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CASES OF SUB-PHRENIC ABSCESS.*

BY WILLIAM OSLER, M.D.,

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THE following cases illustrate some of the forms of abscess beneath the diaphragm. Three contained air and simulated pyo-pneumothorax; in two, the condition was strikingly similar to empyema. The pus may be either in the cavity of the lesser peritoneum, which is commonly the case when perforation of the posterior wall of the stomach, or of the duodenum, occurs, and the abscess is then chiefly beneath the left half of the diaphragm; or it may be between the right lobe of the liver and the diaphragm, in which case the abscess is really within the general peritoneum, though usually shut off. The abscess may come from perforation of the ascending colon, or of the appendix, or from the liver itself. In the air-containing abscesses the most exquisite simulation of pneumothorax may occur on either side, as in the case which first called my attention to this condition, reported by Dr. Gardner,† of Montreal, in which the signs of

* Read before the Association of American Physicians, May, 1893.

† *Canada Medical and Surgical Journal*, vol. ix.

pneumothorax extended as high as the third right interspace, and in which, *post mortem*, the diaphragm was found at the level of the third interspace.

CASE II. is of interest from the development of an air-containing abscess, in consequence of the perforation of the colon and communication with a perinephritic abscess on the right side. It had perforated the diaphragm and produced a pleurisy at the right base.

In CASE III., on the other hand, there was, following injury to the kidney, an empyema which had perforated into the lung, and the sub-phrenic abscess received its air supply from this source, which is somewhat unusual.

The two cases of simple sub-phrenic abscess are of doubtful etiology, and are of interest chiefly from the remarkable simulation of empyema and the good results which followed operation.

CASE I. is one of the few instances in which the diagnosis of pyopneumothorax sub-phrenicus was made during life, and in which recovery followed operation.

CASE. I. *History of dysentery; symptoms of abscess of liver: development of a large area of tympanitic resonance in the right lower axillary region; diagnosis of pro-pneumothorax sub-phrenicus; operation; recovery.* John S., aged thirty-six, was admitted to the Johns Hopkins Hospital on January 16th, 1890, complaining of fever, diarrhea, and pain in the abdomen. There was nothing of moment in his family history. He had typhoid fever when twelve years of age. He had gonorrhœa, but not syphilis. He has been a very hard drinker for very many years. In September, 1888, he had dysentery; not a very severe attack, as he was not laid up in bed; but the stools were frequent, and he passed blood and mucus. He has not been entirely free from intestinal trouble since, but he has been able to keep at work with but few interruptions. Latterly he has lost flesh, and within the past six weeks has become very weak and feverish. On several occasions the feet have swollen. He has had no chills; has never been jaundiced, and has never had severe pain in the region of the liver. He stopped work two weeks ago.

Condition on admission. Emaciated; weight 116 pounds; anemic, muscles flabby; skin hot, dry, and sallow; conjunctivæ white; tongue pale, indented, and with numerous aphthous sores on dorsum and sides. Pulse 96; respiration 30; temperature 101°. Lungs are normal, with the exception of a few dry crepitant râles, probably pleuritic, at the right base.

Cardiac dullness begins at the fourth rib. There is a soft systolic apex murmur. The second sound is reduplicated at base.

Liver. No prominence in hepatic region. No tenderness on pressure.

Dullness begins in nipple line at fifth interspace and extends about 4 cm. below the costal margin, 15 cm. in vertical extent. The edge cannot be distinctly made out. The surface beneath the costal margin is not rough, nor tender. In the median line, dullness extends 3 cm. below the tip of ensiform cartilage.

Spleen not palpable. Area of dullness not increased.

The abdomen is symmetrical, a little full, tympanitic, nowhere tender. Examination of blood negative.

Urine. Specific gravity 1019; reaction acid. Trace of albumin. No tube casts.

The stools were frequent, liquid, and contained much mucus.

From the history of the case and from the appearance of the man abscess of the liver was suspected.

For the first ten days in the hospital the patient seemed better. The number of stools in the day reduced. He had no chills. On several occasions he sweated heavily at night. The temperature range was from 98° to 102°.

On the 24th it was noted that "there is distinct tenderness in the right renal region, best elicited on bimanual palpation. No special fullness. No dullness in the right flank. Liver dullness is not increased in the lateral region; in the posterior axillary line it begins at the eighth rib and extends to the costal margin."

January 8th. The tenderness on the right side has increased, and it is specially noticeable at the extremity of the tenth rib when pressure is made upward. There is here a distinct sense of fullness and resistance. To-day there was noticed on percussion a remarkably tympanitic percussion note between the ninth and eleventh ribs on the right side. An exploratory puncture, in the tenth interspace, posterior axillary line, obtained a small amount of curdy, thick pus, which contained altered pus cells, and a few fat crystals. The following note was dictated:

In the right flank the fingers can be passed well toward the kidney with, perhaps, slight sense of increased resistance. With bimanual palpation there is certainly great resistance below costal margin, and especially below points of the tenth and eleventh ribs; here there is also marked tenderness. From behind there is distinct fullness in the infra-scapular region on the right side, and intercostal spaces are here not so well marked. There is no distinct tenderness in right lumbar space beyond. Liver dullness in mid-sternal line, extends three fingers' breadth (5 cm.); in nipple line, from lower margin of the fifth to costal border. In mid-axillary line there is a pulmonary note to lower margin of sixth. There is dullness for a finger's breadth on the seventh rib, and below, the most extreme metallic tympany, extending from exactly the seventh interspace to upper margin of eleventh,

where it passes on insensibly into bowel tympany. There does appear, however, to be a slightly dull note before bowel tympany is reached. Anteriorly, the metallic tympany extends to within 4 cm. of nipple line. Behind, it extends to posterior axillary line. When turned on side, percussion in axillary line is distinctly flatter, and there is movable dullness. Altogether, tympanitic area occupies position of seventh to tenth interspace in a line drawn at the level of ensiform cartilage. A diagnosis of a sub-phrenic air-containing abscess was made, and the patient was transferred to the surgical department.

On the 29th Dr. Halsted resected about an inch and a half of the tenth rib in the mid-axillary line, and removed about a litre of a thick, grumous pus, which had an acid reaction, and very distinct odor of vomit. The patient rallied well from the operation.

February 2nd. The last few days the patient has had a slight elevation of temperature. His general condition, however, is good. The tympanitic note is even more intense than before the operation, and it is almost amphoric in character. It extends anteriorly as far as the nipple line, where it is only 10 cm. from the nipple line. The area is triangular in shape, the apex being toward the sternum. It is 15 cm. in transverse diameter. The liver seems pushed far over into the left hypochondrium.

10th. Since the last note the patient's condition has rapidly improved. The temperature has been but slightly above normal, the sweats have stopped, the diarrhea checked, and his appetite has become very good. The wound is dressed every day and the cavity irrigated. Dr. Halstead is now able to pass his finger far down into the flank, reaching quite to the level of the crest of the ilium. A flat tympany extends in the mid-axillary line from the lower margin of the eighth to the iliac crest.

14th. General condition remains excellent. The cavity has reduced very considerably and the discharge has lessened.

The improvement continued, and the patient was discharged well.

CASE II. *Tuberculous pyelo-nephritis; tuberculous colitis; perforation at splenic flexure of colon, with the formation of a perinephritic air-containing abscess; prominent tumor over tenth, eleventh, and twelfth ribs behind; incision and drainage; pulmonary tuberculosis; death; autopsy.* In October, 1887, I saw, with Dr. R. H. Harte, of Philadelphia, a case which illustrates a somewhat unusual form of this condition. He was a young man, aged about thirty, who, as early as 1880, had passed blood and clots with the urine, and was sent to California under the impression that he had Bright's disease. He lived a pretty hard life, and had been treated for stricture of the urethra and irritable bladder. When Dr. Harte saw him in July he had lost much flesh, was very pale, but was still fairly muscular. The urine contained pus and blood; the bladder was very irritable, and micturition was very frequent.

Early in September he had chills, which were supposed to be malarial with these the fever was high, and he sweated heavily. In the middle of October diarrhea of an obstinate character set in. When I saw him he was pale, somewhat emaciated, with an irregular fever and occasional chills, which were evidently of a septic nature. He had profuse diarrhea, and the stools, at times, contained small quantities of pus. The urine was very purulent. On examination of the abdomen nothing of special note was observed. Behind, on the left side, beneath the skin over tenth, eleventh, and twelfth ribs, there was a prominent tumor, somewhat hemispherical in outline, and nearly equal in extent to the palm of the hand. It was soft, not specially tender, and, on percussion, when he was in an erect posture or on his belly, gave a most remarkable tympanitic note. On the other hand, when he was on his left side or back the note was dull. On coughing there was a distinct impulse in the tumor. Anteriorly, there was nothing to be felt on deep pressure, but there was evident thickening and pain in the left lumbar region. It was thought at first that this projection might possibly be hernial, though in an unlikely position. Aspiration, however, revealed the presence of pus, and it was thought to be perinephritic abscess which had communication with the bowel. On November 1st he was taken to the University Hospital, and Dr. Agnew laid open freely the abscess. There was evidently communication with the bowel, as fig-seeds were, on several occasions, noticed in the dressing. Gradual signs of involvement of the left lung came on, and he sank and died about January 1st.

The *post mortem* showed extensive old tuberculous disease of the left kidney. An abscess cavity, the size of a cocoanut, surrounded it and communicated with the colon at the splenic flexure through an opening which would admit a lead pencil. The abscess had perforated the diaphragm and produced pleurisy at the right base. There was extensive and progressing tubercular disease of the right lung. The right kidney presented a number of small tuberculous abscesses. The bladder was thickened and contracted, and presented tuberculous ulcers. There was an abscess of the prostate which opened into the bladder. The ureters were thickened and ulcerated.

The condition has been met with following injury, as in the following case, which was transferred to my wards from the surgical side at the University Hospital, Philadelphia.

CASE III. *Injury to arm and back ; hematuria ; amputation of arm ; erysipelas ; three weeks after accident signs of inflammation at the left base ; development of a pyo-pneumothorax ; expectoration of fetid pus ; septic fever ; asthenia ; death ; autopsy.*

William S., aged twenty-four years, was admitted to the surgical wards

of the University Hospital on November 13th, 1885, having fallen under the wheels of an engine. The left arm was crushed, and he had a deep scalp wound. The arm was amputated at the upper third. For a week he had hematuria, and he complained of a pain in his left side. Subsequently erysipelas developed in both arm and face. About three weeks after admission signs of inflammation appeared in the left infra-scapular region, indicated by a rise of temperature, dullness, and feeble, blowing breathing, and he was transferred to the medical ward. The stump at this time had almost healed. Examination of the chest revealed a circumscribed dullness at the left base, extending nearly as high as the angle of the scapula, and, laterally, to the mid-axillary line. Tactile fremitus was diminished; on auscultation, feeble, blowing breathing, and, on deep inspiration, râles. Slight cough; very little expectoration. A septic pleurisy was suspected. The condition remained practically unchanged for several weeks, during which there was irregular septic fever. He complained at times of pain in the iliac region and left side, particularly when he drew a deep breath. He soon began to spit up fetid pus, and in twenty-four hours brought up several ounces. It was concluded that a localized empyema had perforated the lung. On examination, tympanitic resonance, amphoric breathing, and metallic râles were found low down in the postero-lateral region, beneath the eighth, ninth, and tenth ribs, indicating pneumothorax.

The autopsy showed the existence of a large abscess behind the left kidney and descending colon, extending from the diaphragm to the crest of the ilium. The chief part of the abscess lay above the kidney and beneath the diaphragm, and in this region there was a distinct cavity, partially occupied by dirty-brown pus, similar to that which the patient had expectorated during the last two days of his life. Part of the diaphragm was in a sloughy condition, and two orifices, through each of which the point of the index finger could be passed, communicated directly with an abscess cavity in the lower lobe of the left lung. The pleural membrane of this part was greatly thickened, and there was a small localized empyema between the layers. There were areas of recent broncho-pneumonia throughout the other lobe. The left kidney was small, and presented at its upper part a distinct cicatrix, to which the capsule and adjacent tissues were strongly adherent.

The sequence of events in this case was, probably, as follows: Wound of kidney with bruising of tissue in lumbar region; sub-phrenic abscess; localized empyema, probably from contiguity with sub-phrenic abscess; perforation of diaphragm and lung, with discharge of pus; development of a sub-phrenic air-containing cavity which gave, in the lower and lateral aspects of the left side, the signs of pneumothorax.

I regarded this case, when admitted to my wards, as one of septic pleurisy, passing on to empyema and perforation of the lung. The physical signs of pneumothorax were of the most characteristic kind, and I must confess that it never once occurred to me that the air-containing cavity was below, not above, the diaphragm.

CASE 4. *Acute illness; signs of empyema; operation; pleura free; evacuation of large sub-phrenic abscess.* John M., aged twenty-four, fireman, admitted April 30th, 1892, complaining of pain in the right side of the chest. Nothing of any note in the family history. The patient had measles when young; otherwise has been remarkably healthy. Denies excess in alcohol; admits gonorrhoea, but has never had syphilis. His bowels have been regular; he has had no abdominal pains. The present illness began about a week ago, with headache, loss of appetite. He kept at work until two days ago, when the pain became very severe in the right side of the thorax, and was much aggravated by coughing and during a deep breath. He is positive that there was no chill, but he has had one or two heavy sweats. For three days his bowels have been loose, and he has had from five to ten stools a day, but has not noticed any blood.

On admission temperature 104°. He is a large, well-built, well-nourished man; lies upon the left side. Lips and mucous membranes of a good color; the cheeks are flushed; tongue has a whitish fur. Pulse is 92, regular in force and rhythm; respirations shallow, 36. The thorax is well formed; the left side moves more than the right.

Percussion. Resonance normal on the left side. On the right side the patient winces on percussion below the fourth rib. The flatness begins at the upper border of the sixth rib in mammillary line. Behind, the resonance is defective at the right base and in the lower axillary region, and possibly there the line of dullness in front varies slightly with the position. The fremitus is diminished over the flat area.

Auscultation is everywhere clear in the left chest and in the upper part of the right, but in the flat area the respiratory and voice sounds are diminished in intensity, and in the lower mammary region there are a few dry râles. The condition of the heart is normal.

The abdomen is full; the walls are tense. There was no tenderness, no glandular enlargement, and the only point of special moment was the distinct increase in the size of the spleen, the edge of which could be easily felt at the costal margin. The blood was negative as regards the malarial plasmodia. There was marked leucocytosis—18,000 white corpuscles per c.cm.

The urine presented a trace of albumin, was dark amber-colored, acid; specific gravity 1020.

The patient had a slight cough, with a muco-purulent, slightly bloody

expectoration, in which there were numerous cocci, some encapsulated. It was evident during the first week in the hospital that the patient was very ill. Every day the temperature rose to between 103° and 104° , occasionally reaching 105° and once 106° . The pulse range was from 100 to 120. He had at times heavy sweats, and on the 2nd of May he had two severe chills, in one of which the temperature rose to 106.2° . The dullness at the right base persisted, beginning in the back about the ninth rib, and in front in the recumbent posture at the fifth rib. There seemed very little doubt to Dr. Thayer, under whose care the case came, that there was pus in the pleura, and an aspirating needle was inserted, but without obtaining any pus.

During the second week the patient emaciated rapidly; the fever persisted until May the 8th, and then fell to normal, the range being between 97° and 99° . The spleen remained large; there were definite sweats, but he seemed altogether better. On the 9th the blood count showed a diminution in the number of leucocytes—13,000 per c.cm. The temperature remained low, and patient seemed to be somewhat better until the 15th, when it rose to nearly 105° , and the pain in the side had been worse ever since he sat up with the bed-rest two days ago. Yesterday it became very intense. The physical signs have scarcely changed. There is still flatness from the fourth rib, and behind from just below the angle of the scapula. The apex-beat of the heart can now be accurately localized, and is in the fourth interspace 1.5 cm. outside the nipple. The respiratory sounds are feeble and distant.

On the 16th the patient was again aspirated, and this time pus was found which was a little stained, and contained the staphylococci and micrococcus tetragenus. Shortly after the aspiration the patient was seized with a fit of coughing and began to expectorate a quantity of reddish-brown, anchovy-sauce-like sputa, which was examined for ameba, without finding any. It was then determined to transfer to the surgical side for operation. Before the transfer the following careful note was made: "The patient is propped up in bed; the right side of the chest seems a trifle fuller than the left, the upper part looking more nearly equal. Motion is defective in the lower right front. On the right side flatness begins in the upper sternal line in the third space, at the upper border of the fourth in the nipple line, and at the fourth space in the mid-axillary line. Posteriorly, flatness begins at the angle of the scapula. In the erect posture the upper limit of dullness in front appears to move slightly. On the right side the percussion is clear. Respirations are clear at the apex in front, but diminish greatly in intensity over the flat areas, and is of a distant tubular character. The voice sounds have a somewhat nasal quality. The vocal fremitus is only just perceptible. In the infra-scapular

regions the inspiration has a more distinctly tubular character, and there is very distinct egophony. The liver does not appear enlarged downward, and the border is not palpable."

The case was thought to be probably empyema, though the possibility of an hepatic or sub-phrenic abscess had been considered.

The following is an abstract of the report on the operation by Dr. Halsted :

The eighth rib on the right side was exposed by an incision from the axillary line to the nipple line ; a portion of the rib, 5 cm. in length, was excised. It was found that the costal and diaphragmatic pleural surfaces were adherent. An incision made through these and the diaphragm opened at once into a large sub-phrenic abscess, which was freely evacuated and packed with iodoform gauze. The patient reacted well from the operation, and made practically an uneventful recovery. The discharge of pus gradually diminished, and he had fever only on two days. He had a chill on the 30th of May, and on the 3rd of June, after which he had no further fever. His weight rose from 129 to 156 pounds, and he was discharged August 15th with only a small sinus remaining.

CASE V. *Acute rheumatism; during convalescence signs of large empyema; operation; 100 c.c. clear serum in pleura; evacuation of large sub-phrenic abscess; recovery.* Thomas F.M., æt. 14, schoolboy, admitted August 3rd, 1892, complaining of pain in the shoulders and in the stomach. His family history is good. He has had measles once, and diphtheria twice, but has been, until quite lately, healthy and strong. The present illness began three months ago with pain and swelling, at first in the ankles and knees, and subsequently in the hips and other joints. Evidently, from his account, he had a pretty sharp and somewhat protracted attack of acute rheumatism. He had been convalescent and doing very well until two weeks ago, when he had pain in the right side, cough, and slight expectoration. For at least two weeks he has had some shortness of breath, which lately has increased very much. He has had no diarrhea; the bowels have been regular, the appetite fair. He has had chilly feelings, but no definite rigors; has at times been feverish, and has sweated freely at night. He states that he has lost about twenty-five pounds since the beginning of his illness.

