introduced several new anatomical terms which the reviewer thinks only add confusion, rather than light, to the already existing multiplicity of terms. In the chapter devoted to the methods of examination and diagnosis is included a brief description of Kirstein's method of autoscropy.

The subject of the therapeutics and prognosis is very fully considered and from which a great deal of good common sense advice may be gleaned, and it is indeed gratifying to learn that in these days of specialism, when so much is done locally with absolute disregard either of the patients general health or even the individual himself, to find such good advice as is generally given here upon this very subject and the timely advice as to conservative surgical measures.

In the treatment of acute affections of the nose, it is the reviewer's opinion, unfortunately, to find the use of solutions of cocaine advocated,

and although this use is cautiously advised, yet, abolition of the use of such a remedy is preferable, as so many are apt to make use of such in cases not suitable for it; thus some have quite innocently become the victims of such a habit.

On the subject of epistaxis, no mention is made of the use of powdered supra-renal capsule as a hæmostatic, which in the hands of many rhinologists has proved very serviceable. The chapter on chronic affections of the nose is very ably written and the operation (Ashe's) for correction of deviation of the septum, which give such admirable results, is fully described by the author. Diseases of the tonsils, palate and pharynx are fully described and the treatment very complete.

The subject of atrophic rhinitis, the *bête-noir* of all rhinologists, is well considered and good advice given regarding local and general treatment. A subject full of interest is that of diseases of the accessory cavities which is exhaustively dealt with and all the more recent advances as regards operative measures thoroughly described.

Under the subject of acute affections of the larynx and trachea the treatment of diphtheria is considered, and the writer advocates methods, which at this time have been relegated to the past by a majority of practitioners. Antitoxin is only mentioned, but not advised, as the author thinks it is yet only on its trial. This seems hardly credible in the present age, when overwhelming evidence has proved the great benefit which antitoxin gives in such cases and it is indeed gratifying to find the subject more thoroughly dealt with in another chapter, when the full advantages of the use of antitoxin are clearly brought out. Tuberculosis of the air-passages is very exhaustively and interestingly dealt with, and all the consideration thoroughly up to the views of the present day. The subject of neoplasms of the upper air passages is a scholarly article, and largely drawn upon from the writer's extensive experience. Neuroses of the upper air passages are very thoroughly written.

The work closes with a few words on the external operations on the lower air passages (tracheotomy, thyrotomy, pharyngotomy and extirpation and resection of the larynx). It is to be regretted that this interesting and important section should receive such scant consideration as to details of the several operations.

Taken altogether, the part of the work devoted to diseases of the nose and throat may be regarded only as a work of reference, and not one to be recommended in general for either practitioner or student, but for those seeking complete information on any of the diseases under consideration.

So far as the ophthalmological section of this work is concerned we have no hesitancy in giving it a place among the leading text-books on eye-surgery of to-day. It occupies a unique position between the exhaustive works of Græfe and Sceniesch and Oliver and Norris, and the numerous smaller hand-books of which we have at the present time so numerous examples. Nevertheless, the work in conjunction with the other sections may be recommended to the student for help in the acquirement of a knowledge of the special subjects of which it treats and the more so, as it strikes us as being an excellent treatise of reference for him later on in his career as a practitioner; on the other hand the specialist cannot fail to find much that is instructive and helpful in the experiences of the writers—24 in number—who represent the higher works in ophthalmology in America.

The arrangement of the work is excellent, and we do not begrudge the relatively large space which has been devoted to anatomy, physiology and examination methods, believing that a true treatise of these subjects is essential for the specialist and often useful to the practitioner.

All the clinical chapters are handled in a satisfactory manner, though it is evident in places that the confinement of the writer within fixed space-limits has rather hampered the treatment of his subjects.

The section on diseases of the conjunctiva is the most up to date text-book treatment of this advancing field we have yet seen and is equal to what we should expect from an expert bacteriologist like Dr. Weeks. Canadian ophthalmology is ably represented by Dr. Buller who contributes articles rich in clinical experience on diseases of the orbit and the operation treatment of orbital conditions.

In no part is the work more helpful than in the chapter on operations and in this field supplies a distinct want in English ophthalmological literature.

The work is beautifully printed and well illustrated and altogether is most creditable both to the editors and publishers.

Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, December 14th, 1900.

JAMES FERRIGO M.D., PRESIDENT, IN THE CHAIR.

DR. JAMES J. BENNY, of Montreal, was elected an ordinary member of the society and Dr. A. G. McAuley of the Royal Victoria Hospital, a temporary member.