On admission the patient was emaciated, pale, propped up in bed, the pulse 124, regular; the temperature, 100°, rose within a few hours to 103°. The respirations were 28.

Thorax. Prominent on the right side, which does not move nearly so much as the left, and there is distinct bulging in the fourth and fifth right spaces under the nipple.

Percussion on the right side gives a somewhat tympanitic resonance in

the infra-clavicular space, gradually shading into flatness at the fourth rib, the line of dullness extending through the lower axillary region to a point just above the angle of the scapula. In the erect posture the line of absolute flatness in front is distinctly higher. Tactile fremitus is absent in the flat regions. The respiratory sounds are everywhere clear except at these parts, where the respiratory murmur is scarcely audible. On the left side the physical examination is negative.

There is no expectoration. The apex-beat is under the fifth rib in nipple line. The first sound is loud and sharp, and the second sound at the margin of the sternum was louder than the left. On palpation there was a suggestion of a thrill at the apex region, and there was a slight echo in diastole, but no definite murmur. The abdomen presents nothing special on inspection: the liver dullness extends three fingers' breadth below the costal margin. The border is not accurately palpable, owing to the contraction of the abdominal muscles. The edge of the spleen is not palpable. The patient remained in the medical wards for five days. The temperature range was from 98° to 103.5° . He had no chills, some sweating; the pulse ranged from 110 to 130. On the 7th, pus was drawn off with an aspirating needle, and the patient was transferred to the surgical side with the diagnosis of empyema. The pus was creamy-looking, but no micro-organisms were found.

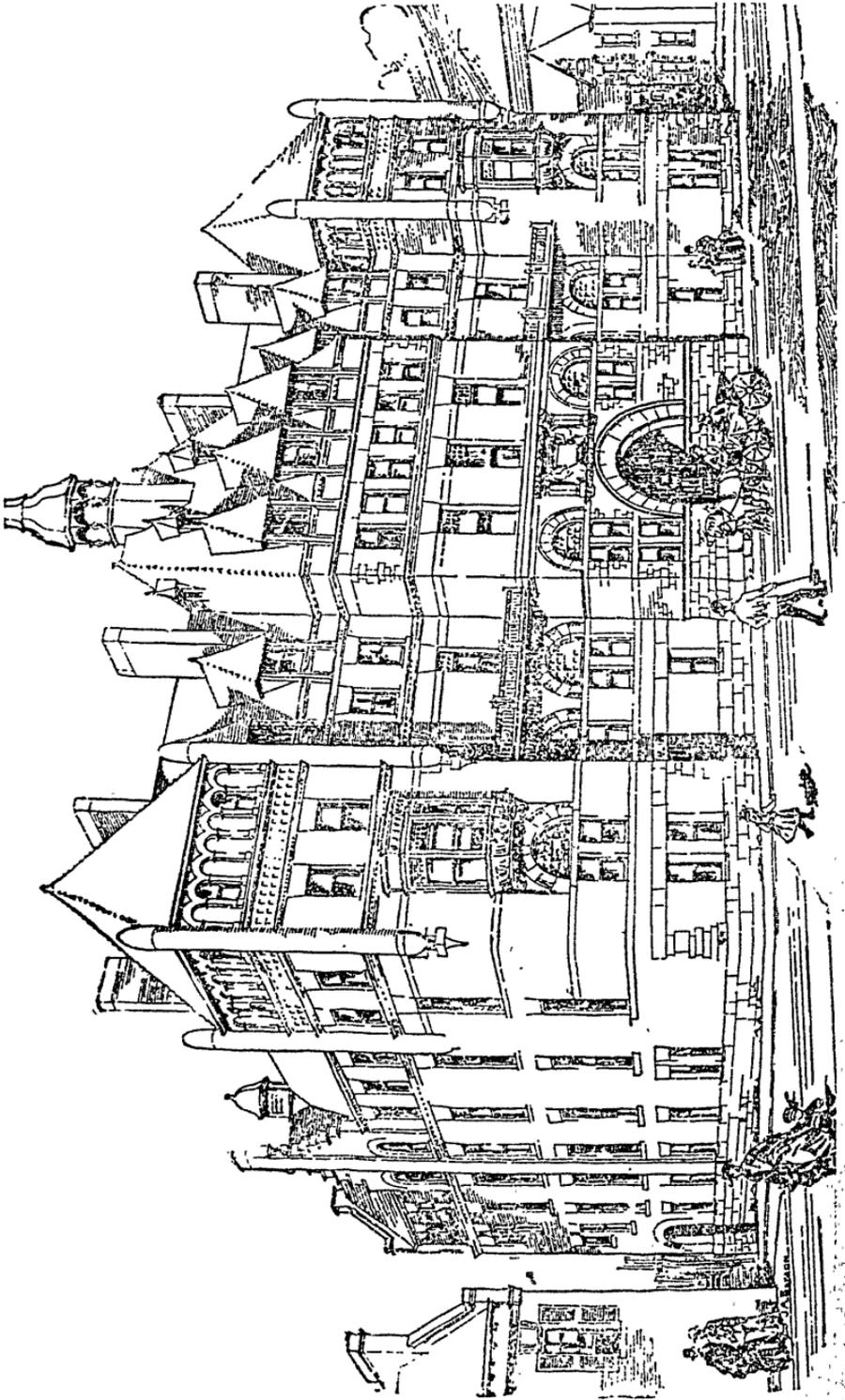
An operation was performed by Dr. Finney on August 11th. About 9 cm. of the ninth rib on the right side was excised. An aspirator needle was then passed through the thickened pleura, but seemed to enter a solid mass, and nothing was obtained. On a second attempt, 250 c.c. of pus were withdrawn. The pleura was then incised just above the diaphragm. No pus was found, but 100 c.c. of clear serum. The diaphragm presented at the wound. The pleural cavity was shut off as completely as possible with strips of gauze, and the diaphragm was incised with the Paquelin knife, opening into a large pus cavity with numerous pockets. About 100 c.c. of pus were evacuated. A rubber drainage tube was inserted into the cavity. The patient did remarkably well, and the temperature fell. He was dressed daily; the discharge was free, and he gained in weight, and left the hospital on September 9th, still with a slight sinus.

VICTORIA HOSPITAL FOR SICK CHILDREN,
TORONTO.

Hospitals are at all times objects of interest to medical men ; so that one may almost take for granted that a brief description and narration of the circumstances surrounding the origin and growth of one of the largest institutions of that kind in the city may be read with pleasure. While this general interest may be presumed, there are many readers of THE PRACTITIONER who are interested in a somewhat especial manner in the history of the Victoria Hospital, since but recently, as members of the Ontario Medical Association, they had an opportunity of inspecting the building and equipment ; and at the same time of accepting the hospitality of the trustees. Then, too, in this age of hospitals and magnificent charities, there is a constant increase in the number of these institutions, and many men are actively engaged in their establishment, equipment, and management ; so that the relation of difficulties and successes of a kindred institution from its inception in a most humble way, twenty years ago, to the position which it now holds as the best equipped children's hospital on the American continent to those so engaged may be profitable, and at the same time give encouragement.

The character of the hospital, its devotion solely to children's diseases—a comparatively recent departure in hospital work—must appeal to those who appreciate and are endeavoring to lessen, in some way, the appalling mortality among young children.

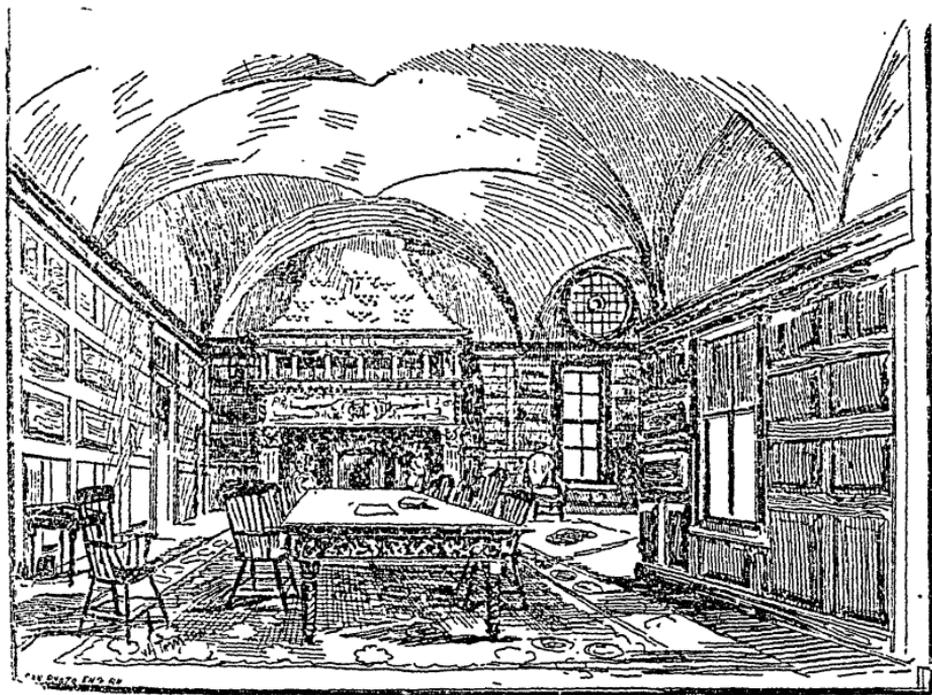
The Victoria Hospital, as it stands to-day, is a monument to the long-continued perseverance and earnest effort of those who were and are connected with it. The present splendid building is the fourth in the history of the institution. At its foundation—in 1875—a small dwelling of eleven rooms on Queen street was utilized, but the number of patients soon made it necessary to secure more accommodation, and in 1876 a larger building on Seaton street was secured. This, in turn, soon became insufficient to accommodate the number of children admitted, and for the second time a move became necessary, and in 1878 a building somewhat larger than the one vacated was secured on the site of the present hospital on College street. However, the new quarters, while larger, were of such poor construction that it was impossible to make repairs, and the management determined upon the erection, at an early date, of a building in every way suitable for the purpose intended. In the meantime the temporary shelter was secured, and in 1886 the hospital became located on Jarvis street, where the work was carried on until the completion of the present structure in 1891. During these years there had been a constant increase in the number of patients ; and despite the hampering conditions, both in the



VICTORIA HOSPITAL FOR SICK CHILDREN.

way of insufficient accommodation and scanty supply of money, an immense amount of good work was accomplished.

A lot of 150 feet frontage on College street, extending between Elizabeth street and Mission avenue, having been secured, the foundation stone of the new hospital was laid, and two years after the magnificent building was completed, thoroughly equipped and furnished from basement to garret. In the construction no expense was spared, everything was of the best, both of material and workmanship, and every device and appliance which would add to the efficiency of the hospital service was secured. Indeed, so anxious were the management that everything should be fully abreast with the most recent advances in the art of hospital building that

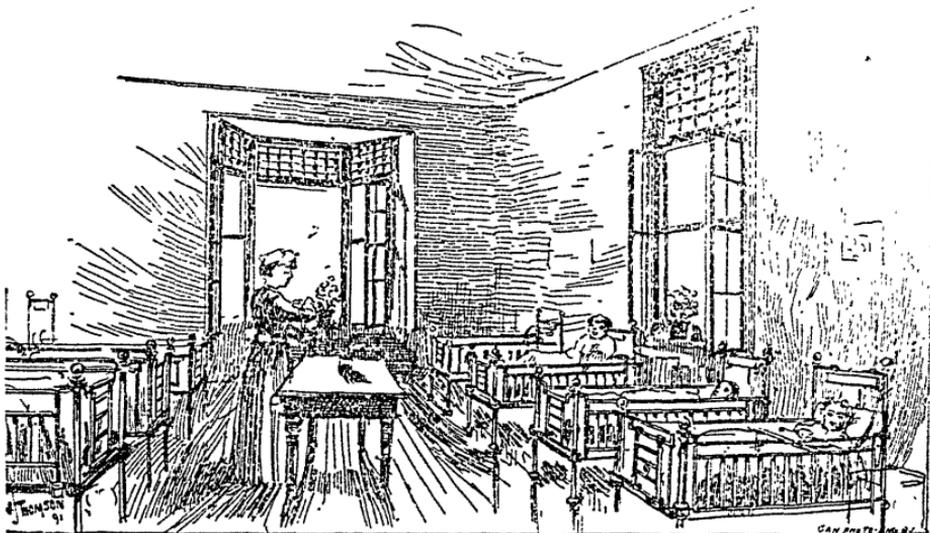


BOARD ROOM.

the indefatigable chairman of the board, Mr. J. Ross Robertson, visited and examined every children's hospital in the world, with the solitary exception of one at Buda-Pesth. Small wonder, then, that the hospital, as it stands to-day, is a model one, and illustrates to the fullest degree in its appointments and furnishings the most advanced ideas in hospital building.

The hospital occupies the entire lot, having 150 feet frontage, and being 105 feet deep. It consists of a centre pavilion, two flanking towers, and two intermediate sections. The style of architecture is of the Romanesque

with a suggestion of the French château. The walls are of dark, hard-burned brick, relieved by a large quantity of cut-stone trimming. The centre pavilion and the two towers at the angles are roofed with Spanish tile. The color, being a dull red, warm in tone, gives an impression of rest and comfort. The letter "E" conveys a fairly accurate idea of the outline of the hospital. In the wings are situated the large wards, three in each wing, while smaller wards occupy the front corners of the building. The small central portion of the letter would indicate the position, in the basement, of the laundry, drying room, etc., and, above, the lecture room and operating theatre, with its adjacent instruments, anesthetic, photographic, general appliances, and wash rooms. In the

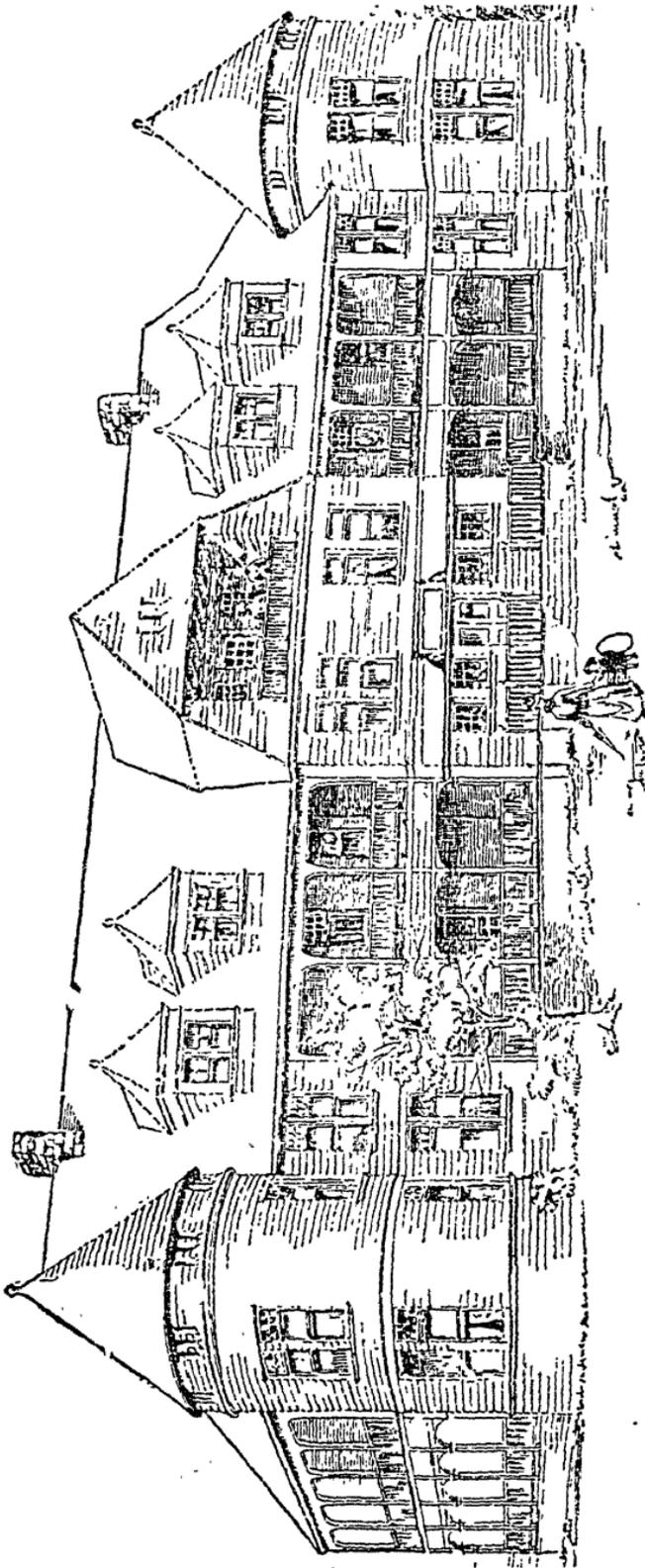


J. ROSS ROBERTSON WARD.

centre, corresponding with the front line of the letter, are, below, the entrance and stairway, offices, cloak rooms, and elevator; while above are two large wards.

A portion of the third story is reserved for the nurses' bedrooms, and parlor. In the attic are the servants' quarters.

The general plan of the wards is the same throughout. The large wards in the wings, of which there are five, contain twenty beds, are lofty, and exceptionally well lighted. Adjoining the wards are the bath room and dressing room. These rooms are situated at opposite ends of the ward, which is a great improvement, and is found more convenient; while the dressing room, quite apart from the ward, frees the other occupants from the distressing surroundings of a minor operation or dressing. Each ward contains a fireplace for ventilating purposes. The six



LAKESIDE HOME.

corner wards contain eight beds each. On each flat, between the large ward in the wing and the small corner ward, is the nurses' pantry, linen closet, and clothes shelves.

The basement beneath the main building contains a well-arranged outpatient department, dispensary, schoolroom, linen room, nurses' and servants' dining rooms, and a model kitchen. Beneath the operating theatre is a complete laundry, furnished with power by an electro-motor, and complete in every particular, with its rotatory wringer, drying room, mangles, and disinfecting apparatus. Beneath the basement proper are the engine rooms and ventilation apparatus, with a perfect labyrinth of pipes running to all parts. There is also the pumping plant necessary to run the elevators, of which there are three in the building.

For the accommodation of cases of infectious diseases occurring in the wards, the third flat in the west wing has been completely isolated from the rest of the hospital, having a separate elevator with outside entrance, and also separate kitchen and other accommodation. This wing is divided into a number of small wards, and will contain eighteen beds. The hospital has one hundred and sixty beds in all.