Meningitis Complicating Pneumonia.

DR. J. R. SPIER read the report of a case of pneumonia complicated by meningitis. (See page 16 of the January number.)

THE PRESIDENT had never seen a case of pneumonia where meningitis had occurred as a complication, although he had been led to think of it as a possibility in some cases until prompt resolution of the disease had proved that his impressions were incorrect. He referred to a case, seen some years previously, of pneumonia of both bases, in which the predominant symptom was intense headache. There was no cough but high temperature of 104° and upwards for two or three days, and he felt sure that he had to do with a case of acute meningitis, as did also the consultant who was called in. One day the child spat up some rusty sputum, and an examination of the lungs showed inflammation of both bases. As the area of inflammation extended the intense headache disappeared, and the child made a good and rapid recovery. It was well to bear in mind that a great many of the cases of pneumonia in children, the so-called head symptoms were not due to meningitis.

A Case of Spinal Tumour.

DR. F. MORLEY FRY presented the report of this case. (See page 4 of the January number.)

Vesical Hæmorrhage during Labour.

DR. G. A. BROWN reported this case which he illustrated by a diagram. (See page 10 of the January number.)

DR. BROWN in reply to two questions by members as to whether there had been any varicose veins seen near the vulva and how he accounted for the hæmorrhage, said he had at the outset concluded that the fall might have had something to do with the hæmorrhage, but as the patient had complained of no symptoms relative to her bladder the day

after, he had come to the conclusion that there must have been some stretching of the bladder, and that probably some of the vessels had given way by the pressure of the gravid uterus. There had certainly been very great tension on the anterior vaginal wall, and the pain in the bladder had been described as of a tearing character. There had been no varicose veins visible around the vulva. The patient was anæmic.

Sudden Death in Infancy and Childhood.

DR. A. E. VIPOND read a paper with this title, which will be found at page 23 of the January number.

DR. BAZIN, in connection with this paper, related the following case:

The patient was a female child, eight months old, which had been brought up on Nestlé's Christie's, and other starchy foods. It was fed at 7 a.m., taking only a small quantity. Half an hour afterwards the child was taken with sharp intense pain, uttering piercing cries. When seen by me, the temperature was normal, the pulse very rapid, 140 to 160. The history, as far as I was able to elicit it, was that the child had been constipated and the night before had been given a teaspoonful of sweet oil, and, as this had had no effect, it was repeated in the early morning, also without result. There had been no vomiting.

The child was lying on the back drawing up the legs, at the same time uttering piercing cries and apparently was suffering from colic. There was no distension of abdomen, the walls being quite flaccid and a good examination could be made. The heart and lungs were apparently normal. It was stated that the child had cried a little during the last two days putting the hand up to the ear. On examination with the mirror, etc., nothing was found to explain any pain. A castor oil enema was given which was retained and a spice poultice was applied over the abdomen. At 12 o'clock the condition was the same, the child crying and getting no rest; a small quantity of the oil came away but no fæces. As nothing more could be made out from the examination and the condition remained the same, I ordered a $\frac{1}{4}$ grain tablet of morphia in, I think, 12 teaspoonfuls of water, one teaspoonful to be given every two hours till pain was relieved. In consultation with Dr. Blackader, I saw the child again in the evening, at that time temperature was elevated, 101°, the child greatly exhausted and pulse even more rapid and feeble; no further symptoms. The opiate had not relieved the child, the parents had continued it till I should think it had taken about $\frac{1}{4}$ th grain, except that it was a little listless between the attacks of crying, it showed no effects of the morphia. Breathing was now shallow and slightly more rapid, in the left apex was a fine crepitation with every breath but not at all distinct. Another enema of oil given and retained but without

effect. Next morning, without the development of any more symptoms and with the continuance of this temperature, the child suddenly died about 11 a.m. That evening with Dr. McTaggart's assistance, I held a post mortem, and we examined every part.

The brain was normal, firm consistence ; meninges pale, not at all congested ; both ears perfectly normal ; cribriform plate not at all affected, no meningitis of any nature. Minute section of brain failed to reveal anything abnormal. Lungs beautifully pink especially at this point where crepitation was heard ; pericardium and heart normal ; bladder full of pale limpid urine, no albumin, liver and spleen not enlarged ; pancreas normal ; kidneys and suprarenals apparently normal. The mucosa of the stomach was normal, and the intestines perfectly empty except for a very small quantity of yellowish fluid, and the oil in the rectum. In the small intestine from about 12 inches below the duodenum there were lengths of intestine which were of much smaller calibre than the rest of the intestines. The contents of the bowel, however, could be forced through and there was no mechanical obstruction and nothing at all in the way of congestion. The explanation of the intense pain and death could not be found at all. Whether it was a spasm of the muscular wall of the intestine, causing a certain amount of colic which resulted in death, we could not say. The amount of morphia given would have relieved the spasm. If this were an ante-mortem spasm it remained in spite of the morphia.

The reader of the paper mentioned that in diphtheria fatal paralysis followed in mild cases as well as in severe ones. It has been my experience that this does not occur unless the case has advanced for some time without treatment. I have notes of a case, a nurse, who had the first dose of antitoxine within 4 hours after the appearance of a small point of membrane on one tonsil, another full dose was given in 12 hours and a most malignant diphtheria developed with paralysis 3 weeks later, affecting the four extremities, and lasting a considerable time, she recovered completely, however. I think the neuritis is a sign of the absorption of a considerable amount of toxine from the diphtheritic lesion.

DR. G. A. BROWN had recalled to mind by Dr. Bazin's case, a case of sudden death in a child by intussusception. Where invagination took place high up in the bowel, death was very rapid. In Dr. Bazin's case there might have been this invagination, but on moving the bowel to examine it the invaginated portion might have dropped out. The speaker had seen two cases of sudden death in pericarditis in patients who appeared to be doing well. Sudden death in diphtheria, in his experience, occurred either on the fifth or sixth day, when the mem-

branes were disappearing, or a couple of weeks later. In the epidemic of scarlet fever which occurred eight years ago, he had seen a case die in three hours, and before the rash had appeared, from hyperpyrexia.

DR. J. R. SPIER agreed with Dr. Bazin that sudden death in diphtheria usually occurred in those cases that were neglected for a few days after the onset of the disease, and was due to toxic absorption. He had seen several cases of scarlet fever die within the first twenty-four hours all, he thought, from hyperpyrexia.

DR. ABBOTT asked whether ante-mortem intussusception could be the cause of death and not give rise to distinct symptoms in the intestines.

THE PRESIDENT referred to deaths from overlying of infants, and stated that there was a law in Germany that no child under two years of age was allowed to sleep with its parents. The first case he had seen was a healthy child of about five months, in another case the parents had gone to visit friends, and had taken the baby with them, wrapped up to protect it from the cold. When they reached their destination the baby was dead, smothered.

With regard to Dr. Bazin's case, he hardly thought it was invagination or intussusception, as there would have been some evidence, as Dr. Abbott remarked, in the intestine. He thought kinking of the bowels a more likely explanation. It had been noted by many observers that the pain in this condition, when the kink was high up, was much more severe than from simple invagination. It had also been noted that a slight kink of the bowel causing obstruction and death, might leave very little evidence of its presence post-mortem. A point Dr. Vipond had not touched upon was the occurrence of convulsions in scarlet fever after the rash was out. He had seen three cases of this kind, all fatal, and thought this was always fatal.

DR. VIPOND said that he thought that paralysis was just as likely to follow mild cases of diphtheria as severe ones. The form of sudden death occurring in pneumonia was when a child doing well, perhaps, sits up suddenly contrary to orders, and drops dead.

DR. BAZIN, discussing the points raised with regard to the case he had related, said that the bowel had been most carefully examined, and showed an alternate full and empty condition from the duodenum right down to the ileocaecal valve. Then there had been no vomiting, and there were no signs even of congestion in the bowel. He did not think that intussusception, invagination, or volvulus could have been present.

DR. F. R. ENGLAND said that Dr. Vipond in his paper had gone over pretty much all the causes of sudden death in children, but the speaker did not think that death occurring somewhat unexpectedly from pneumonia, etc., should be classed as sudden, when there was a long period of

previous illness. An infant two days old, under his care, recently had passed from one convulsion into another for about twenty-four hours before it finally died; showing that convulsions do not, as a rule, cause sudden death. Cerebral hæmorrhage had been looked upon as the cause of death in this case. There was a family history of hæmophilia. He had only seen two or three cases of laryngismus stridulus. The rarity of the condition in this country was probably due to the rarity of rachitis. He could call to mind several cases of death from food being drawn into the larynx, and this was a possible explanation of the case of sudden death reported by Dr. Vipond as occurring in a child with enlarged thymus, death having occurred while the child was eating.