In the way of special features, the internal telephone system, by which the general office is connected with every part of the building, has been found very convenient. The operating room is large and well lighted, and has seating sufficient for sixty students. The furnishings are complete in every detail. The hospital management, fully recognizing the facility for the extension of their work through education in diseases of children, have given every opportunity to medical students. The fee fixed is a nominal one only. Clinical lectures are given daily in the operating theatre and in the wards. The trustees are anxious not only to benefit the children of Toronto, but to have in their hospital a centre of education in Diseases of Children, so that in course of time, as succeeding classes go out to practise, the influence of the Victoria Hospital will be felt in the lives and happiness of children in every quarter of this Dominion. Their efforts in this direction are not confined to medical students only, for in connection with the hospital there is a training school for nurses.

Under the same management, and forming a part of the hospital, is the Lakeside Home, situated on the island, off from the city, and distant about two miles. In the summer months all patients, except acute cases requiring constant medical care, are taken to the Home, where, in addition to medicine and nursing, they can have the benefit of the refreshing breezes from the lake.

The rules regarding the admission of patients are: The children must be between the ages of two and fourteen. The regular rate in the public wards is \$2.80 per week. In the case of those who are too poor to pay

this amount, they are allowed to pay what they may feel able towards the support of the child, and, if this cannot be done, the patient is taken in without fee of any kind. There are private and semi-private wards for the children of well-to-do parents, and in the case of private ward patients the physician or surgeon is paid his regular fee. The entire cost of the Hospital proper is, roughly, \$120,000; of the Lakeside Home, \$30,000. The institution depends largely upon the support of its friends. From time to time bequests and donations are received, and as the nature of the work becomes more widely known no doubt the number of these will rapidly increase. As an instance of the loyal support given to the hospital by its friends, one might mention, first, the princely gifts of the chairman of the board, Mr. J. Ross Robertson, who has contributed to the Victoria Hospital and Lakeside Home, in all, \$40,000. Messrs. E. B. Osler, George A. Cox, and A. M. Smith, the trustees, have given respectively \$3,000, \$1,000, and \$1,000. The city, in the Jubilee year, made a grant of \$20,000. There is also the Tucker bequest of \$20,000, not yet received, and the Stewart bequest of \$8,000.

(TRANSLATION.)

CHOLERA AT THE COCHIN HOSPITAL.

(Under the supervision of Dujardin-Beaumetz.)

BY J. SOTTAS AND PATAY.

Translated by

DR. J. A. AMYOT, TORONTO.

FROM July 12th to October 30th, 1892, forty-six patients suffering from symptoms of a choleric form nature were treated under Dujardin-Beaumetz in the Cochin Hospital.

The symptoms varied in intensity in the different patients, and according to the gravity of these symptoms the cases have been divided into three groups: Twenty-two are placed in that group in which there were only slight general disturbances, slight algidity, diarrhea that was not very characteristic, vomiting, and slight cramps. Of these, fifteen were males and seven females.

It is a question whether or not these were merely choleric form cases or mild cases of true cholera.

The remaining twenty-four, with anuria, rice-water stools, grave general symptoms, and the comma bacillus present in the stools of all those cases examined by Dr. Netter, were characteristic ones of cholera. The second and third groups may be taken from these twenty-four; according to the severity of the symptoms, twelve would then be placed in the second or

milder form group ; of these, seven were females and five males. The third, and most virulent group, will take in the remaining twelve ; of these, seven were women and five men ; ten of these died, five males and five females. Out of the twenty-four classic cases there were then ten deaths, or forty-one per cent.

No new points as to etiology were made out.

The ages of the cases ranged from fifteen to sixty years. Nearly all came from the southern suburbs of Paris.

The greater number were in bad condition from want and exposure, from alcohol, and from lack of hygienic precautions. One, for instance, had admitted drinking habitually from a ditch.

Three of those patients that died had nursed or had lived with patients that had died of cholera. One of those that died had been treated at L'Hôtel Dieu three weeks previously for a first attack of cholera.

The following are the symptoms observed in those cases considered cholera without doubt :

Diarrhea set in generally with epigastric pain. The first stools were fluid and profuse, bile-stained and oily. It appeared that when this diarrhea could be stopped, and this particularly in the less severe cases, the progress of the case was arrested for a time at least, and sometimes cure followed promptly. The diarrhea of the first few days may be considered as premonitory only. When it persisted, it soon became characteristically rice-watery.

Vomiting was present in nearly all the cases, even in the milder ones. In the more severe forms it was uncontrollable, and was accompanied with most severe gastric pain. The vomit in most cases was clear and aqueous, sometimes mixed with small green or, again, whitish gray particles.

Cramps were present from the very beginning. They were of all degrees of intensity, from the mere dull, heavy pain, which did not persist and could easily be borne, to the most excruciating and intolerable, continuous cramps that tortured without relaxation, extending even to the extremities—the whole body, in fact—but localized chiefly in the epigastrium.

The weakness of the pulse was naturally proportional to the severity of the attack ; sometimes could not be felt at all ; even a day or two before death the heart sounds could, in some cases, only be heard with difficulty, especially when the peripheral circulation seemed to have come to a standstill altogether. The wound necessary to expose a vein to be opened for intravenous injection of artificial serum could be made without even the effusion of blood. When convalescence set in, the pulse gradually became stronger ; but only regained its former strength after a long time.

In all the cases the temperature was subnormal—35° and 37° C. in the

less severe, and even to 34° , 33° , and 32° C. in the very severe ones. In no case during the period of reaction was the temperature seen to rise excessively. In one case, where the attack had been severe, with sub-normal temperature, anuria and coma, convalescence was established without rise of temperature above normal. It returned to the normal by lysis, if the term might be so used.

Anuria was a constant symptom in all the cases. The return of urinary excretion was always a favorable sign. Tube-casts were found in the first urine. Histological changes corresponding to this condition were found in the kidneys of the two cases examined.

General symptoms. The patients became rapidly depressed. They are completely prostrated, sluggish, remaining indifferently in one position, or complaining of their horrible sufferings, of a sensation of oppression, a weight on the chest, and insufferable agony. In contrast to the excessive pains, the sensibility to external objects is quite dull, they scarcely taking notice of what would cause severe pain in a healthy individual.

The expression is that of fear, the eyes are sunken and circled with black, the features are pinched, the lips are dry, the tongue is coated, the gums and teeth covered with sordes.

The voice is cracked, and finally disappears; sight is dimmed. There is no true delirium, but a progressive dulling of perception and mentation.

The extremities are cold and soon become as if mummified; the skin of hand remains wrinkled for quite a time if pinched up. The whole body becomes mottled over with bluish spots.

Whether this torpid state has been preceded by a period of excitement, brought on by the excessive pains, or whether it has come on gradually, the patient soon becomes comatose, and is insensible even to the incising of the skin necessary to expose the veins for intravenous transfusion; he dies without agony.

Two of the women who died were pregnant. The authors have pointed out the unfavorable influence of this state in an attack of cholera. We give here the observations made on these two cases.

CASE I. Martha G., æt. 43, pregnant six and a half months, has suffered from phlebitis of left leg for one month, entered the isolation pavilion in charge of Dujardin-Beaumetz on September 4th, suffering from an intense diarrhea, with vomiting and cramps.

During a couple of days the patient improved, and appeared as though going to recover; fetal heart sounds could be heard, but patient was still very feeble. A recrudescence, anuria, and extreme feebleness accompanying it, soon came on.

On September 9th, at 2 p.m., there was done a transfusion of Hayem's artificial serum.

Sterilized distilled water 1000 grams.
 Sodium chloride 5 "
 Sodium sulphate 10 "

The median-cephalic vein of right arm was exposed ; the patient, absolutely exhausted, made no movement. The axillary temperature was 33.5° C.

Two litres were injected in twenty minutes by means of a Collen's apparatus.

During the operation the pulse reappeared, the patient seemed to recover, the conjunctiva became moist, the patient even spoke, and seemed really to be coming to life. This has been the experience of all. It is well known, though, of what short duration is the resurrection. Two hours after the operation the temperature had gone up to 34.5° C., and remained there for that night and the following morning; but the anuria persisted, coma reappeared. Again an injection of a litre of fluid was tried at 1 p.m. Again this injection, given *in extremis*, improved the pulse. The patient then, without showing any signs of pain, gave birth to a seven months female fetus at 4 p.m., and died herself at 9 p.m. on September 10th.

CASE 2. Rosina G., confectioner, æt. 36, entered on October 11th with classical symptoms. She had been ill three days, and showed on entrance a good deal of agitation, and was suffering severe pain. There was complete anuria. She was pregnant eight months. There could not be made out any fetal sounds, the fetus probably being dead.

On October 13th, at 2 p.m., she gave birth to a dead child. Labor normal, but rapid. No hemorrhage.

Immediately following delivery was an amelioration of symptoms, the temperature rose slightly, and some urine was passed.

She went on this way for a couple of days ; then the symptoms became more grave, anuria again came on, the extremities became cold, the body became covered with violet spots, the tongue blackened, followed by coma and death on the 17th.

The other three women who died were only a short time in the hospital.

CASE 3. Female, æt. 36, died in eight hours.

CASE 4. Female, æt. 62, died in twenty hours.

CASE 5. Female, æt. 46, died in forty-eight hours.

The other five deceased were males, as follows :

CASE 6. Male, painter, æt. 19, relapse. Had been in L'Hôtel Dieu three weeks previously ; died immediately on entering.

CASE 7. Painter, æt. 46, died in twenty-four hours.

CASE 8. Blacksmith, æt. 44, died in four days.

CASE 9. Laborer, æt. 42, died in five days.

CASE 10. Plumber, æt. 46, died in forty-eight hours.

At the autopsies of the preceding subjects, the macroscopic lesions were not very noteworthy. Cadaveric rigidity was extreme, and had come on immediately after death.

The lungs were in all cases congested. In two cases there was pleural effusion. The blood was thick and viscous, and flowed quite slowly on the autopsy table, almost like oil.

The liver showed superficial yellowish spots. The gall bladder in all cases was distended with a quantity of greenish bile.

The intestines did not show, in all cases, that classical rosy tint, but were congested. The vessels were engorged; the intestine appeared as though desquamated, and was covered with riziform débris; Peyer's patches were swollen and surrounded by a congested line.

We did not find marked exfoliation in all the cases, and in two there was none at all; there was none, either, in the fetal intestines. We found it once in the large intestine. The spleen was soft, and only slightly enlarged.

The kidneys were engorged and enlarged even after washing; the cortical substance was yellowish. We examined, microscopically, the kidneys and livers of the two pregnant women, and made out the following points. The pieces were put in hardening fluid four hours after death.

Kidneys, Malpighian bodies. The vascular tufts were engorged with blood, and slightly infiltrated with leucocytes; the tuft fills nearly the whole of the glomerular cavity, with the exception of a little crescent-shaped portion at the pole opposite to the vascular entrance; this portion is filled with refracting albuminous masses, epithelial cells from the vascular tufts, and with leucocytes and red blood cells.

Convoluting tubules were dilated; the epithelial cells that are normally cylindro-conic had become cubical; the portion of the cell towards the lumen was detached from the rest of the cell. In those cells that had remained intact, small characteristic hyaline bodies were found. A number of the granules in the cells were blackened by osmic acid. Some of the granules had coalesced into quite large globules, which could be distinguished from the hyaline ones by being blackened by the osmic acid. The islands of degeneration are distributed unequally throughout the kidney. The lumina of the convoluting tubules and those of Henle's loops were filled with material in major part composed of hyaline masses, oil globules and granules, and a few leucocytes and red blood corpuscles.

The collecting tubules were filled with hyaline and granular casts.

In fact, there was an acute glomerulo-nephritis, with a certain amount of degeneration. The kidney was as if injected by the exudate, and thus is explained the anuria and the great number of casts found in the first urines.

There was no well-marked lesion in the liver. There was fatty degeneration in those hepatic cells bordering the portal spaces. The island of degeneration surrounds the space, and prolongs itself to join similar islands, and thus the lobules are surrounded by a zone of degeneration.

TREATMENT. On entering the hospital, the patients (they generally were in the algid state) were enveloped in a woollen blanket and surrounded by warm water bottles. They were also rubbed well with warm, rough, dry towels, and besides this they were given three tablespoonfuls of the following mixture every quarter of an hour :

Lactic acid	10 grams.
Simple Syrup	20 "
Essence of Lemon	2 "
Water	1000 "

To stop the vomiting, ice in small pieces, or ice-cold milk, or some aerated fluids. Twenty minims of paragoric elixir was given every hour.

Laussedat's drops were often successfully used for the vomiting. The following is the formula :

Ethereal Tr. of Valerian, 5 grams.
Tr: Opii 1 gram.
Essence Peppermint 5 drops.
Hoffman's Anodyne 5 grams.

Twenty-five drops of this mixture is given each time that the patient has an inclination to vomit or for the bowels to move.

Massage and hypodermics of morphia are used to relieve the cramps; and caffeine and ether injections for the algidity and weakness.

Transfusion of artificial serum was done but twice on the same patient, and then under the circumstances mentioned above.

Following the advice of M. Bourey, flushing out the intestines was done several times with good results; this procedure rid the intestines of considerable quantities of riziform materials.

The operation is done by means of an esophagean tube pushed up as far as possible, and by this means throwing in about three litres of a naphtholated solution, 20 centigrams to the 1,000. Of the different remedies used in the treatment of cholera, some are simply for the treatment of symptoms: vomiting, diarrhea, cramps, etc.; others have for object the destruction of the germs causing the affection, and, again, the neutralizing of the toxins, and this constitutes rational medication; such is the use of lactic acid, for example, and such, again, the use of antiseptics by the gastro-intestinal tract. Other medications combine both at a time, the symptomatic and the rational, such, for example, as washing the stomach and intestine, which methods diminish the vomiting and the

diarrhea, and saves the economy from absorbing the deleterious toxines.

Subcutaneous and intravenous injections of artificial serum and of saline water give to the economy that water which has been taken from it by the continued dejections; they dilute, and at the same time render the blood less toxic; they play the part of nerve excitants and heart stimulants, bringing back the circulation to its normal. This transfusion can be compared in effect with bleeding in uremia, depleting the blood in part of its toxic principles; also to the transfusion of alkaline fluids in the coma of diabetes.

But in none of the cases can the method be curative. It simply wards off the immediate danger, and aids the organism in the struggle, but does not act directly on the morbid principle.

In the first stages of cholera the treatment would be symptomatic. The majority of authorities contend that if we could check the premonitory diarrhea, the progress of the disease would be stopped in many cases.

To combat the diarrhea and bring on the elimination of toxines, Professor Peter gives at the very start out a mild purgative, followed by some opium preparation.

Professor Hayem advises lactic acid from the beginning. He claims very good results in those cases that have not started too suddenly, and in which the algidity is not marked.

M. Lauenstein, of Hamburg, obtained no good results from the employment of lactic acid. Salol, resorcin, naphthol, and benzo-naphthol have all been used with a view to their antiseptic properties, but with very little success.

Selected Articles.

DIFFUSE TUBERCULAR HEPATITIS WITH TUBERCULAR PERICARDITIS*

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AND

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THE following case is worthy of being placed on record, both on account of the rarity of the disease and the unusual character of the symptoms.

Ellen S., aged twenty-eight years, married, husband and one child dead of tuberculosis, four children living and healthy, family history unimportant. Since her husband's death, two years ago, she has been in domestic service. She enjoyed good health until early in December, 1891, when she began to feel epigastric distress after eating, and a short time later vomited almost as soon as food was taken. The vomited matter became increasingly bile-stained, whilst strength failed and thirst was prominent. About January 1st, 1892, she noticed a jaundiced hue, which soon became quite marked. The bowels had become loose in December, and now a troublesome diarrhea set in. She frequently had chilly sensations, but no rigors, and was confined to bed during most of January.

When admitted to Toronto General Hospital, on January 27th, 1892, she was considerably emaciated, and her face had an anxious, pained expression. The conjunctivæ and body surface generally were deeply jaundiced, and the skin moist. Her temperature was 99.5° F.; pulse 108-120 beats to the minute. Distress was still felt in the epigastrium, and also in the right hypochondrium, but there had been no vomiting for two weeks. The bowels were constipated and stools clay-colored.

Inspection showed the abdomen to be decidedly full in its upper part, and the lower border of the liver was easily traced across a level three-quarters of an inch above the umbilicus; it was even and somewhat

*Read at the meeting of the Canadian Medical Association, Ottawa, September, 1892.

rounded, the surface of the organ being smooth and tender. In the left side the hepatic dullness was continuous with that of the spleen, the lower end of which extended one inch below the border of the ribs. There was considerable tenderness over all the liver and spleen, and continuous pain in these regions was complained of.

There were signs of pleural effusion in the right side, dullness extending as far forward as the mammary line, and as high as the fourth rib in that line and the fifth dorsal vertebra behind. Over this area respiratory sounds were audible, but weak, and occasional friction sounds were present with both inspiration and expiration.

The apex beat of the heart was displaced a little outward and was somewhat diffuse, a high-pitched systolic sound, probably pericardial, being heard over the fourth and fifth costal cartilages to the left of the sternum, almost disappearing with inspiration.

The urine, specific gravity 1015, contained much bile pigment, but no albumin. No signs of disease could be found in the lungs, nor in the abdomen or pelvis, except those already spoken of.

February 8th. Signs of pleurisy in left side.

13th. Pericardial friction, fremitus felt in the third intercostal space; auscultatory signs very distinct. A week later the whole pericardium became affected, with considerable effusion, precordial dullness extending to the third intercostal space.

20th. Some coarse liquid crepitation present in lower parts of both lungs; this was found to vary in abundance from day to day. There was slight cough, with occasionally some thick, dark sputum, mostly blood. The sputum disappeared entirely after a few days, and the cough subsequently abated so much as to give scarcely any trouble. Jaundice had begun to lessen perceptibly.

March 1st. The pericardial effusion had begun to absorb; the right pleura showed no change, but the effusion in the left had gradually increased. The abdomen was extremely tender and diarrhea troublesome, the stools being liquid and offensive. Some effusion into the peritoneal cavity was noted. The urine was less pigmented than at first, and contained a small quantity of albumin. Microscopic examination discovered the presence of pus corpuscles and crystals of tyrosin. The crystals were small, abundant (four or five in a field), and always adherent to pus corpuscles. The size of liver and spleen remained unaltered.

7th. Diarrhea had become profuse and bowel motions involuntary; patient appeared *in extremis*.