OTTAWA MEDICAL SOCIETY.

This Society met at St. Luke's Hospital on Friday evening, Dec. 14th, 1900, Dr. J. L. Chabot, president, in the chair.

Cataract with Delayed Maturation.

DR. HORSEY showed a case of double cataract with delayed maturation in a woman of 85.—To hasten ripening he had done an iridectomy on the right eye with massage of the lens, and later, a needling. A month ago he had extracted the lens with good result. He proposed to deal with the left eye also if the patient desired it.

Treatment of Acute Pneumonia.

DR. DOWLING read a paper with this title, an account of the results of several years experience of the disease in a large lumbering district. The value of bleeding in the early stages of certain cases was alluded to. He was in the habit of using acetate of ammonia with sweet spirits of nitre in the early stages and cold sponges for the high temperature. For pain, morphine was permissible only at the outset. For restlessness and sleeplessness he recommended the bromides and ice to the head. The careful watching of the pulse was insisted on and reference made to the value of ammonia, strychnine and digitalis in failing heart. Complications and their treatment were mentioned, and several cases of sudden death in young and robust people, some of whom had had but moderately severe attacks, reported.

DR. SMALL referred to the value of a good dose of calomel at the onset of the disease, and to the great importance of an airy room and careful general management throughout the illness. He said that oxygen very often might save life.

DR. COUSENS related a case in a child of 12 with hyperpyrexia, 107° F., near the crisis. It was treated with ice water packs for ten hours without influence upon the temperature. He then removed the pack and used stimulants and hot blankets. The crisis came the next morning.

DR. KIDD referred to a fatal case probably owing to the use of morphine late in the illness.

DR. GORRELL instanced two experiences of several cases of the disease following each other in the same house. He recommended antikamnia and strapping the side for severe pleuritic pain.

DR. J. A. GRANT spoke of a case of pneumonia following grippe in a pregnant woman in whom alarming tachycardia came on. Opium was

used for this with great benefit. The illness came to an end and the child was carried to term.

DR. PREVOST alluded to the progress of treatment during the last thirty years, the knowledge of the course of the fever through Wunderlich's thermometer, the pioneer work of Hughes Bennett in abolishing bleeding as a routine treatment, reduced the mortality from 27 to 10 per cent., and further by using stimulating treatment from 10 to 3 per cent. Dr. Prevost had read a paper on his return from Europe in 1875 in which he advocated the treatment of pneumonia by alcohol. This had given rise to much discussion.

DR. CORMACK recommended Dover's powder as the most valuable form in which to give opium in pneumonia.

DR. GIBSON spoke of the value of paraldehyde as a hyponotic in the disease.

THE PRESIDENT spoke of the necessity of treating each case as it rose as a separate thing by itself according to the indications present.

The Society met in Water Street Hospital on Friday, December 28, 1900, Dr. J. L. Chabot, President, in the chair.

Appendicitis with Unusual Seat of Pain.

DR. PREVOST showed an appendix removed that day, much thickened and with two perforations. On admission to St. Luke's Hospital the day before, the patient had had a temperature of 102° F.; pulse of 120. On the right side there was no pain or tenderness on pressure, but severe pain was complained of on the left side. Dulness and rigidity were present over the lower part of the abdomen on both sides. The first attack had been three years before, with pain in the right side and vomiting; one slight attack had taken place before the present attack. Pretty diffuse peritonitis was found over the lower part of the abdomen and the pelvis was full of seropus.

Albuminuria of Pregnancy.

DR. J. A. GRANT, JR., reported a case of albuminuria of pregnancy in a healthy young primipara. Two grammes of albumin per litre with hyaline and granular casts were first discovered three weeks before confinement. No uræmic symptoms followed and the case did well.

Injury to the Spinal Cord.

DR. DEWAR showed a youth who two months before had been injured in the back by a falling tree. A week after the accident he had been brought to the hospital suffering from great pain and stiffness of the back, and weakness of the legs. Sensation was not impaired. There was retention of urine, 126 ounces being drawn off on admission.

Power had returned to some extent but spastic symptoms were marked, pointing to an injury to the lateral columns of the cord.

Tetany; Report of Two Cases.

DR. BRADLEY read a paper on tetany, two cases of which had recently come under his notice. One was a woman of 30 with marked gastrectasis and ptosis of the abdominal viscera. When first seen there had been symmetrical and painful contractions of the hands, forearms, and feet; no loss of consciousness; pulse and temperature normal. These lasted one hour and returned in three days with prodromata in the form of occipital headache, numbness in hands and feet, and burning sensation in the bones. After the attack, weakness and staggering gait remained for some time. In two weeks the spasm returned with prostration and hallucinations. Six months later there was another recurrence. The case was likely to do badly.

The second case was in a rickety child of 4 years, which had had a first attack three years before. The present attack came on after a gastro-enteritis of three weeks duration. Tetany continued until three days before death. The larynx was not affected. Dr. Bradley then gave an exhaustive account of the disease.

Cases of Nervous Disease.

DR. MACCARTHY read notes of certain cases of disease of the nervous system.

(1) A case of syringomyelia in a woman of 50, in which the symptoms came on two years before with weakness of the left hand, numbness, tingling and wasting. The same state supervened in the right hand and arm. The claw-like hand, wasted deltoids, projecting scapula, and absence of temperature sense, were noted. The diagnosis was discussed and the pathology demonstrated by microscopic sections of the cord from a case.

(2) A case of syphilis of the brain and cord in a man of 42 with a history of three attacks of gonorrhoea, no chancres, but frequent stomatitis and ulcers on the legs. Two years before he began to have severe headache of the vertex and found his memory and mental faculties failing. Twitching of the right side of the face, ptosis of the right eyelid, girdle pain and difficulty in urinating came on with, finally, incontinence of feces. Under iodide of potash, 50 grains thrice daily, he had greatly improved.

(3) A case of undoubted locomotor ataxia with Romberg's and Argyll-Robertson symptoms, lightning pains, loss of knee-jerks, ataxia, and loss of sexual power. Under potassium iodide for a year he had not improved. Arsenic was given in increasing doses until toxic symptoms occurred, and then strychnine in doses of 1/30 of a grain thrice daily,

hypodermically. He can now walk in the dark and stand a few seconds with his eyes shut. The pains are gone and sexual power is returning. The knee-jerks and pupil phenomena were unchanged.

After some discussion, Drs. Bradley and MacCarthy replied.

The Society met in St. Luke's Hospital on Friday, January 11, 1901, Dr. Dewar in the chair.

Laminectomy.

DR. J. F. KIDD reported a case of laminectomy in a patient who sustained fracture dislocation of the lumbar spine through 5000 feet of lumber falling on him. The laminae of the first lumbar vertebra were found pressing on the cord and, together with those of the twelfth dorsal, were removed. On the second day the patient could pass urine voluntarily and the legs began to recover tone. In five months he was able to get out of bed. Improvement still continues.

Tracheotomy.

DR. J. D. COURTENAY reported a case of tracheotomy for obstruction, due as it turned out to a glandular abscess. The glands were removed. No tubercle bacilli could be found in the sputum. A week after the operation a piece of calcified cartilage was coughed up. The diagnosis was not clear.

Recurrent Otitis Media.

DR. COURTENAY also showed a case of recurrent otitis media following measles, and resulting in cerebral complications with paralysis of the third nerve and semicoma with spasm. The antrum was found full of pus and a sinus led to the middle fossa. Some denuded bone and much broken down tissue were removed. Ptosis disappeared the same night but the child died.

In this family seven had had measles, and of these, two who had had adenoids removed, did not suffer from otitis media.

Pathological Specimens.

DR. KIDD showed a faecal concretion with the appendix of a patient aged fifteen years from which they had been removed. Pain was complained of at the umbilicus for six weeks before it became localised at McBurney's point. From another case of appendicitis a phosphatic coprolith was shown.

A third specimen was that of a loose body in the knee joint which proved to be a portion of the internal articular cartilage of the femur. There was a history of injury twelve years before.

The Society met in the Water Street Hospital on January 25, 1901, Dr. J. L. Cabot, President, in the chair.

Ciliary Spasm.

DR. HORSEY reported two cases of ciliary spasm in young neurotic girls twelve years of age. They both did well under homatropine. The possibility of damage to such cases through ignorantly prescribing glasses was pointed out.

Hæmoglobinuria.

DR. GIBSON reported a case of hæmoglobinuria in a young woman suffering from la grippe with pneumonia of part of the right lung. The condition was not due to drugs as it was present from the onset of the fever and before remedies had been used. She had made a good recovery from the pneumonia and the urine was almost normal again a fortnight from the beginning of the illness.

Hemiplegia.