10th. The bowels now became constipated and patient began to improve.

20th. She was quite hopeful, and taking nourishment fairly. She slept better, had less pain, and the temperature was less disturbed, and finally sat up for an hour or two daily. This improvement lasted for only a few days, and then she grew rapidly worse again, the temperature varying from 96.5° to 103° F. There were profuse perspirations, but no chills. Jaundice was now completely replaced by a dusky livid hue. Fine liquid crepitation was heard in the lungs, more abundant and generally distributed than before. No signs of pericarditis were present, and no change was noticed in the condition of the right pleural cavity; the effusion in the left was increasing, however, as was that in the peritoneal cavity. The urine still contained tyrosin crystals, pus, and a small quantity of albumin.

The patient's condition continued much as above during April, her strength gradually failing, although she had sat at the window of the ward almost daily. The liver showed no change in its condition, but tyrosin crystals were not found in the urine after April 10th. Death took place April 28th.

Report of *post-mortem* examination—made at Toronto General Hospital, April 29th, 1892 :

Inspection shows the body of a woman of apparently forty years of age; emaciation extreme; skin dark and somewhat yellowish in color, black hair on chin and abdomen; *rigor mortis* and *post-mortem* staining poor; bedsores over sacrum.

Section shows subcutaneous fat almost none; muscles thin and black; omental fat much wasted; three pints of bright yellow slightly fibrinous fluid in abdomen.

Pleuræ. Diffuse adhesions on both sides; loculi containing fluid, formed by adhesions also on both sides; loculus on left side large, reaching from second rib to base and limited by nipple line in front; both pleuræ greatly thickened by layers of plastic lymph, only that immediately next the serous membrane being replaced by fibrous tissue; the adhesions appear old and are about one-half inch in thickness, but break down readily, being nearly pure fibrin. The pleuræ are found, when stripped, studded with miliary tubercles. The inflammatory process has spread from right side into the anterior mediastinum, and plastic material is thickly deposited on right half of inner surface of sternum.

Pericardium. Complete fibrinous adhesion exists between the parietal and visceral layers; thick, but readily broken down, except over the surface of the right ventricle, where, on a spot the size of a 25-cent piece, it is firm and fibrous. The lungs overlap the pericardial sac, almost hiding it, and are glued to it by fibrin.

Lungs. Millitary tubercles scattered through both, by far most densely in and just beneath the pleuræ; caseating glands at root of lungs; no consolidation; edema and hypostasis.

Abdomen. Perihepatitis and perisplenitis of some standing, and with adhesions similar to those found between the pleuræ, fixing the liver and spleen to diaphragm, and spleen to liver.

Spleen. Weight twenty-three ounces; diffuse perisplenitis, adhesions; reaches forward and to right till its border is attached closely to the left lobe of the liver by plastic lymph; miliary tubercles scattered widely through the organ and plainly visible beneath the capsule; consistency, firm; pulp, increased.

Kidneys. Taken out with difficulty on account of density of the perinephritic areolar tissue; capsules peel fairly readily; scars as from old infarcts; tubercles in both cortex and medulla, but not in large numbers.

Ureters and bladder. Healthy.

Uterus and ovaries. Healthy.

Suprarenal capsules. *Post-mortem* softening.

Appendix vermiformis. Four and one-half inches; healthy.

Intestines. Large and small intestines empty, thin, pale; nothing specially noticeable excepting adhesions (old) between the colon, omentum, and gall bladder.

Stomach. Shows catarrh.

Liver. Large, sixty-two ounces; smooth; cuts hard, as though cirrhotic; of "nutmeg" appearance; miliary tubercles beneath capsule and throughout liver substance; gall bladder, ducts, and veins healthy.

Pancreas. Soft; *post-mortem* changes.

Head. Not opened.

Microscopic examination. Miliary tubercles are demonstrated in the lungs, pleuræ, pericardium, diaphragm, liver, spleen, and kidneys.

Liver. Sections of the liver show miliary tubercles, though not in large numbers, from one to three in a section being common. They are scattered widely through the substance of the liver, and tend to be intra, rather than interlobular. In addition to the tuberculosis there is a *diffuse* interstitial hepatitis, which is largely of the intercellular variety, and which is accompanied by little or no alteration of the capsule from within. The interlobular tissue is widely infiltrated with inflammatory cells, and the inflammatory process has spread into the lobules, causing an intralobular cell infiltration, in many places quite dense, and a considerable new formation of connective tissue along the lines of the capillaries. This process has extended in many instances through quite a fourth of the distance between periphery and centre of lobule. The capillaries are in parts apparently occluded by the new tissue formation, and numerous leucocytes are to be seen in some, occasionally completely plugging them. The liver cells have undergone marked changes. Fatty infiltration is prominent in parts, whilst cell atrophy is very conspicuous in the peripheral areas

of lobules, where the pressure of the new tissue and cell infiltration is felt. Deposits of brownish-yellow pigment, apparently bile pigment, are seen here and there in cells, but not in abundance. In very numerous spots a curious hyaline-looking necrosis of the liver cells has occurred. This is noticed both in single cells and in groups of cells, and presents an appearance as though the cell protoplasm had become coagulated and broken up into a large number of roundish particles, some larger than a red blood corpuscle, but many much smaller. These particles stain strongly with eosin. In most instances the remains of at least one nucleus are distinctly visible amongst the necrosed protoplasm. The nucleus may remain intact, showing large nucleoli, or may be split up into fragments. These necrosed cells are in some cases infiltrated with leucocytes. The nuclei persisting in the broken-up cells are mostly very large, and stain darkly and sharply with hematoxylin, and the necrosed cells are also increased in size. Their limits are very definite. Scattered throughout the liver are enlarged cells with gigantic nuclei, corresponding closely to those of the necrosed cells; these are probably going through previous degenerative stages. In some parts numerous small branching bile ducts are to be seen, such as are noticeable in so-called hypertrophic cirrhosis.

This woman presented a most rare and interesting pathological condition, the true nature of which could be only partly understood from the *post-mortem* examination. It was thought at first that we had to do with a case of pylephlebitis, with much more than the usual jaundice. There were serious difficulties to be explained, however, if this diagnosis were to be accepted—*e.g.*, the absence of a primary suppurating focus of ulceration in the pelvis, cecal region, or elsewhere; the absence of chills; the signs of perihepatitis and perisplenitis, together with the affection, one after another, of the several serous cavities, and the long duration of the case. Pyemia, probably more frequently than any other affection, gives rise to inflammation in such various parts, but its course is usually terminated much earlier. Bright's disease was excluded as a cause by the condition of the urine, heart, and circulation. That there was sepsis in the case was quite evident from the temperature chart, the sweats, the dusky discoloration of the skin, the tumefied spleen, etc.; the source and nature of the poison were not so readily to be gotten at. When several parts are simultaneously the seat of inflammatory lesions, our minds naturally turn to tubercle as a possible cause; but it seemed just as difficult to explain many of the observed phenomena, especially those pointing to the liver, if this etiology were accepted, as with any other. Few pathologists refer at all to tubercle as a cause of diffuse hepatitis, and those who make reference to it say that it gives rise to no symptoms. Ziegler describes one form of tuberculous liver as exhibiting a general connective-

tissue hyperplasia, the parenchyma being traversed by bands of fibrous tissue, in which are lodged gray or yellow tubercles (*Path. Anat.*, 1890, Band ii., p. 599). Saundby, in 1890, said that he had seen two cases of tubercular cirrhosis in which there was a tubercular network surrounding the lobules, and in the lobules a remarkable development of biliary canaliculi (*Brit. Med. Journ.*, 1890, vol. ii., p. 1459). Delafield and Prudden, speaking of tubercular hepatitis, say that it may be associated with cirrhosis (*Handbook of Path. Anat. and Hist.*, 1889). Coats, in his latest edition, makes no mention of the condition. Osler states that with eruption of miliary tubercles in the liver there may be a slight increase of connective tissue, which is, however, overshadowed by fatty change. "Practically," he says, "it is very rare, except in connection with chronic tuberculous peritonitis and perihepatitis, when the organ may be much deformed by a sclerosis involving the portal canals" (*Practice of Med.*). Pepper records a case following measles, in which jaundice was occasional; the liver was hobnailed. No history of syphilis could be obtained. Klein has described acute interstitial hepatitis as he found it in eight cases of scarlatina. R. P. Howard, of Montreal, in a paper on "Cirrhosis of Liver in Children," reports seven or eight out of sixty-three as being co-existent with tubercle.

Having been unable to find anything in the history of our case or in the *post-mortem* appearances, apart from the tuberculosis, that would account for the occurrence of an interstitial hepatitis, we are constrained to believe that it resulted from irritation caused by the specific poison of the tubercle germs circulating in the blood. It could not have been the result of irritation by the localized tubercular nodules, since these were too few in number and too widely separated to account for a general hepatitis. The condition of the stomach and intestines was not such as to lead one to suppose that any fault in them was the cause. The points in the microscopic appearances which seem to add special strength to the view taken are (1) diffuseness of the process; (2) large amount of cell infiltration present; (3) necrotic condition of liver cells.

With regard to the first point nothing need be said, but of the second we may remark that such an inflammatory process is what one might expect where the poisoning was as acute as in this case. The comparatively small development of fibrous tissue is not what one would naturally look for were the process caused by prolonged absorption of irritative matters from the digestive tract, or by retention of bile by obstruction. Alcoholism was excluded from the history of the case, and the liver had none of the characteristics of an atrophic cirrhosis; the deposit of bile pigment was extremely small and confined to a few cells, none of the bile capillaries being plugged and dilated with it, as so commonly seen in

obstructive cirrhosis. A catarrh spreading from the duodenum might, of course, account for the passing jaundice, but not for the persisting hepatitis. The presence, moreover, of necrosed liver cells points rather to a toxine effect than otherwise. It has been shown that the toxalbumins of diphtheria and typhoid fever gave rise to such a necrosis as described (*Johns Hopkins Hospital Bulletin*, March, 1892; and Osler's *Practice of Med.*, art., "Typhoid Fever"). One of us has also observed a similar cell necrosis, with leucocytic infiltration, in a case of syphilitic cirrhosis.

The occurrence of tubercular pericarditis is worthy of note, since so few cases of this disease are on record. When she first came under observation there were signs of old pericarditis; these signs underwent no change, and at the autopsy they were found to be due to old adhesions. Later, signs of fresh inflammation developed over the base of the heart and gradually extended downward to the apex. The moderate effusion that resulted was fairly rapidly absorbed, and in five weeks after the first signs of pericardial disease showed themselves all traces of the attack had disappeared. The history of the pericarditis contained nothing distinctive in itself; its tuberculous nature could be surmised only from the associated conditions.—*The American Journal of the Medical Sciences*.

ON THE MEDICINAL EMPLOYMENT OF COFFEE.

I HAVE often been in the practice of prescribing coffee as a medicine in certain states of great debility. It appears to me to be a remedy quite unique in its usefulness in sustaining the nervous energy in certain cases. Apart from its general usefulness, I have found it of especial service after operations where anesthetics had been used, and in states of exhaustion where alcohol had been pushed and a condition of semi-coma followed. In these latter cases I have sometimes prescribed it as an enema when the patient could not swallow, and with the best effects. Its value as an antidote to opium is of course well known. Tea and coffee seem to me to be much alike in many respects, but I would give great preference to the latter as to its sustaining power. It would, I think, be a great advantage to our working classes, and a great help towards the further development of social sobriety, if coffee were to come into greatly increased use, and if the ability to make it well could be acquired. As an example of the difference of effect of tea and coffee upon the nerves, I may note, what I believe many sportsmen will confirm, that it is far better to drink coffee than tea when shooting. Tea, if taken strong or in any quantity, especially if the individual be not in very robust health, will induce a sort of nervousness which is very prejudicial to steady shooting. Under its influence you

are apt to shoot too quickly, whereas coffee steadies the hand and gives quiet nerves. My object in the present note is, however, to illustrate the remarkable power of coffee as a restorative medicine.

In the case of an old man in whom colotomy was done in a very desperate stage, he being almost moribund, good rallying took place under injections of coffee and milk. During the first two or three days great use was made of coffee, and I believe that the recovery that resulted was largely to be credited to it. I have employed it in many similar, though less severe, cases. It is my almost invariable prescription for elderly people after an operation for which an anesthetic has been given. One of the most remarkable facts, however, which I have ever witnessed, illustrating its powers, was the following: I was called late one evening to an elderly lady whom I had repeatedly seen previous on account of multiple sarcomatous growths in her bones. She had been in an almost dying state for more than a month, and at length it seemed that her end was come. I found her in a state of deep collapse, with pale face and dusky lips, and unable to speak or recognize any one. Her breathing was short and rapid. Her daughters were attempting to force brandy into her mouth by the spoon, but she could not swallow it, and I learnt that they had given a good deal of champagne and brandy during the afternoon. Her pulse, although very rapid, still beat well, and was not in keeping with her other symptoms of collapse. This made me think that probably more alcohol had been given than was useful, and I resisted the importunity of the relatives that subcutaneous injections of ether should be made. Feeling sure that she was sinking, and expecting that all would be over in an hour or two, I wished to take my leave. The patient's daughters, however, in great distress, begged me to stay to the end. I waited about an hour, still refusing to administer more alcohol. At the end of that time the nose had become cold, and the face was bedewed with a clammy sweat. It was under these circumstances that, in consequence of the urgent solicitations to do something, I thought of trying a coffee enema. After the nurse had prepared it, she appealed to me as to whether she should give it, evidently thinking, as I did, that it was absurd to attempt anything in a patient so nearly dead. It was, however, administered, and with the surprising effect that within a quarter of an hour the patient opened her eyes and recognized those about her. In another half-hour she spoke to us, and color began to return to her face. The coffee was repeated several times during the night, with the addition of some very small quantities of brandy. The result was that the patient recovered and lived on for three weeks afterwards.

In this instance I have no doubt that alcoholic stimulants, whilst they sustained the circulation, had acted injuriously on the nervous system,

and that the patient, already extremely weak, had been pushed into a condition approaching that of intoxication. It is, I believe, very easy on the deathbed to over-use alcohol, although in the case which I have narrated, the disease being incurable and the suffering great, the prolongation of life for a few weeks was not a matter of real importance. There are, however, many others in which death may be close at hand where an expedient such as that which I have described may be the means of permanent restoration to health.—*Hutchinson's Archives of Surgery.*

Clinical Notes.

A CASE OF ANEURISM OF THE ABDOMINAL AORTA— PROBABLE RECOVERY.*

By A. MCPHEDRAN, M.B.,

Associate Professor of Medicine and Clinical Medicine, University of Toronto.

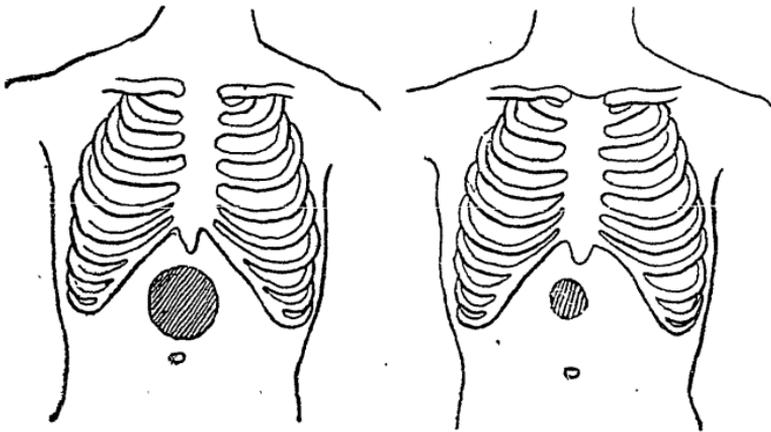
FRANCIS W. L., æt. 46, a plasterer. Had a slight attack of inflammatory rheumatism at the age of fifteen. Has been subject to slight attacks of lumbago for ten years. Between two and three years ago he began to be troubled with pain in the epigastrium—not constant—increased by work, so that coming home from work in the evening he walked somewhat stooped. Rest relieved the pain. It became constant, except when in bed, from September, 1891. In February, 1892, while leaning against a fence, he first noticed epigastric pulsation, and after that it was perceptible through his clothing.

On admission to the Toronto General Hospital in March, 1892, the following facts were noted: He is spare, anemic, poor musculature, apex beat of heart displaced half an inch to the left. A systolic murmur at apex, not traceable beyond anterior axillary line. In epigastrium opposite ninth costal cartilage there is a slightly elevated pulsating tumor, its centre being a little to the right of the middle line. The pulsation is expansile in all directions, and the tumor can be grasped on all sides, except the upper, which is overlapped by the liver. It is fixed, not affected by respiration, and pulsates in the knee-elbow position. Its surface is even and rounded. A faint bruit is audible over it; also very faintly in the upper lumbar region. Both sounds of the heart are distinct over the tumor. There is a perceptible interval between the radial and femoral pulses.

*Presented at the annual meeting of the Ontario Medical Association, June, 1893.

These signs, viz., a circumscribed pulsating tumor that could be grasped, the character of pulsation and its persistence in the knee-elbow position, the immobility of the tumor, the bruit, and the delayed femoral pulse, rendered the diagnosis quite certain.

On entering the hospital he was put to bed, and enjoined to maintain a state of as great quietude as possible, both physically and mentally. The amount of liquid per day was reduced to the smallest possible amount, about ten ounces, but he was encouraged to partake as freely of solid food as his powers of digestion could dispose of comfortably. These directions, I have reason to believe, were followed very conscientiously. This seems to me worthy of note, because, with scarcely an exception, patients of this class have proved quite unreliable. They would beg or



steal their neighbors' supplies if they could not get all they wished by more legitimate means. To further reduce arterial tension, and make it as low as possible, compatible with maintenance of circulation, nitro-glycerine was given, one minim, increased to two, being given four times a day. The radial pulse became barely perceptible, and remained so for several weeks. Potassium iodide was given in from five to ten grain doses, with a view to remove, as far as possible, the endarteritis affecting the vessels supplying the walls of the aneurism, and thus beget a better blood supply. This would lead to better nourishment of the walls and organization of inflammatory exudate; contraction of the walls would follow, and this, with deposit of fibrin on the inner surface, might lead to complete cure of the disease. With some the main object in administering the iodide is to lower arterial tension; but nitro-glycerine is a much more effective agent for that purpose.

The bowels were kept gently relaxed, so as to prevent all straining at stool; an enema or a mild laxative being given as needed.