DR. GIBSON also showed a case of embolic hemiplegia in a young woman of 22 years with a history of severe rheumatic fever at the age of 10, diphtheria at the age of 12, and recently palpitation and dyspnoea. There was a presystolic murmur. The right leg, arm, face, and speech were all affected suddenly without loss of consciousness or convulsions. Power returned quickly to the leg and gradually to the arm and face. Loss of memory for words was absolute for a few days and now, two months from the onset, speech power was very limited. She can only speak or write very familiar words, but can copy anything written down or say over words spoken to her.

Foreign Body in the Abdominal Cavity.

DR. CHABOT showed a penholder removed from the abdomen of a female patient who had passed it into the bladder to relieve pruritis and frequency of micturition. She was suffering on admission from signs of general peritonitis. Supra-pubic cystotomy was first performed but nothing was found. Laparotomy discovered the foreign body adherent to the intestines and much greenish yellow fluid in the abdomen. Recovery followed under drainage.

Treatment of Spinal Deformities by Exercise and Postures.

DR. R. TAIT MCKENZIE, of Montreal, read a paper with this title. He referred to the sources of spinal deformity through faulty posture, etc., in growing children and traced the development of the vicious changes ensuing. Dr. McKenzie then illustrated these by means of diagrams, and showed upon the living model examples of movements and postures resulting in cure or improvement of the deformity. The demonstration was much enjoyed by all present. A hearty vote of thanks was awarded to Dr. McKenzie on the motion of Dr. Cousens,

Correspondence.

CALEDONIA SPRINGS AS A MEDICAL APPOINTMENT.

To the Editors of the MONTREAL MEDICAL JOURNAL.

DEAR SIRS,

To the Medical Practitioner who appreciates the value of an exceptionally fine opportunity to see and study the course of that rebellious and obstreperous malady, rheumatism, and incidentally to obtain about as much pleasure as is afforded at the average summer resort, there is no place that presents a better opportunity than Caledonia Springs—that well known Canadian Spa situate midway between Montreal and Ottawa on the Canadian Pacific Railway's short line.

The curative effect of the Magi Caledonia Waters and Baths is attested by the fact that after a century of quiet and unostentatious existence they not only continue to be as popular as ever but are increasingly so, notwithstanding the many new counter attractions that have grown up; thousands of grateful sufferers, from their own experience of the relief here obtained, bear testimony to the virtues of this time honored institution.

The waters, clear and sparkling, coming from depths of from 150 to 170 ft. are of an even temperature at all seasons of the year and of a constant abundant flow. The several springs comprise saline of different degrees of strength, white sulphur and gaseous waters, alkaline, and all decidedly palatable. Besides their cleansing and tonic effect on the stomach, liver, kidneys and bowels, the waters have an alterative effect on the blood in rheumatism, gout and many of the intractable forms of skin disease; the effect of the hot sulphur baths on rheumatic pains is quite remarkable.

The waters are a veritable boon to the dyspeptic and to the man of sedentary habits or with a tendency to obesity, a fact that is duly appreciated and taken advantage of by many, especially the Clergy. In fact they are truly Nature's cure, but only when guided, directed and applied intelligently.

I have also discovered that patients afflicted with that insufferable disease, hay fever, experience immediate relief, though whether from the change of climate or atmosphere or from any special effect of the Waters, I have not been able to determine, possibly both.

Patients require practically no medicine while undergoing the treatment, though they require constant medical supervision; while the Waters may be used with some degree of impunity, no one who comes to the Springs for treatment can expect to get the greatest benefit otherwise than under the direction and advice of the Resident Physician. The Physician himself should on coming to the Springs, dispossess his mind of the idea that he is merely on a holiday—the importance of his responsibility and trust cannot be over estimated; and while demonstrating the facility with which alcohol in all its forms can be dispensed with here, he should observe the strictest abstinence himself.

The management should pass the guests into the hands of the physician on arrival as his special charge, after which nothing should be done in the way of treatment by the visitors on their own account; a physical examination should be made in each case as to the condition of the heart, lungs, kidneys, personal and family history, etc. In all cases where the slightest symptoms of valvular disease exist or even functional derangement, with or without a tendency to syncope, the case should be watched and examination of the heart made before and after the bath, and the temperature and duration of the bath regulated accordingly. In all cases over forty years of age, the urine should be examined more or less frequently as to the quantity of urea and uric acid excreted and directions given as to diet, ever on the alert for Bright's disease or diabetes. Every case should be an object for daily observation and study and an accurate and minute record of each one kept. This would afford, in time, material for a valuable contribution to the literature of the subject and tend to the general progress of medical science.