The progress of the case was slow, but, on the whole, satisfactory until the following May, when his child died of diphtheria after a short illness. This caused so much mental disturbance, especially in his weakened condition, that the tumor, which had diminished materially in size, became enlarged to almost its former dimensions. This was probably due chiefly to the increased muscular tension resulting from the excitement, distending the walls of the aneurism, which had become partially collapsed rather than contracted. In two weeks he had regained what was lost, and he steadily improved from that time onward. The tumor became gradually smaller, and the pulsation less distinct. He became very anemic and considerably emaciated.

He was kept in bed until October; then he was allowed to sit up, and shortly to move quietly about. As such exertion had no apparent effect on the tumor, his liberties were gradually extended, and restrictions as to fluid and diet removed. In November he was allowed to return home. He was enjoined to exercise care as to quietude, and to avoid over-exertion. Light occupation was advised as preferable to idleness.

In December he felt himself driven by the needs of his family to resume his trade. He worked hard all winter, often doing heavy, straining work. This caused him no pain or discomfort, nor any change in the condition of the tumor. This spring, however, his general condition is not so good; he has considerable flatulent dyspepsia, and he is not so strong. The tumor seems a little larger, and the pulsation stronger; but the change is slight, and may possibly be due to lowered arterial tension. The pulsation in the tumor is now only slightly, if at all, expansile; it feels more like a solid mass attached to the aorta.

In the treatment of these cases, the greatest importance, of course, attaches to rest, mental and physical; it is essential in all cases. As to diet, cases vary. This man was decidedly anemic, and I deemed it advisable to improve the state of the blood by nourishing food, so as to supply good blood to the wall of the aneurism to improve its nutrition, and thus secure as much contraction as possible of whatever newly organized inflammatory exudate that might occur in it. As little liquid as he could do with was given, in order to reduce the volume of blood as much as possible, and thus reduce the tension of the sac. To further reduce arterial tension, nitro-glycerine and potassic iodide were given; of these I have no doubt that the nitro-glycerine was of much the most importance. The chief object in administering the iodide, as already stated, was to remove, as far as possible, the endarteritis affecting the nutrient vessels of the aneurismal sac, so as to improve its nutrition.

(These two figures will convey some idea of the size of the tumor and the area of pulsation on entering the hospital, March, 1892, and on presentation to the association, June, 1893.)

A CASE OF SYPHILIS WITH THE PRIMARY LESION
OCCURRING ON THE LOWER LIP.

BY F. N. G. STARR, M.B.,
Registrar, Toronto General Hospital.

THE following case may be of interest to some of your readers: The patient, a female, *æ*t. 24 years, entered the General Hospital, under the care of Dr. McPhedran, in May, 1893. There was nothing important in the family history, nor in her previous personal history, except that about fourteen months before being admitted to hospital she had a "white swelling" in the right knee. In August, 1892, a tender lump appeared on the inner side of the lower lip, about its centre; a small spot in the middle of this swelling ulcerated, was painful, tender to the touch, and would not heal. This ulcerated nodule was burnt several times with caustic, and finally went away in a month or two. The point where this ulcerated spot formerly existed has continued to swell at times, and to be more or less painful; never but once, however, has the surface again become broken. Following closely upon the breaking down of this tender, indurated nodule, the mucous membrane of the mouth and throat became sore, and was more or less covered with white spots having red edges. The tongue, with the exception of one place at the side, escaped. Early in October she noticed some small red spots upon the skin of the face, close to the mouth; they next appeared upon the forehead. Other than this, she is positive there was never a rash on any other part of the body. Some time during December her hair commenced to fall out in great quantities; this, however, ceased some time ago, and the hair is now growing in. At the time of admission the cicatricial tissue on the lip, at the site of the former lesion, was apparent. Between the fingers the indurated mass could be felt to extend about half an inch from side to side, and about a quarter of an inch from before backward. The cervical glands were indurated; the epitrochlear on the right side was enlarged, hard, and tender; that on the left was feelable. There was some sternal tenderness. The rash at this time upon the face resembled an *acne vulgaris*, except that there was not the usual sluggish appearance to the surrounding skin. The forehead was more or less covered with pigmented spots where there had evidently been an eruption at some time. There was one marked pustule at the side of the nose. The patient was put upon iodide of potassium. In the course of two or three days the eruption upon the face commenced to fade, and at the end of two weeks, when the patient left the hospital, the rash had disappeared, there being nothing apparent but some pigmentation of the skin. During the winter previous to coming to the hospital

she had been through a course of treatment, which will probably account for the cessation of some of the symptoms, notably the falling out of the hair, and the healing of the mucous patches in the mouth. I was unable to discover how the disease had been contracted.

A CASE OF SCARLATINAL RECRUDESCENCE.

REPORTED BY F. MARTIN, M.D.,

Resident Physician to Victoria Hospital for Sick Children, Toronto.

(Under care of W. B. Thistle, M.D., in Victoria Hospital.)

ON May 27th, J.M., æt. 5 years, presented all the initial symptoms of an attack of scarlet fever. Her temperature suddenly rose to 101°. Had complete loss of appetite, with vomiting. On the following day the rash presented itself. It appeared first upon the neck and chest, and gradually spread and covered the whole body in twenty-four hours. Patient was transferred to the isolation ward, where the disease ran the course of a typical case of scarlet fever. Temperature gradually subsided, with daily remissions, as the rash disappeared, becoming normal on third day. Desquamation commenced about the usual time, but at no time was it very marked.

On July 3rd, while still isolated, the child became irritable, complained of headache, vomited, refused to take any nourishment; while the tongue presented the characteristic strawberry appearance. Temperature rose to 100°, with considerable angina present.

On the 4th a rash appeared, similar in every respect to that of the previous attack. To-day (the fifth day since the rash appeared) the temperature has reached normal line, and desquamation is commencing.

Progress of Medicine.

THERAPEUTICS

IN CHARGE OF

GRAHAM CHAMBERS, B.A., M.B. Tor.,

Professor of Analytical Chemistry and Toxicology, Ontario College of Pharmacy; Lecturer in Organic Chemistry and Toxicology, Woman's Medical College;

AND

WILLIAM LEHMANN, M.B. Tor.,

Physician to the Home for Incurables and House of Providence.

EXPERIMENTAL RESEARCHES ON THE COMPARATIVE ABSORBING POWERS OF STOMACH AND RECTUM.

At a recent meeting of the Société de Thérapeutique, reported in the *Bulletin Général*, M. Main presented, on behalf of himself and M. Lemanski, the result of comparative investigations made, under M. Dujardin-Beaumetz, on the absorption of certain medicaments by the stomach and by the rectum. "One of us," he states, "being pressed for time, we instituted our experiments only with salicylate of sodium, salol, antipyrin, iodide of potassium, terebinthine, and methylene blue. After having determined the integrity of the gastric and renal functions of the subjects under observation, we first administered by the mouth a quantity of the medicament, the dose being adjusted with great precision. Two or three days after every trace of the medicament had disappeared from the urine, we placed in the rectum of the same subject a hollow Kügler suppository containing the same dose of the product."

Taken by the mouth, the salicylate of soda manifested itself in the urine at the end of thirty-five minutes; and at the end of twenty-five minutes when taken by the rectum.

We were enabled to determine the passage of antipyrin forty minutes after stomachal indigestion, and thirty minutes after rectal absorption.

We found iodide of potash in the saliva at the end of fifteen minutes, giving the medicament by the mouth; and at the end of ten minutes, giving it by the rectum. Here we must observe that the rectal administration of iodide of potash is extremely painful, and the subject of experiment is almost at once forced to expel the suppository. Accordingly, less than one gramme (the adopted dose) was absorbed by the rectum.

Methylene blue imparted a coloration to the urine within forty minutes after oral administration, and at the end of an hour and fifteen minutes when given per rectum.

Salol, taken by the stomach, manifested itself at the end of thirty minutes; taken by the rectum alone, after the lapse of four hours. This was to be anticipated, taking it for granted that the salol does not split up in the digestive tube, save under the alkaline influence of the pancreatic juice.

As for the terebinthine, it required forty-five minutes to communicate the odor of violets to the urine when administered by the stomach. Given by the rectum, it never gave evidence of its characteristic odor.

"One of us," adds M. Main, "had attempted some time previously the employment of suppositories of santal. This product was not absorbed, and produced only an intense rectitis."

From these experiments it follows that all substances may in general be administered by the rectum. Certain products, however, such as the terebinthine and the santal, would not be absorbed.

The speaker added that amongst the products directly soluble, which had been tested, the greater number pass into the circulation more quickly by the rectum than by the mouth. This is a new confirmation of the researches of Demarquay.

In the discussion which followed, M. Patein observed that salol decomposes, not only under the influence of the pancreatic juice, but also in the circulation.

M. Main: We simply wished to emphasize the fact that the decomposition of the salol in the rectum must proceed less rapidly, the secretions not being alkaline at the lower end of the digestive tube.

M. Catillon: This question of the alkalinity or acidity of the rectum has been controverted. In the course of investigations which I made at the laboratory of Vulpian on alimentation per rectum—investigations which have been here discussed and which have solved this question—I was led to look into this phenomenon, and very often I found an acid reaction in the rectum.

M. Constantin Paul: I believe the physiological rectum should be alkaline, but I have often determined its acidity in children suffering from green diarrhea.—*Medical Age*.

THE CURATIVE AND PREVENTIVE ACTION OF MERCURY AND IODIDE OF POTASSIUM.

Mauriac (*Journal de Médecine et de Chirurgie Pratique*, tome xlv., 64 année, 4 series) holds that the two drugs most powerful in the treatment of syphilis do not realize the conditions essential to entitle them to be named as specifics, though they are incontestably superior to all other remedies which have been employed against syphilis.

Their curative action is often wonderful, and can usually be implicitly relied upon when the drugs are given in accordance with the recognized clinical manifestations of the disease. In their preventive action, however, they are less satisfactory. This action is feeble, superficial, and transitory, since the outbreaks of the disease seem to be prevented not at all by the prophylactic treatment. There is only one condition under which this preventive action has proven satisfactory—that is, when administration of the specifics prevents hereditary transmission of the disease from the husband or wife free from apparent manifestations. Daily experience demonstrates that mercury neutralizes the latent infection of the spermatozoa of the sperm, the ovule, and the blood which occasions hereditary syphilis. This, again, however, seems to be transitory, since after treatment and apparent cure hereditary transmission may appear latent and the parents themselves may be attacked by recurrences. It cannot be doubted that there is a tendency towards spontaneous cure in syphilis. Since well-directed treatment cannot injure the system, since it powerfully aids this tendency to spontaneous cure, the disease should never be abandoned to its spontaneous evolution. Whatever be the degree, form, tendency, or age of syphilis, it should always receive specific treatment. This is especially so when the disease is in its active state; medication should be directed not only against manifestations of the disease, but against the diathesis. Under these circumstances (the absence of symptoms), medication must be conducted somewhat by guesswork. Admitting that the syphilitic diathesis may be present, and admitting the value of the administration of specifics against this diathesis, the logical deduction would be to administer specifics during the entire period of life after syphilis is once acquired. This, however, is an unnecessary extreme, abandoned by its one-time most enthusiastic advocates.

Mauriac believes that the best preventive results from the specifics are to be obtained by pushing their curative action as far as possible each time manifestations appear. The indications under these circumstances are clear and correct, and the dosing should always be full. In the intervals, when no external signs of syphilis are to be found, the mercury can be suspended until new developments require its administration. Mauriac believes that during the periods of latency the administration of a specific is without good effect, excepting as a means of preventing hereditary syphilis. Here mercury is incontestably the strongest guarantee against the chance of transmission of the disease.—*Therapeutic Gazette*.

THE EFFECTS OF DIURETIN. BY DR. SABACHNIKOFF.

The author has studied the action of diuretin on animals in Prof. Pavloff's laboratory of pharmacology. He introduced the drug into the

lymph-hearts of frogs, and directly into the veins in rabbits, dogs, and cats. The results are summed up as follows :

(1) Diuretin, almost immediately after introduction into the blood, produces marked diuresis in rabbits and young dogs.

(2) Diuretin has no diuretic effect on adult dogs. It even causes a diminution of urine.

(3) This diminution of secretion disappears on administering narcotic doses of chloral or morphine ; and after section of the sympathetic, or of the pneumogastric, or, again, after section of the cerebral hemispheres.

(4) Diuretin acts chiefly on the renal epithelium.

(5) Contrary to what has been pointed out by Schroder, diuretin acts as a poison on warm-blooded animals, and, above all, on the nervous system. In no matter what doses given, it excites the brain.

(6) Under the influence of diuretin, the heart beats become more frequent, and in the larger doses the beats become irregular. Small doses even nearly always quicken respiration. Death takes place through its action on the heart and respiratory organs.

(7) The fatal dose of diuretin is seventy centigrams per kilo. of animal's weight. Of course, there are individual idiosyncrasies.

(8) Non-toxic doses of diuretin produce a temporary rise of temperature ; a toxic dose produces a marked rise of temperature that persists until death.

(9) Diuretin has undoubtedly an effect on the muscular system of both warm and cold-blooded animals.

(10) In large doses, diuretin brings on vomiting, and frequent liquid stools.

(11) Diuretin has a sialagogue action.

(12) Diuretin is not cumulative.

(13) Diuretin has an action on cardiac muscle analogous to the action of the accelerator nerve.

(14) In all doses, diuretin diminishes arterial pressure.—*Revue Chirurgicale*. J.A.A.

THE USE OF MENTHOL IN PRURIGO.

Colombini publishes forty-four cases of pruriginous dermatitis treated with menthol according to the method of Dubreuilth and Archambault. The cases may be divided into three classes :

(1) Those in which an inflammation of the skin, accompanied by an eruption, produces itching ; as, for example, eczema.

(2) Those conditions of the skin in which the itching is the chief symptom, without any visible symptoms ; or, in other words, nervous pruritus.

(3) And, finally, in those cases in which eruptions having appeared, and been scratched, the disease is produced by the friction which is applied.

For these cases the following prescription is given :

R. Menthol, gr. lxxx. to clx.;
Alcohol, ℥iiss.

Or,

R. Menthol, gr. clx.;
Oil of sweet almonds, ℥iiss.

Or, again, an ointment consisting of :

R. Oxide of zinc,
Powdered starch, of each, ℥viss.;
Menthol, gr. vii. to xlv.;
Vaseline, ℥ii.

Or, finally,

R. Oxide of zinc,
Subnitrate of bismuth, of each, ℥iii.;
Menthol, gr. xv. to xlv.;
Powdered starch, ℥i.

The results which he obtained have been excellent in the first class, variable in the second class, and very good in the third class.—*L'Union Médicale*.

THE THERAPEUTIC VALUE OF STRYCHNINE.

Prof. De Giovanni, Turin, in a recent clinical lecture (*Rif. Med.*, 240-241), stated the following :

He employed strychnine as a general exciter, heart-and-vaso-stimulant, in adynamia and heart failure; when these conditions occurred either in the course of acroupous pneumonia, or of typhoid fever, or in attacks of influenza or heart disease.

A possible *danger exists only in the mode of its administration*. The dispensing in pill form is to be avoided, as the dosage is not exact, and consequently leads to a culminative action of the drug. Strychnine should be administered in liquid form, either by the mouth or subcutaneously. He begins with the administration of 0.001 gramme [$\frac{1}{84}$ grain] *hypodermatically*, and increases the dose to 5, 8, 10, and 12 mgm. [$\frac{1}{12}$ — $\frac{1}{3}$ gr.] per day. In very excitable individuals the initial dose may be as small as half a milligramme [$\frac{1}{23}$ grain]. If rapid action is desirable, *two injections* can be given at the beginning, at an interval of from four to six hours.

Internally the initial dose is 1 milligramme (or even 2) [$\frac{1}{84}$ — $\frac{1}{32}$ grain], dissolved either in distilled water or aq. cinnamon, or chamomile water; which can be increased to 10, 20, 30, 40, and 50 milligrammes [$\frac{1}{6}$ to $\frac{3}{4}$ grain] per day.

Strychnine is best administered shortly before meals, if it is desired to affect the gastric functions. Administered in this way, strychnine serves several good purposes in such cases, without producing deleterious after effects; except a slight insomnia in a few instances, which condition soon disappears after the discontinuation of the drug.—*Merck's Bulletin*.

DR. E. LANG (*La Semaine Médical*) recommends the following in cutaneous diseases:

(1) ACNE:

White precipitate.....	grs. xxx. to ʒi¼
Oxide of zinc	} aa..... ʒii.ss.
Sublimed Sulphur	
Benzoated lard	} aa..... ʒvi.
Vaseline	
Balsam of Peru.....	ʒxxx.

(2) CHLOASMATA AND PIGMENT SPOTS:

White precipitate	} aa..... ʒss. to ʒi¼
Subnitrate of bismuth	
Benzoated lard.....	ʒi.
Lanoline.....	ʒv.

(3) ITCH AND PRURIGO:

Naphthol (B)	} aa..... ʒv.
Sublimed sulphur	
Prepared chalk	
Black soap	} aa..... ʒii.
Benzoated lard.....	
Lanoline.....	
Balsam of Peru.....	ʒi¼

MICROBES AND CARNIVOROUS PLANTS. BY DR. J. N. TICHOUTKINE.

The author made a series of experiments in Professor Botaline's laboratory at St. Petersburg, and came to the following conclusions:

(1) The modifications of albuminoid substances in the juice of carnivorous plants are the results of the vital action of microbes, notably of bacteria.

(2) There exists always in the juice of full-grown carnivorous plants microbes which have the property of dissolving albuminoid substances.

(3) The commencement of the modification of the albuminoid substances does not coincide with the time of secretion of the juice. The modification commences only when a sufficient number of microbes have developed in the juice.

(4) It is through the air that the microbes get to the leaves of the carnivorous plants—not, of course, to the exclusion of other ways.

(5) We are to understand by the term carnivorous plant as being a plant that absorbs products elaborated by micro-organisms.

(6) The part of the process belonging to the plant is the secretion of the juice; this juice then forms a favorable medium for the growth and function of the microbes.—*Revue Chirurgicale*. J.A.A.

THE ACTION OF ALCOHOL ON THE CIRCULATORY SYSTEM.

The internal administration of alcohol diminishes the blood pressure, in the first place as a result of dilatation of the arterials, and not because of any diminution of the force of the heart. If the latter were the case, a damming up of blood would take place in the left auricle, with a consequently increased blood pressure *there*; but the very opposite takes place, as the ventricle contracts more vigorously and drains the auricle of its contained blood.

Alcohol also acts as an analeptic—at the same time producing diminished blood pressure from a *diminished excitation of the vaso-motor centres*. The greatest amount of arterial dilatation takes place in the pelvic region.