In fulfilling his duties, the time of the physician will be fairly well occupied and he will be amply repaid, not only by the satisfaction of duties well and faithfully performed, but by the gratitude of his patients and the fees satisfactorily proportionate to the services rendered.

W. F. Shaw, M.D.,

Resident Physician, 1900.

T H E

Montreal Medical Journal.

A Monthly Record of the Progress of Medical and Surgical Science.

EDITED BY

THOS. G. RODDICK,
A. D. BLACKADER,
GEO. E. ARMSTRONG,
WILLIAM GARDNER,
F. G. FINLEY,

JAMES STEWART,
J. GEORGE ADAMI,
G. GORDON CAMPBELL,
FRANK BULLER,
H. A. LAFLEUR,

WITH THE COLLABORATION OF

WYATT JOHNSTON.
C. F. MARTIN,
J. M. ELDER,
D. J. EVANS,
A. E. GARROW.

T. J. W. BURGESS,
J. W. STIRLING,
F. A. L. LOCKHART,
W. F. HAMILTON,
E. J. SEMPLE,

H. S. BIRKETT,
J. C. WEBSTER,
KENNETH CAMERON,
C. W. WILSON.
A. G. NICHOLLS.

VOL. XXX.

FEBRUARY, 1901.

No. 2.

THE PRIVATE WARDS QUESTION.

At a recent meeting of the Montreal Medico-Chirurgical Society, a resolution was introduced by one of the members affirming the principle that the privilege of using the Montreal General Hospital private wards should not be restricted as at present to the attending staff of the hospital but should be granted to all physicians in good standing in the city. There appears to be an extraordinary misconception on the part of the mover of this resolution and his backers as to the real position of the medical profession in regard to public hospitals and their management. Let us consider this question in the light of plain facts and common sense.

The public hospitals are, so far as we know, legally chartered institutions, having each its board of governors and of management, who are bound by the most sacred obligations of public morality, to expend the revenues of the hospital, no matter how obtained, in a manner most conducive to the attainment of the objects for which the institution was founded. The board of governors elect from time to time their board of management, and they also elect or appoint the attending medical staff from among such applicants as seem to them best suited for the position. Their right to do this is beyond question. These

then constitute the medical board of the hospital. The board of management and the medical board, then, control and are responsible to the board of governors for the proper management of the hospital. The experience of a century has shown this to be a wise and beneficent arrangement.

The management of a hospital so constituted cannot safely be subjected to outside interference any more than could the management of a bank or insurance company, nor has the outside medical profession any more right to come in and do work in the institution than they have to interfere in the management of a bank or other chartered organization.

The establishment of private wards in a public hospital may or may not be a proper arrangement. If the principle is wrong it cannot be made right by throwing them open to all members of the medical profession, an act which might seriously hamper the hospital management. At present they are simply a convenience to the hospital and entirely under its control. No person entering hospital as a private patient goes there except by his own free will, and knowing that he must conform to the hospital regulations and be placed under the care of some member of the medical staff. If he or his medical or lay advisors do not like this arrangement, they are under no obligation to accept it. A person well enough off to pay for a private ward can always get good accommodation elsewhere by paying for it. When a hospital establishes private wards for the convenience of its attending staff, with the additional object of making money for its own use, just as a boarding house or private hospital might do, this affords no ground whatever for those who are wholly unconnected with the hospital to claim the right of participating in the arrangement. In this particular the hospital is not a charity and is under no obligation to those who contribute towards sustaining its functions as a charity. It would thus appear that medical men not connected with, or actually engaged in carrying on the work of, the hospital, have not the vestige of a claim to participate in the benefits of these private wards.

If a patient takes a private ward he does so either with or without the advice and consent of his usual medical attendant, who knows that for the time he hands over the patient to the hospital medical attendant in the former case, and in the latter he can have no possible say in the matter of all. Where then is the hardship? As a matter of fact the private wards in both our large hospitals are mostly occupied by people coming from a distance, and they are nearly always filled and all in use. Often there are patients on the waiting list. Let us suppose the outsiders were given the privilege sought by this resolution, how many would be likely to get accommodation for their patients in the hospital private

wards, when the ordinary rules of precedence and common courtesy would demand that the attending staff have the first privilege? The private wards of the Montreal General Hospital are about ten or twelve in number, the members of the attending medical staff who give their services gratuitously to the hospital are about twenty; for this they have, then, the privilege of half a private ward each during their time of service. Would it not be an act inexpressibly mean and contemptible to deprive them of this one poor little recognition of their services to the institution and to the public.