The diminished blood pressure resulting from the cutting of the splanchnic nerve is *not* increased by the administration of alcohol. Irritation of the nerve increases the blood pressure after it has lessened by the administration of alcohol.

Alcohol has no deleterious effect either on the vaso-motor nerves or on the vagus.—*Z. Gutenkorn, in Zeitschrift für Klin. Med.*, 1892.

LEAD POISONING FROM A BULLET IN THE TIBIA

E. Kuster and L. Lewin contribute the following case (*Centralblatt für Chirurgie* for February 25th, 1893):

The patient, aged forty-eight, clerk, was shot in August, 1870, the ball lodging in the head of the tibia. The wound healed without suppuration. Patient well until January, 1888, when he was subject to severe colicky pains in the epigastrium every two weeks, followed by loss of strength, emaciation, constipation, and slight jaundice. In August the patient was confined to his bed, and shortly after trembling of the hands appeared, and, still later, a distinct blue line on the gums. Lead was found in the urine, but no albumen. In January, 1889, the head of the tibia was laid open and scraped out. The bone was soft and infiltrated with gray and blue-black spots. No bullet was found. The symptoms of lead poisoning gradually ameliorated, and by the middle of March, 1889, the colics and blue line on gums had disappeared.—*Therapeutic Gazette*.

AN OINTMENT FOR THE SKIN SPOTS OF PREGNANCY.

- R. Pure oxide of zinc, gr. iv.;
 Yellow oxide of mercury, gr. xvi.;
 Castor oil,
 Coca-butter, of each, ʒiiss.;
 Essence of roses, gtt. x.

Make an ointment, and apply, with friction, twice a day.

At night allow some of the ointment to remain on the parts affected.—
L'Union Médicale.

METHOD OF COVERING UNPIGMENTED SPOTS IN THE SKIN AFTER
BURNS, ETC.

Dr. K. Paschkis (*Med. Neuigkeiten*) employs the following procedure to cover over unpigmented spots or scars following burns. A mixture of the sulphate of baryta, yellow ochre, and water, of the color of the skin, is made and laid on in a thick layer. This is then tattooed into the skin by means of an instrument containing from three to five well-disinfected needles. In this manner he has succeeded in coloring ugly vaccination marks and spots left after burns the color of the surrounding skin.—*Lancet-Clinic.*

SODIUM IODIDE IN CHRONIC AORTITIS.

Prof. Potain, of Paris, has obtained excellent results in chronic aortitis from the use of a two per cent. aqueous solution of sodium iodide, taken in teaspoonful doses thrice daily, in a cupful of infusion of orange leaves.

To be efficacious, this treatment must be continued for several months; it may be employed during the first three weeks of every month, and suspended during the remainder of the month. In the author's cases, where a definite cure was attained, the treatment lasted about eighteen months on an average.—*Merck's Bulletin.*

LOCAL ANESTHESIA FOR MINOR OPERATIONS.

	Parts.
Menthol	I
Ether.....	15
Chloroform.....	100

Use in spray apparatus.—*Dobisch, in Medical Record.*

OBSTETRICS

IN CHARGE OF

ADAM H. WRIGHT, B.A., M.D. Tor.,

Professor of Obstetrics in the University of Toronto; Obstetrician to
the Toronto General Hospital.THE LOWEST LIMIT OF PELVIC CONTRACTION ADMITTING
OF SYMPHYSIOTOMY.

An impression prevails that symphysiotomy is the proper operative treatment for labor obstructed by a moderate degree of contraction in the pelvis, in which the other alternatives are the induction of premature labor and craniotomy. This view was expressed without contradiction at a recent meeting of a prominent medical society, at which the operation was the sole topic of discussion. Increasing experience, however, demonstrates that symphysiotomy is to be depended upon in the case of a pelvis symmetrically contracted, that a few months ago would have been thought quite impassable for a living child, even though the symphysis were cut. Leopold has recently delivered in this way a woman with a pelvic conjugate of only 6 cm., and more than a month ago, in the Philadelphia Hospital, I delivered without difficulty a rachitic dwarf, a primipara, $4\frac{1}{2}$ feet high, whose conjugate was, I think, very little, if at all, over 65 mm. The diagonal was a scant 9 cm., but the conjugato-symphyseal angle was so increased that $2\frac{1}{4}$ cm. was, in my judgment, a sum scarcely sufficient for the subtraction. To be on the safe side, I induced labor two weeks before term; then dilated the cervix, performed version after opening the symphysis, and extracted the child in a few minutes. It weighed six pounds four ounces. The head measurements were: Bi-temporal, 8 cm.; bi-parietal, 9 cm.; occipito-frontal, $11\frac{1}{2}$ cm.; occipito-frontal circumference, $33\frac{1}{2}$ cm. The woman had an absolutely afebrile convalescence, and the child is thriving.

The combination of delivery before term and symphysiotomy will give us entire control over any grade of symmetrically-contracted pelvis that we are likely to see in this country, and whenever possible the two should be combined. In a very large experience with the induction of labor from two to four weeks before term, I have found the mortality for children no greater than in delivery at full maturity, whereas the slight diminution in head diameters and the compressibility make a vast difference in the ease of delivery. Another and a very great advantage in the induction of labor when symphysiotomy is contemplated is the fact that a convenient hour can be selected by the operator for the delivery, and all preparations can be made for the appointed time, as in an abdominal section. The plan.

adopted in the case here reported, and always followed by me if practicable, was as follows: Early in the morning a bougie is inserted, and an ounce of glycerine injected alongside of it. Twenty-four hours later the lower abdomen is cleaned and shaved. By this time, if the pelvis is so contracted that the head cannot enter the inlet, the cervix will be softened, but scarcely at all dilated. The cervical canal is then dilated with three sizes of water-bags, the largest twice the size of the largest Barnes' bag, each left in for about an hour. This is most conveniently done by an assistant. At about the time that the artificial dilatation is completed, the operator arrives prepared to operate and deliver as soon as the patient is anesthetized, the vagina is disinfected, and the instruments are sterilized.—*Barton Cooke Hirst, M.D., in Medical News.*

OBSTETRIC PARALYSIS.

The pathology and etiology of this affection are clearly discussed by Dr. C. F. Carter (*Boston Medical and Surgical Journal*, May 4th, 1893). He tabulates Lovett's and Burr's reported cases and sixteen of his own, making statistics of thirty-two cases. He concludes that the upper-arm type of obstetric paralysis is due to a stretching of the upper trunk of the brachial plexus (formed from the fifth and sixth cervical nerves) during the process of delivery. This is brought about by traction on the head or pressure on the breach when the shoulder is retarded, or by traction on the shoulder when the head is retarded—not by pressure of the forceps, as often assumed. The prognosis, as a rule, is good, though recovery may be delayed for months or years. Permanent disability is rare.

The muscles paralyzed are the deltoid, supraspinatus, infraspinatus, teres minor, biceps, and brachialis anticus, with the supinators. In some of the severe cases some of the extensors of the wrist and fingers may be involved. The affected arm is held by the side in a position of internal rotation, the elbow pointing outward. The fingers are usually semiflexed. The paralysis is rarely noticed before the second or third day. After a few days the reaction of degeneration is well marked in the affected muscles, and, if one were able to test satisfactorily in such young subjects, diminution of sensation would probably be found on the outer aspect of the shoulder and upper arm, and on the radial side of the forearm.

The treatment consists in the use of passive movements, massage, and electricity (galvanism two or three times weekly through the brachial plexus and affected muscles).—*New York Medical Journal.*

DEATHS FROM PUERPERAL SEPTICEMIA.

It is quite likely that many, if not the majority, think that puerperal fever is much less common now than it was twenty years ago. It has

been proved beyond a doubt that it has been almost banished from well-regulated lying-in hospitals where the mortality was often very serious in times past. Has it diminished to any appreciable extent in private practice? I hope there is less of this terrible disease in Ontario than there was ten years ago ; but I (like many others) am in a position to know that there is still too much of it.

Dr. Robert Boxall, of the Middlesex Hospital, London, has investigated the matter, with results which are certainly very discouraging. He has compared the reports of the Registrar-General for more than forty years, and, although he acknowledges that they are especially defective in regard to puerperal fever, he quite properly contends that they will answer very well in showing comparative results in different years.

He summarizes as follows (*London Lancet*, July 1st) : " It appears that the death rate from childbirth has not been appreciably diminished so far as England and Wales are concerned, and that, as regards puerperal fever, an actual increase has taken place in the provinces. . . . Such results as have been obtained in lying-in hospitals and maternities by the adoption of antiseptic measures in the elimination of septic processes are not as yet apparent in obstetric practice generally throughout the country."

A.H.W.

TREATMENT OF RUPTURE OF THE UTERUS.

Herzfeld, of Vienna (*Centralbl. f. Gynak., Brit. Med. Jour.*), recommends treating rupture of the uterus by simply plugging the laceration with iodoform gauze. He says that plugging is always sufficient unless there is so much hemorrhage that pressure from below would be insufficient to check it. In cases where the plugging has been done, especially if aseptic, the prognosis is favorable ; if sepsis has set in, abdominal section is as unfavorable as plugging.

GYNECOLOGY

IN CHARGE OF

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ABDOMINAL SECTION FOR SUBCUTANEOUS RUPTURE OF THE SPLEEN.

A case was reported to the Clinical Society of London on the 14th of April, 1893, by Dr. W. H. Battle. "A patient who had fallen through a skylight about fifteen feet was admitted to St. Thomas' Hospital three hours after. He walked from the place of the injury, half a mile, to the hospital. The pulse was found weak, respiration shallow, and patient evidently suffering from shock. The tenth lower rib was found to be broken. Temperature was 97.6° next morning. He vomited once at eleven o'clock, pulse 120, and respirations almost entirely thoracic. Dullness was noticed on percussion, in both flanks; temperature 96°. About two o'clock in the afternoon evidences of fluid in the peritoneum were marked; the pulse had become weaker, and it was now 128. A diagnosis of rupture of the spleen was made, and it was evident that unless some means of improving the man's general condition could be found an operation would only be too likely to hasten the end.

"Four pints of a saline solution were infused, and as a consequence the pulse rate dropped to 95; the patient's color and appearance were improved. Abdominal section in the median line above the umbilicus was performed at six o'clock; seventy-five ounces of blood and blood clots were removed from the abdomen. A deep laceration of the spleen in its outer surface, extending to its anterior surface, was found, but owing to adhesions could not be brought to the surface; an attempt was therefore made to pass a ligature around the vessels. It was found necessary to make another incision further out in the loin to carry out this procedure. Stout silk was then passed and tied, and arrested the hemorrhage; the abdomen was washed out and closed. Another saline infusion, amounting to five pints, was administered into the left internal saphena vein at the ankle. In the evening bright blood began to flow from the drainage tube. The next day he was feeling very well; temperature 101.4° at 4 a.m., and 99° at 9 a.m. Later, he vomited. On the 18th, vomiting continued; this was accompanied by pain in the abdomen, with distention; the signs of the peritonitis increased. He died in the evening of the sixth day after the reception of the injury."

In the discussion, it was stated that death usually takes place in such cases in from seven minutes to half an hour. Shock is usually marked, and there may be an absence of tenderness.—*Medical Press and Circular.*

ANOTHER SUCCESSFUL GASTRO-ENTEROSTOMY.

Mr. Herbert Allingham reported to the Clinical Society of London a successful case of gastro-enterostomy. "The operation was performed for a cancer of the pyloric end of the stomach; too much of the wall of the stomach was involved to allow of the removal of the malignant mass. The patient was greatly relieved by the operation, and gained in weight, but died about five months after of a secondary deposit in the lungs."

In the discussion, those present who had had experience with this operation agreed that the sensation of hunger was usually relieved immediately after the operation.

The question of regurgitation of bile in the stomach was also taken up. Some thought that incision should be made on the posterior wall of the stomach, so as to permit of the more ready onward progress of the contents of the stomach into the jejunum when the patient is in the dorsal position. The regurgitation of bile seemed to bring on an attack similar to an ordinary bilious attack, relief following the vomiting.

GASTROTOMY FOR MASS OF HAIR IN THE STOMACH.

"Mr. Ormsby, of Dublin, recently was called to see a young lady of nineteen, who was suffering from a painful elongated transverse enlargement of the abdomen; this had occupied the epigastric and umbilical regions for two years. Various opinions had been expressed as to the nature of the growth, and operation was eventually decided upon. Under ether the abdomen was opened, and the growth was found enclosed in the stomach. Gastrotomy was performed; stomach opened to the extent of five inches, and a large black-looking body, rounded at each end, was removed; this was about twelve inches long, and nine inches in circumference; it was in shape much like a large cucumber. When examined, it was found to be composed of human hair, mixed with inspissated aliment and gastric mucus. The patient afterwards admitted that she had been eating her hair for a number of years. The patient made an excellent recovery."

HERNIAL OPENING IN THE BROAD LIGAMENT.

At the meeting of the Royal Academy of Medicine in Ireland, Dr. Alfred Smith showed a left broad ligament with a well marked hernial opening situated half an inch from the uterus, and directly under the fallopian tube. The patient died with symptoms of intestinal obstruction. At the *post-mortem* examination, it was found that six feet of the ileum had passed through this hernial opening, and was strangulated. There was a small dermoid cyst of the corresponding ovary which had become adherent to the abdominal wall, and considerably stretched the broad ligament.

—*Medical Press and Circular.*

SURGERY

IN CHARGE OF

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ELECTROLYSIS IN THE TREATMENT OF FIBROUS ANCHYLOSIS.

If one may judge by the small amount of literature presented, electricity seems still to be employed in surgery only by the gynecologist as a means of reducing fibroid tumors, fibrous adhesions, and other conditions in this special branch, and by surgeons for diagnostic and cauterizing work, for traumatic paralyses, and, perhaps, by a few in the treatment of strictures of the urethra and rectum and some other conditions; but none seem to have made use of it, except incidentally, in the treatment of restriction of motion in joints, tendons, and muscles, due to the development of new-formed fibrous tissue following traumatism, whether accidental or operative, and disease.

The electrolytic action is obtained with the galvanic current, either continuous, or what Dr. Piffard calls a fluctuating current. The mode of application briefly is as follows: I use electrodes varying in size according to the part under treatment and the extent of the adhesions; usually one large flat electrode and one ordinary sponge electrode with handle. The large one is easily made of thin sheet copper, and may be bent to any shape. It may be covered with sponge, cotton, and sheet lint, or other material, and placed without permanent covering in the dish of solution, a flat sponge or some cotton laid upon it and the part to be treated rested upon that, perhaps partly surrounded by the solution. The large electrode should be nearest the adhesions and attached to the negative pole; the small one applied to the opposite side.

Both electrodes should be wet in a salt solution, and of several solutions I have tried best results have been obtained with a rather strong one of ammonium chloride.

The electrodes applied, the current is then turned on and increased till the patient will stand no more. The amount that can be given depends on the sensibility of the part and the temperament of the patient. If applied to the same part in two healthy individuals, the amount borne by each will be found to vary very greatly. Passing a current through my

own hand I can bear not more than 10 to 12 milliampères, while I have given through the hands of another 50 milliampères with seemingly no greater discomfort.

The amount that a patient will take may be recorded from the milliamperemeter at the first and second applications; and it will be found that the same or increased amounts may be given at future applications, except in some cases. Such a record will also be found useful in preventing any attempt at malingering.

As to the strength of current necessary to dissolve adhesions I can make no statement, except that I have obtained results with a current as low as 8 to 10, and have given as high as 75 milliampères, but have noticed no proportionate increase in the dissolution. I have remarked, however, that the older the adhesions the greater the current necessary to dissolve them, and believe in a strong current for a short time rather than a weak one for a longer time.

The duration of the applications I make from ten to thirty minutes, and repeat them at intervals varying from one to five days.—*F. W. Gwyer, in Annals of Surgery.*

ON TREATMENT OF BURNS.

The profession are not yet of one mind as to the ideal dressing in recent burns. The following is a *résumé*, taken from the *Pacific Record*, of an article by Dr. K. A. Von Bardeleben (Berlin) upon this subject:

Up to our days, Stahl's burns-remedy (Ol. lini and aq. calcis ana) has occupied the foremost place in the treatment of burns. The only improvement consisted in endeavors to give some play to the antiseptic principle, and for this purpose carbolic acid or some other antiseptic was added to this remedy.

In recent times iodoform has been used in the treatment of burns in the way of a powder applied to the sore spots. Unfortunately frequent phenomena of intoxication were observed, necessitating a change of bandage accompanied by pains, but, on the other hand, demonstrating how easily medicaments are resorbed by burns to which they are applied.

Barring trifling burns, in the treatment of which collodium elasticum and argent. nitr. solutions in weak concentration find a useful application, the author recommends bismuth in powder for all other cases.

Since the beginning of the year 1889 a typical bismuth dry bandage has been used in the surgical department of the Friedrichshain Infirmary, at first in some of the patients, and later on, after having ascertained the good results, in all of the patients admitted on account of fresh burns.

After carefully cleaning, the burned places were rinsed with carbolic or salicyl. (3 per cent.) solution. Then, after removing thoroughly

all blisters and their contents, necessary antiseptic precautions being observed, an extensive bepowdering of the whole burned surface with bismuth powder is proceeded with. Then, in order to effect a permanent exclusion of the air, a bandage of Bruns' wadding is applied, which has to be renewed later when it becomes soaked, with the exception of the lowest layer of the bandage.

Subsequently the bandage was somewhat modified. After the fashion of gypsum bandages, unstarched gauze bandages were impregnated with bismuth powder to be wound around the extremities affected with burns. Later on, for the purpose of economizing and of obtaining a closer adhesion, the bismuth powder was mixed with an equal quantity of amyllum.

The advantages of this bandage treatment are the following: (1) The bandage answers the requirements of a rational antiseptic wound treatment; (2) the bandage may be left for fourteen days, while linseed oil bandage has to be changed very often in the midst of great sufferings; (3) phenomena of intoxications are never to be feared.

Sometimes transplantations of skin had to be performed. Whenever, after removing the first bandage, a probability of healing without transplantation was apparent, all further treatment was limited to the application of a simple ointment bandage with Graf's boron-vaseline, under which healing usually took place very rapidly.

THE POINT OF ELECTION FOR THE INJECTION OF IODOFORM IN TUBERCULOUS HIP DISEASE.