It would be interesting to know the real motives of those who pretend so much zeal for the welfare of the public, when there is apparently so little to be gained by the success of their schemes. Their efforts to influence public opinion through the sensational columns of the daily press are, to say the least, undignified and unworthy of a profession supposed to occupy a position above the level of ward politicians. A fair sample of the staff supplied to the public by one of these penny-a-liners is to be seen in the *Daily Herald* of March 1st. His fervent imagination pictures a respectable citizen found unconscious in the street and hurried by the ubiquitous ambulance to the hospital, where he regains consciousness and cries aloud for his own doctor. His prayers are unheeded and he is forced to accept the aid of some monopolist in whom he has no confidence, though he "*pays amply for the privilege of a private ward.*" In the very next paragraph comes the astonishing statement that a private hospital could not compete with the private wards of the Montreal General or Royal-Victoria Hospitals because they would be obliged to charge six or seven dollars for the accommodation these institutions furnish for two or three dollars per diem!! Which statement is correct? As a matter of fact, the hypothetical patient would, on recovering consciousness, thank his stars he had fallen into such good hands, and his convalescence would be cheered by the reflection that he was saving four or five dollars every day of his detention.

One of the worst features of this resolution is that it asks the society as a whole to formulate a request to the authorities in control of the Montreal General Hospital, which has for its object the benefit, real or imaginary, of certain members of the society, to the detriment of other members of the same. There could be no more certain way of creating discord in the society at a time when, as we all know, harmony and unanimity are essential to its existence.

Supposing the resolution were adopted and forwarded to the hospital authorities, what would be the position of the medical board? It would be this. Most of its members are undoubtedly opposed to extending the privilege of using the private wards to the profession at large, but

in maintaining their objection, before the governors of the hospital, these latter could say:—You are members of the Medico-Chirurgical Society, are you not? Yes! Your Society has adopted a resolution approving this change? Yes. Then you are here contesting a measure which you presumably favoured in your medical society! To be consistent these members of the Medico-Chirurgical Society would have no other course open to them than to resign from the society. Is it then the intention to drive these men out of the society? If so, one does not need to be the son of a prophet to tell how this thing will end.

We might suggest, however, a less objectionable way of attaining the pretended object sought by the framers of this resolution than by forcing such a measure against the will of so many members of the society. If there be such an urgent need of private ward accommodation for the general profession, as supporters of this resolution seem to believe, there should be no difficulty in establishing and maintaining a good sized hospital of this kind as a private enterprise, and it is reasonably certain that many members of the society connected with the hospitals would lend their aid in supporting such an institution.

NEW BOOKS, ETC., RECEIVED AND NOTED.

E. H. Colcgrove, Chicago. 1900.

Obstetric Clinic. By Denslow Lewis, Ph.C., M.D., Professor of Gynæcology in the Chicago Polyclinic, etc.

W. B. Saunders & Company, Philadelphia and New York.

A Text-Book of Histology, including Microscopic Technique. By A. A. Bühn, M.D., and M. von Davidhoff, M.D. Edited by G. Carl. Huber, M.D. Authorised Translation from the Second Revised German Edition. By Herbert H. Cushing, M.D. 1900.

An American Text-Book of Physiology. Edited by William H. Howell, Ph.D., M.D. Second Edition, Revised. Vol. II. 1901.

J. B. Lippincott, Philadelphia.

Appendicitis and its Surgical Treatment. By Herman Mynter, M.D. 1900.

F. A. Davis Company, Philadelphia, New York and Chicago.

Studies in the Psychology of Sex. By Havelock Ellis. 1901.

A Text-Book of Practical Obstetrics. By Robert H. Grandin, M.D., with the collaboration of George W. Jarman, M.D. Third Edition, Revised and Enlarged. 1900.

A Practical Treatise on Materia Medica and Therapeutics. By John V. Shoemaker, M.D., LL.D. Fifth Edition, thoroughly Revised. 1900.

Lea Brothers & Co., Philadelphia.

Progressive Medicine, Volume Q IV. 1900.

A Manual of Materia Medica and Pharmacology. By David M. R. Culbreth, Ph.G., M.D. Second Edition, Enlarged and thoroughly Revised. 1900.

A System of Practical Therapeutics. Edited by Hobart Amory Hare, M.D. Second Edition, Revised and largely Rewritten. Vol. I. 1901.