In urging the treatment of tuberculous disease of the hip by injections of iodoform-glycerine emulsion, Büngner (*Centralblatt für Chirurgie*) says: "It can no longer be contested that iodoform has a distinct anti-tubercular action, not only in cold abscesses, but also in tuberculosis of the joints. Instead of following the method of Krause and making the puncture for the injection above the greater trochanter, he advises the method of Küster. The spot where the femoral artery passes over the brim of the pelvis is determined, and a line drawn from it to the apex of the greater trochanter; where this line crosses the sartorius muscle at its inner border is the point where the trochar is to be introduced. The joint at this point is not only comparatively superficial, but the capsule also is thin, and there is an overlying bursa which, once in ten times, communicates with the joint cavity. A comparative test of the two methods of Krause and Küster on dead bodies gave, for the former, nineteen successes and six failures; for the latter, twenty-five successes, the fluid being well distributed in the joint, and comparatively little around the outside. A

hypodermic syringe of ten grams capacity, with a needle five to seven centimetres long, was used, five to ten grams of a 20 per cent. mixture with glycerine being injected and repeated in from one to four weeks.—*Atlanta Medical and Surgical Journal.*

NOTE.—In one case of tuberculous disease of the hip, and in three of similar disease of the knee, we have incised the joint and introduced several iodoform suppositories. These are carefully prepared, and contain ten grains of iodoform and ten grains of boracic acid. The results have been satisfactory.

L. M.S.

NOTE ON THE DIFFICULTY OF EFFECTING COMPLETE REMOVAL
OF THE NAILS.

In a paper read last November before the Royal Society, by Dr. F. A. Dixey, attention is asked to the fact that the corium underlying the epithelium of the nail is continuous with the phalanx, and that the two subjects are histologically very similar to one another.

This anatomical fact may perhaps account for the extreme difficulty which exists, especially in children, in extirpating a nail. I had recently occasion to attempt this in the case of a girl in whom I was told that two operations had failed. Although, as the operator told me, he had taken the utmost pains to secure the removal of the entire nail, fragments of a new one had been reproduced, and as they had again inflamed and become painful I was asked to attempt it the third time, on account of the disappointment which had been encountered. It may be understood that under such circumstances I took especial care to excise the whole. The child was under an anesthetic, and the circulation being controlled by an india rubber band the dissection was not obscured by blood. I removed, as I thought, everything down to the bone, and in parts even took portions of periosteum. At the sides I left nothing that could be suspected to be nail-bed. In spite, however, of all my precautions, the wound was no sooner healed than the scar, at several different points, began to form nail. It was not very much, but enough to be quite definite and to cause some irritation.—*Mr. Hutchinson, in The Archives of Surgery.*

ENUCLEATION OF CANCEROUS GLANDS FROM THE INGUINAL REGION.

Dr. Rupprecht (*Centrallb. f. Chirurgie*) recommends the following operation, which he has employed during the last ten years in twenty-three cases: Incision from the tubercle of the pubis to the anterior superior iliac spine. Second incision in the course of the large vessels extending downward from the first incision. The flaps thus formed are dissected off from subjacent tissues, and the exposed fatty layer stripped

off in all directions toward the fovea ovalis by blunt means. The saphena vein is divided at the lower angle of the wound. The entire mass of fat in which the inguinal glands are imbedded is now attached only at the point of junction of the saphena and crural veins, and is removed after ligation of the vena saphena close to the crural vein. If considerable defect of skin exists the wound is tamponed; otherwise it is sutured.—*International Journal of Surgery.*

PEDIATRICS

IN CHARGE OF

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TO WHAT EXTENT CAN EPILEPSY BE PREVENTED BY EARLY DIAGNOSIS AND TREATMENT.

Dr. Graeme M. Hammond read a paper on this subject before the New York Academy of Medicine. The early recognition of epilepsy is of great importance, for the nervous system is always injured by a convulsion. In a large proportion of cases of epilepsy, it will be found that convulsions had occurred during infancy. The form of epilepsy known as petit mal is especially liable to be overlooked. It is characterized by brief attacks of giddiness, a sudden sense of fear, twitching of certain muscles, loss of voice, or indescribable cardiac sensations. More common than these is a momentary fixed stare. A child who falls frequently without cause should receive immediate attention. Up to the age of seven years, the brain grows with great rapidity. Attacks of this character decidedly retard its growth. There is a strong tendency for functional disorders of the brain to become organic, for the delicate brain cells are easily changed. The earlier treatment is begun, the better the chance of cure. The family physician meets these cases first, and should be able to recognize them at once. It would be wise for him to instruct the mothers regarding these symptoms when a neuropathic family tendency is present.

The usual cause of convulsions is rachitis, and defective digestion. There is in some families and individuals a strong neuropathic predisposition to convulsions. This should be taken into consideration as well as the exciting cause. A convulsion should never be considered as unimportant, for no one can foresee what results may follow.

The convulsive tendency should be combated by training of body and training of mind, and by proper diet. Skim-milk, peptonized and

sterilized, if necessary, should be a large part of the diet to three years, nitrogenous food being omitted for one year, and resumed cautiously. Bromides still hold their place. No other drug gives so uniform and certain relief. In rare cases of petit mal, bromides act badly. Strychnia and phosphorus are to be selected. Anemia should be vigorously combated by proper tonics. Treatment should be continued for at least one and a half or two years after the last seizure. If the case is severe, it should be continued for four years. It need not be continued, but should be given for five or six weeks, with intervals of two months. The amount administered should be just sufficient to do the work, the bad results of overdosing being avoided. Five grains to fifteen grains three times a day are usually sufficient, and will not retard mental and physical growth.

—*Medical Review.*

CONSTIPATION.

In an excellent paper on the subject published in the *American Practitioner and News*, June 30, 1893, Dr. Skinner points out that one of the great, if not the greatest, causes of constipation is the failure to take a sufficient quantity of water. This is chiefly true in the case of those who lead inactive lives, and whose occupations call for little movement. They are noticeably small drinkers, seldom taking water except at meal times, and then drink to excess, impairing by dilution the gastric secretion. It is not easy for us to realize the amount of water thrown off by the healthy man or woman in twenty-four hours. By the kidneys, we lose 42 ounces; by the lungs, we lose 23 ounces; by the skin, we lose 15 ounces. Now, contrast this with the amount taken during the same time, and we find little enough left for the bowels under the most favorable circumstances; and when this is lessened by one-fourth or one-half, we find nothing left to keep the stools soft and in a proper condition to be, by peristalsis, packed down into the sigmoid ready for prompt and easy expulsion. The author advises the habitual drinking of water in the interval between meals as a remedy for the condition, and in a vast number of cases this is all that is required. He has the patient drink a tumbler of water about half an hour before each meal, and a fourth when retiring. Constipation in young subjects may be overcome in the same way.

A CASE OF SCURVY IN A BREAST-FED INFANT.

An interesting case of infantile scurvy is reported by Dr. Southgate, Newport, Ky., in *Archives of Pediatrics*, June, 1893. The child was about fifteen months old, and had been seen on previous occasions for eczemas and chronic indigestion. It had been fed exclusively from the breast, and the mother said she always had a plentiful supply of milk. The child's

surroundings were not of the best. The mother was a washwoman, and occupied apartments in a tenement house. The child had grown well, but was pale, and had "kernels" in his neck. When first seen by the author, he lay helpless in the cradle, listless, emaciated, and anemic; cried when handled. His legs, feet, and hands were much swollen, and seemed insensible to the prick of a needle. Blood was oozing from over an oncoming tooth; otherwise, the mouth was quite healthy. Stomach unstable, and stools offensive. Hemorrhagic spots about the size of a nickel were scattered thickly over front and back. Child presented many indications of rickets. Blood examination: Hemoglobin, 30 per cent. of normal; red corpuscles, 1,440,000 per cm.; white corpuscles, 1 to 412. Ordered salol, grs. 2, every three hours, and continued breast milk. Continued this treatment several days, when anti-scorbutic diet of cow's milk, meat juice, orange juice, and potato were given. Change in diet made Jan. 25th, and on Feb. 10th child is much improved. Hemoglobin, 40 per cent., red corpuscles, 1,500,000. Feb. 17th, hemoglobin, 60 per cent.; red corpuscles, 2,200,000. March 20th, hemoglobin, 70 per cent.; red corpuscles, 3,200,000. The mother's milk had been analyzed, and it was found to be normal.

The cause of the scurvy seemed somewhat obscure, and the author is of opinion that it might perhaps be due to tuberculous taint, as tuberculosis existed in several members of the family. The treatment throughout had been salol and the change in diet.

TREATMENT OF CHOLERA INFANTUM.

Gross, of New York (*Therap. Monatsch.*, May, 1893), who states that an exceptionally large number of cases of infantile cholera come under his notice, claims to have successfully combated this disease: first, by hygienic and dietetic measures; secondly, only by drugs. Children showing marked pyrexia attended by convulsions, but as yet no other symptoms, are subjected to a rectal irrigation of cold water, and friction with alcohol in iced water. If necessary, small doses of antipyrin are frequently administered, and should the patient then have overcome the acute onset a strict diet is enforced, to commence twenty-four hours after the attack, all milk being excluded, regardless of the child's age. On the other hand, thin gruel, boiled sugar water, or tea, are given frequently in small quantities, and salt water irrigations are administered once in twelve hours, while six minute calomel powders are given at two-hourly intervals. By these means the attack is cut short, and in twenty-four hours milk from the breast or otherwise can be given with impunity. Should, on the other hand, the malady be developed, the abstinence from milk should be longer, the injections should be made more frequently, and a sufficiency

of fresh air in or out of doors must be enjoined. In addition, calomel and salol, or the latter only in the later stages, are frequently administered, and, during recovery, hydrochloric acid and pepsin are substituted. Obstinate cases which have lapsed into a chronic condition are relieved by weak tannic acid injections, and continuous vomiting generally yields to flushing of the stomach once daily with weak hydrochloric acid, one operation generally sufficing. Should the child be first seen in a collapsed condition, the author recommends immediate warm irrigation of the stomach and rectum with hot mustard baths, and small quantities of stimulants, as even the most serious cases often improve under energetic action.—(*Epitome*) *British Medical Journal*.

PASTEURIZATION VERSUS STERILIZATION IN THE PRESERVATION OF MILK.

In a paper read before the New York Academy of Medicine, Dr. R. G. Freeman points out that pathogenic organisms can be destroyed by raising the milk to a temperature of 75°, and condemns the practice of raising the temperature to the boiling point for a greater or less length of time. Exposure to the lower temperature, which is sufficient to kill the organisms, he calls pasteurization; while to the boiling process he applies the term sterilization. The author claims that while the higher temperature must certainly kill the germs, at the same time it brings about certain changes in the milk which make it unwholesome. These changes began to take place when the temperature went above 80° C. By actual experiment, he had been able, by raising the temperature to 75° and continuing at that point, to sterilize milk which had contained the following germs: That of diphtheria, of tuberculosis, of cholera, of typhoid fever, the streptococcus pyogenes, the streptococcus pyogenes aureus. The milk should be cooled as quickly as possible.

TREATMENT OF RINGWORM.

The recent treatments of tinea tonsurans show a strong tendency toward the use of losophan, a new and very active mycotic which has been giving remarkably good results. Losophan is a tri-iodocresol, very rich in iodine (about 80 per cent.), with which, on application to dermatic lesions, it slowly parts, thus avoiding toxic effects, while making the pathological field untenable for living organisms. For these reasons, losophan is indicated in all cutaneous conditions due to the development of the trycophyton fungus, in mycosis, pityriasis, sycosis, prurigo, pediculosis, and in all of the large groups of skin diseases due to the presence of filamentous fungi or microspores. The clinical reports advise the use of losophan in one to two per cent. ointments with lanolin or vaselin. Where a wash is needed, a solution should be made of one or two parts of losophan in a

mixture of twenty-five parts of water with seventy-five parts of alcohol. The mixture keeps well. Losophan has already been tested in the treatment of phimosis and chancre. The best results were gained from a one per cent. powder dusted over the lesions.—*Albany Medical Annals*.

FETAL HYDROCEPHALUS: SPONTANEOUS CURE.

Schrader (*Centralbl. f. Gynak.*, No. 16, 1893) recently exhibited at a German society a photograph of a child taken when it was eight days old. On its scalp lay a bright red scar over two and a half inches long and one-half inch broad. It ran a little to the left of the middle line, chiefly along the sagittal, partly along the frontal, suture. The cranial vault under the scar was deficient, and the scalp seemed adherent to the periosteum. This condition indicated that very acute hydrocephalus occurred late in pregnancy, causing absorption of the cranial bones and hernia of the meninges, which healed before birth. The child was well developed and showed no signs of hydrocephalus after birth. The scar tissue turned darker and began to fall off even before the photograph was taken. The child lived and grew for a while, but died when three months old. No necropsy was allowed. The mother did not receive any kind of injury during pregnancy.—(*Epitome*) *British Medical Journal*.

PATHOLOGY

IN CHARGE OF

JOHN CAVEN, B.A., M.D., L.R.C.P. Lond.,

Professor of Pathology, University of Toronto and Ontario Veterinary College; Pathologist to Toronto General Hospital and Home for Incurables.

ESCAPE OF BACTERIA WITH THE SECRETIONS.

The question of the excretion of living bacteria from the body has given rise to many experiments. In 1882 Cohnheim suggested that the kidneys were the chief roads of exit by which invading germs were expelled. Although the secretions in health are sterile (Pasteur, Meissner, Watson Cheyne, Lister, etc.), the specific bacterium of an inoculated disease can be cultivated from the urine of the infected subject in some cases (Philippowicy, Finkler and Prior, Neumaun, etc.). But allowing that the process of obtaining them from the urine were such as would exclude the possibility of infection from the tissues, it still remains to be shown that the germs have really passed outward through an intact living membrane before that passage outward can be regarded in any sense as excretion.

That living germs enter the body through living membranes (pulmonary or intestinal) must be admitted; but so far, at least, some lesion of the membrane may always be supposed, for there is no test which can be relied upon to demonstrate its absence—a fact not to be wondered at, considering the great extent of the area to be examined, and the smallness of the lesion that might suffice for infection. But the excreting area of the kidneys, though large, is so compactly arranged that microscopical examination of the whole of it is possible, while a yet more delicate test for the presence of lesions is available.

A lesion of the renal epithelium may be imagined without albuminuria, yet albuminuria cannot be imagined without a lesion. The protoplasm of the tubules normally resists the passage of albumin from the blood into the urine; in slight albuminuria, changes not recognizable by the microscope, and predicated, then, only from their results, do undoubtedly occur, and of such a nature as to diminish that resistance. The epithelial excreting membrane is no longer intact. Hence, if bacteria are found in urine, and albumin also is present, it is impossible to assert that an intact membrane excreted them; though, at the same time, the absence of albumin does not exclude the possibility of the existence of a lesion sufficient to allow *bacteria* to pass, even where *albumin* would not.

These considerations led Sherrington to examine the somewhat conflicting evidence on the question anew. He devised a method of obtaining the urine free from the possibility of infection from the tissues. Wyssokowitsch had concluded that bacteria never reached the urine except when carried directly into it by hemorrhage from some part of the urinary tract. Sherrington therefore examined spectroscopically for hemoglobin in each case—a liberal concession to this view. The results of other investigators (Trambusti, Maffucci), who, on the contrary, denied the necessary presence of lesions, at least as detectable microscopically, he rejected on the ground that such examination of the kidneys could not be sufficiently exhaustive. Thus he relied chiefly on analysis for the proof of the presence of such lesions.

His results not only reconciled those of previous experimenters, but allow the formulation of a very attractive theory. He found that non-pathogenic bacteria do not appear in the urine at all. Of the pathogenic forms, some were not recoverable from the urine; others were found, but were accompanied by hemorrhages; while a few (*B. anthracis*, *B. pyocyaneus*, *B. mallei*, *B. murisepticus*, and a pneumo-bacillus) occurred without hemorrhages, but with a certain amount of coagulable proteid in some cases. From sixty-eight experiments he concludes:

(1) That uninjured renal excreting membrane does not allow the escape of any form of bacteria, pathogenic or non-pathogenic.

(2) That non-pathogenic forms have no power to injure the renal epithelium, and hence their eventual disappearance from the body after inoculation occurs by some other path.

(3) That pathogenic forms escape only after lesions of the urinary passages have been set up. Since such lesions do not occur until some time after intravascular inoculation, they are not the result of the direct action of the micro-organic body, but of the toxins secreted by it in its life processes.

(4) That although in those cases where the concentration of the irritant produces hemorrhage from the urinary passages the bacteria thereafter found in the urine may be only those of the escaped blood, and so have reached the urine through a rent in the excreting membrane, yet where there is no hemorrhage, but albumin is found with the bacteria, it is reasonable to suppose that the lesions of the albuminuria allowed their escape. Further, that when albumin does not occur, the interval always found between the inoculation and the appearance in the urine of bacteria, suggests that a process of intoxication of the epithelium by the soluble excreta of the bacteria is necessary before the bacteria themselves can escape.

Finally, then, the passage of bacteria through the renal excreting epithelium is not a true excretion, but is rather analogous to the passage of serum-albumin through the same membrane.

Similar results were obtained from examination of the bile in some forty-nine experiments; but the bacteria appeared in the bile more freely than in the urine. From the aqueous humor no results were obtained. In no case were the virulence or power of growth of the germs impaired, a suggestive fact for prophylaxis.—*C. S. Sherrington, in Journal of Pathology and Bacteriology* H.H.

CONTRIBUTION TO THE PATHOLOGICAL ANATOMY OF CIRRHOSIS OF THE LIVER IN MAN. W. JANOWSKI, VARSOVIE, 1893.

In this work, based upon ten cases of *biliary* cirrhosis studied at the Pathological Institute of Varsovie, the author, by comparison of these cases with results experimentally obtained by ligature of the biliary canal, has arrived at the following conclusions: The fact most constantly noted in biliary cirrhosis is the occurrence of necrotic foci situated in the peripheral parts of hepatic lobules. The number and dimensions of these foci vary markedly. One sees fewest of them if the study of the liver has been delayed for some time after the beginning of retention of bile, and every focus will disappear after a certain period. Around these necrotic areas there is infiltration and capillary hyperemia, and this is a result of the action of the necrotic areas, which act as foreign bodies upon the surrounding tissue. The prime factor favoring the formation of the

necrotic areas is the rupture of bile capillaries under increased bile pressure. This rupture is most frequently seen in the outer zone of an hepatic lobule, because it is there that increase of pressure in the bile capillaries occurs most readily; it is there that accumulation (?) of bile, with consecutive anemia and necrobiosis of surrounding parts, most often occurs. The author thinks that the toxic action of bile in the course of biliary cirrhosis is greater than usual, its properties being modified by retention. The formation of a precipitate from the bile in the shape of calculi ought also to have considerable influence in this respect. In addition to the factors already spoken of, the author makes mention of the compression of the blood capillaries by the extravasated bile. This gives rise to anemia. There results disorder of nutrition in the hepatic cells, which, on this account, submit themselves more readily to the necrosing action of the bile.

The second constant feature of these cases observed by the author is the inflammation and new formation of bile canaliculi. Infiltration is seen through the entire thickness of the walls of the bile channels; their epithelium is desquamated, and a number of cells increased. Amongst them are often seen cells with two nuclei. Infiltration takes place *around* the bile ducts, and terminates in the formation of connective tissue in their vicinity. The connective tissue becomes gradually poorer in cells. The new formation of bile ducts depends principally—almost exclusively—upon the multiplication of the epithelial cells of the original bile ducts, but the author does not believe himself justified in denying the possibility of the transformation of hepatic cells into the lining cells of biliary ducts. The characteristic disposition of the connective tissue in biliary cirrhosis depends upon its formation around the new-formed bile ducts, and in the spots where areas of necrosed liver cells have disappeared through time. Here and there, one may notice a regeneration of liver cells, as indicated by an increase in the number of cells and their nuclei.

Often flattening of cells from pressure is observed; also atrophy and a yellow coloration, sometimes intense. In biliary cirrhosis the liver is enlarged only at the beginning of the morbid process, because then the connective tissue has not become cicatricial, or contractile, and atrophy of the cells has not advanced far. On the other hand, much later, as cell atrophy goes on more and more, and the interstitial tissue becomes more and more contractile, a remarkable diminution in the size of the liver is noted.—*Rev. Intern. de Bibliog. Med.*

ABSCESSSES FOLLOWING TYPHOID FEVER.

M. Melchior gives the history of a boy eleven years old who, after typhoid fever, was attacked by a peculiar form of abscesses. They began

to develop during the first week of convalescence, and healed after three months. Six months later new abscesses appeared on the left calf and the anterior face of the right tibia. They developed very slowly, without pain or symptoms of inflammation, healed very slowly, and showed a tendency to reopen; they contained a thin, reddish pus, without special odor. From the pus Melchior cultivated short bacilli with rounded ends, resembling the bacilli of Eberth. The author has made a long series of experiments in order to ascertain whether they really were the bacilli of Eberth, or a species of bacilli resembling these; as, for instance, the bacterium coli communis. By cultivating bacterium coli communis in milk, the milk becomes solidified; when the bacterium coli communis is cultivated in bouillon containing two per cent. of milk-sugar and some chalk, lactic acid is produced, and, by its action, carbonic acid is liberated. The experiments showed that the bacilli found in the abscesses neither solidified milk nor changed milk-sugar into lactic acid. By cultivating these bacilli on agar colored by means of litmus, the colonies were not surrounded by a red halo, as occur with the bacterium coli commune. In short, they gave all the reactions of the true bacilli of Eberth, and the author therefore believes that the bacilli of Eberth may remain for a long time in the body after typhoid fever, and provoke inflammations of a specific kind.—*Hospitals-Tidende, 1892, p. 1021.*

THE BACILLUS OF INFLUENZA IN THE BLOOD OF LIVING PATIENTS.

V. P. Canon examined a large number of preparations of blood taken from patients ill with influenza of a severe type. He stained with eosin-methyl blue, and found in most cases small bacilli which were identical with those of Pfeiffer. In many instances the bacilli were noticed in small heaps; in some singly, and few in number. Using Gram's method, the germs were not stained. The investigator inoculated glycerine-agar plates with the blood, and obtained pure cultures, although the number of colonies on a plate was generally small. The urine as well as the blood was examined, and, amongst other organisms, small rods were found which were apparently identical with those of influenza. Further experiment with these is necessary, however, to establish their identity. Examination of the sweat gave a negative result.—*N. Y. Med. Monatschrift.*

MICROSCOPIC DRAWING.

Place the body of the microscope horizontal; remove the mirror; put the slide on the stage; condense the light upon it by means of the bull's-eye, taking care to centre the light; attach the concave mirror to the front of the eye-piece by means of a spring or a piece of thin wood. Have its surface at an angle of forty-five degrees with the plane of the anterior glass.

of the ocular. This will project an image of the object on the paper beneath. If the outer ring of light is circular, there will be no distortion. With a black cloth exclude all outer light, covering both your head and the instrument. Mr. Hopewell Smith draws any section easily in this manner, including magnifications of 600 diameters.—*Scientific American*

J.A.A.

THE CONTAGION OF MUMPS.

(1) The duration of the period of incubation in mumps is, in the majority of cases, from eighteen to twenty-two days, but may vary from eight to thirty days.

(2) Mumps is contagious, especially during the period of incubation, but is transmissible after cure for a period as yet undetermined.

(3) The blood and fluids extracted from the parotid and the testicle contain a special microbe, which appears to be pathogenic, but the negative results of inoculation upon animals hold this point in abeyance.

(4) The angina and swelling of the sub-maxillary glands constitute at times the initial manifestations of the disease.

(5) In certain cases of metastatic orchitis, the local tumefaction begins with an epididymitis.—*Le Courrier Médical*.

LAVERAN OF THE MICROBE OF MUMPS.

Previous work by different observers has resulted in very conflicting testimony upon this point. Laveran has examined the fluid withdrawn by capillary punctures from the parotid glands of patients affected with mumps. He has also made similar punctures in the testicle when metastatic inflammation has resulted; and has made several examinations of the blood, and one of the serum coming from an acute edema. Cultures from the parotid fluid have been positive in nine out of fourteen cases, from the testicular in three out of six, from the blood in four out of seven, and in the serous also a positive result was determined. There has always been found a certain microbe resembling a diplococcus, and generally the cultures have been pure ones. Laveran does not, however, care as yet to declare a causal relation between this particular germ and the disease.—*L'Union Médicale*.

MICRO-ORGANISMS IN TYPHUS EXANTHEMA.

MM. Curtis and Combemale, of Lille, report that they have always failed in attempts to cultivate organisms from the blood of typhus patients. On the other hand, the spleen and the ventricular fluid gave cultures upon serum-agar, and in bouillon at 37°. These cultures are made up of extremely small cocci, generally occurring as diplococci.—*Le Progrès Méd.*

Editorials.

THE MEDICAL COUNCIL AND ITS SUPPORTERS.

IN correspondence which has recently appeared references have been made to *THE CANADIAN PRACTITIONER* which are, to a certain extent, misleading. This journal has always supported the council in a general way, but has not approved of all its acts. We think it has raised the standard of medical education, it has framed an admirable curriculum, and it has done much to discourage and abolish quackery. These are matters of such paramount importance that they are worthy of consideration even by those who attack the council for alleged mistakes in other directions.

In the early days of the controversies between the two parties our sympathies were with the council, largely because we feared that the existence of that body was seriously imperilled. We endorsed the position taken by Dr. Williams—at that time the president—who conducted his case with considerable ability. When the representatives from the two sides appeared before the committee in the Legislature, it was generally recognized that the Defence Association had a strong support in the house. Probably a majority would have voted for Dr. Meacham's proposed amendments. The matter was postponed for a year to give the council a chance to act. A grand opportunity was thus afforded that body to do something to conciliate its enemies. The leader at that time was, unfortunately, Dr. Williams, who showed singularly bad judgment in practically defying the Defence Association. The members of the council appeared to think it was their duty to stand by their retiring president, and decided to concede nothing. It is true that a committee was appointed to confer with the Defence men; but, after the unanimous endorsement of the fiery address referred to, this amounted to very little. Of course concessions were afterwards offered under the presidency of Dr. Fowler, but they came too late.

For the benefit of some who do not assume a decidedly unfriendly attitude toward this journal, but, at the same time, speak of *THE PRACTITIONER* as one of the journals which has "always supported the council," we desire to quote from our first issue after the meeting of the council in 1892, as follows: "This (the resolution before referred to) is well enough as far as it goes, but it comes far short of what was expected. The desires and objects of the supporters of Dr. Meacham's proposed amendments to the Medical Act, which was introduced in the Ontario Legislature at its

last session, are well known to the members of the council, and yet they do not consider it worth their while to express their opinion on any one point raised. We are entirely opposed to many features of Dr. Meacham's bill, but we cannot shut our eyes to the fact that it contained certain clauses which are strongly supported by a large and powerful section of the profession in Ontario. We may go further—that the present constitution of the council is not just and fair in the interests of the general profession. The numbers of school men are far in excess of what they should be when compared with the numbers of the territorial representatives. This fact is simply incontrovertible, and well known to the council; and yet its members had not backbone enough to take the question up, discuss it intelligently, and express an opinion on it. The council may as well recognize the fact that the Medical Defence Association includes a number of strong men, such as Drs. McLaughlin, Coburn, Sangster, Armour, Eastwood, and many others, who are enthusiastic, united, and thoroughly in earnest. The do-nothing policy may stem the tide for a short time; but a more manly and dignified attitude is necessary to avoid defeat, if not disgrace, in the near future."

Our various comments during the ensuing year were based on the same line of argument, and our forecast of the amendments that were likely to be adopted was substantially correct. We desire to give the council full credit for the good work it has done, and to be charitable wherein it has failed to give general satisfaction. We believe it contains many able and high-minded members, who have been conscientious and faithful in the performance of their duties. At the same time, it contains a few that can well be spared, and this fact is so palpably self-evident and generally recognized that extended discussion is needless.

THE POSITION OF THE MEDICAL DEFENCE ASSOCIATION.

WE publish in full in this issue the latest manifesto issued by the Medical Defence Association of Ontario, as it appeared in the *Toronto Daily Mail*, July 28. The able secretary of the association has published many communications during the past year, but the majority have been characterized by such bitterness that they have not always been pleasant or profitable to read. The last letter, however, has no such faults. It is clean-cut, concise, slightly severe, but, on the whole, correct in its statements.

It would be unfortunate, if it were true, that a lay paper "is the only unobstructed avenue of success" to a large and influential organization in our profession. We hope, however, that before long the independent

medical journals of the province will be considered the most suitable organs for the discussion of all subjects affecting the vital interests of the medical profession. It may be unfortunate, or otherwise, that THE PRACTITIONER has not satisfied either party in the conflict of the last two years, but it does not necessarily follow that it has gone far wrong. Whether our comments be correct or not, we wish it always to be understood that our columns are open to all parties who will discuss medical questions on their merits, without indulging in offensive personalities.

We have before commented on certain changes in the amended Act, referring to the increase of the territorial representatives, and the restrictions in the functions of the school men. While we have no objections to make to Dr. Sangster's interpretation of these particulars, we regret the spirit which has inspired clause 9 of the circular. We consider that no sect or locality of physicians has any rights respecting examining boards. In all cases the best men should be appointed, regardless of all other considerations. It must be remembered that in some subjects, especially, the numbers of physicians fit to examine are exceedingly small. The council had trouble enough many years ago, but in recent years has made excellent appointments, without any regard to sectional desires or jealousies. Now, Drs. Fulton and Henry want to see the rights and privileges of the territorial divisions respected, and, more, that the "examiners from these divisions should be appointed in regular succession, an eastern or a western man, either alternately or together." Does the Defence Association wish to assist in restoring one of the most pernicious customs which the council has ever known, a custom which has produced in the past a considerable amount of log-rolling, and frequently the appointment of incompetent men as examiners?

We are glad to notice the courteous tone of Dr. Sangster towards Dr. Fowler, whom he terms "the respected ex-president" of the council. We believe that gentlemen is well entitled to the respect of all parties for his wise and judicious course during his year of office. We cannot discuss at length other portions of the letter; but we must express regrets at the references to the schools. As the powers of the educational representatives are curtailed, surely a dignified silence on the subject would not have been out of place? We also regret that "aggressive action" on the part of the association is apparently only postponed. Why not accept the amended Act as it stands, and settle on new matters of dispute that may arise in the new "parliament" that will assume control after the next election?

Of course, it must be understood that Dr. Sangster's letter is worthy of careful consideration, not simply because of the ability of the writer, but chiefly because he speaks for an organization which includes something like half the profession of Ontario.

Meetings of Medical Societies.

HURON COUNTY MEDICAL ASSOCIATION.

The regular meeting of the Huron County Medical Association was held at Seaforth on July 11th.

MORNING SESSION.

Dr. Wood, president, in the chair.

Dr. Lachlan, of Auburn, presented an interesting case of scrofula. Young lady, aged 14, with enlargement of cervical glands, one of which had suppurated. On examination no evidence of pulmonary disease was noted. The treatment had been the administration of tonics, nourishing diet, with good hygienic surroundings. A prolonged discussion followed in regard to the treatment of such cases, Drs. Campbell, Amos, Wood, Stanbury, and Smith giving their experiences, with reports of similar cases.

In answer to a question, the president stated that, in his opinion, such cases should be advised not to marry on account of the large number of tubercular cases which bear evidence of being hereditary.

Dr. Campbell reported a case of eclampsia in a patient pregnant for the eighth time; pregnancy was advanced to the seventh month. Had seen patient immediately after the first convulsion; in eight hours another severe convulsion occurred. Urine highly albuminous; administered one-eighth grain elaterium, with hydrate of chloral by rectum. Resolved to produce premature delivery; for this purpose proceeded to dilate the os uteri. This was gradually accomplished, and in a few hours patient was delivered of a living child. No convulsions after delivery. A short discussion followed on the treatment of puerperal eclampsia.

Meeting adjourned at 12.30 till afternoon.

AFTERNOON SESSION.

Dr. Smith presented the report of the special committee on legislation regarding the action of the committee in the matter of recent changes in the Medical Act, and suggesting that the thanks of the association be tendered Mr. Garrow, M.P.P., and other members of the Legislature from Huron, Bruce, and Perth, for their assistance in obtaining the recent beneficial changes in the Medical Act. Report adopted.

Dr. Amos gave a sketch of a case of hematuria in a pregnant woman two weeks before confinement; repeated bleedings occurred, owing to negative evidence. Kidney disease was excluded from the diagnosis, and a vil-

lous or papillomatous growth was regarded as the cause of the hemorrhage. Bleeding continued till some time after confinement, when it ceased.

Dr. Graham would hesitate in making a diagnosis without more knowledge of the case.

Dr. Smith suggested the possibility of a malarial cause; also relating history of a similar case, in which death revealed the cause as due to malignant disease of the bladder.

Dr. Eccles had examined the urine in Dr. Amos' case, but was unable from this to determine the source of the hemorrhage. In villous growth he thought the blood would not likely be so intimately mixed with the urine as if it came from the kidney. Dr. Elliott thought it difficult to make a diagnosis from the symptoms given, but thought washing out the bladder might be of use in diagnosis.

Dr. Bethune related a similar case in a pregnant woman, in which he curetted the bladder and removed a growth diagnosed to be villous.

Dr. Campbell presented a case of vascular growth on the face, treated by electrolysis with good results; treatment still going on. Also presented a case of obstinate intercostal neuralgia in a man in which quin. sulph., grs. x., given at bedtime, with Gross' pill in daytime, gave good results.

Dr. Campbell also presented notes of treatment of a case of uterine antifixion with cervical stenosis. Hayden's viburnum compound was first tried, with no benefit. Next scarified the cervix, using glycerine tampons, with injections of hot water; no improvement. Next dilated the uterus, packed with iodoform gauze; as the symptoms were in no way abated, tried applications of electricity, but so far with indifferent results.

Several members of the association testified to the correctness of the methods of treatment employed in this case, but all agreed as to the very unsatisfactory results of treatment in cases of dysmenorrhea from this cause.

Dr. Eccles thought the cause of pain in these cases frequently due to an imperfectly developed condition of the structures of the endometrium.

Dr. Eccles, of London, read an intensely interesting paper—five consecutive cases of fibro-myoma, with operation. These cases were of intense interest, as serving to illustrate some of the rarer forms of the disease, and also the difficulties in making a diagnosis previous to exploratory incision.

Dr. Taylor made some remarks on the treatment of fibroid disease by ergot.

Dr. Eccles said ergot was useful in the multinodular myomata, but was of no value in the rarer form of edematous fibro-myomata.

Dr. Graham asked Dr. Eccles' opinion as to the value of electricity in the treatment of fibroid. Dr. Eccles testified to the value of the current in restraining hemorrhage, but was skeptical as to its value in causing a disappearance of the growth.

Moved by Dr. Graham, seconded by Dr. Taylor, that the thanks of the association be tendered to Dr. Eccles for his attendance, and for his very valuable and interesting paper; also that Dr. Eccles be elected an honorary member of the association. Carried.

Moved by Dr. Smith, seconded by Dr. Campbell, that the secretary present to the secretary of the Chicago Medical Society the credentials of Dr. Elliott as a member in good standing of the Huron Medical Society. Carried.

On motion of Dr. Smith the association adjourned, to meet in Clinton in October.

Correspondence.

To the Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—I regret to notice, in your July number, several errors (page 546) in your report of the paper on "Bromoform."

In the first place, the report says: "It (bromoform) unfavorably influenced the general condition of younger children." Such is not my opinion; indeed, from all I have seen, its influence is favorable. Second, the report says: "Some . . . found pot. brom. and chloroform to do better." I did not state so; in fact, I know of no person of that opinion. Lastly, it is stated that in one case a patient took a fatal dose of the drug. So far from this being the case, Mr. Editor, I have yet to learn of a fatal case in the use of bromoform as a medicine.

Toronto, July 28th, 1893.

J. T. DUNCAN.

BRITISH COLUMBIA MEDICAL MATTERS.

To the Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—In the last number of THE PRACTITIONER, Dr. Milne, in reply to our joint letter appearing in a previous issue of the same journal, says: "In this province nominations of candidates are not made officially or otherwise, and Drs. Praeger and Wade are cognizant of the fact." Exactly so! That is the point! That is the precise ground we took in our letter, and it was to the breach of this custom by Dr. Milne that we took exception.

Dr. Milne denies having issued any list of names of candidates, stating that he simply gave a list of names in answer to a private communication; but the following extract from a letter written by another candidate to the

undersigned scarcely bears out Dr. Milne's disclaimer: "I quite agree with all you say, and think your letter to Milne very moderate in tone. I would sign it, only I have already written a strong expression of opinion. Milne answered me, and said he sent a list of candidates he 'heard' were in the field. He also told me he sent a fresh voting paper, and a withdrawal of the semi-official list. I have little doubt but that the election is entirely illegal, and could be upset by a more formal objection." This gentleman, it appears, had exactly the same grievance against the registrar, and protested against his excess of zeal independently of us, and long before the case referred to in our letter was brought to his notice.

Dr. Smith's report, and his eulogium of the council and its registrar, is no doubt very nice and comfortable; but has no bearing on the point at issue, and is of no interest to any one—unless it be the registrar.

Yours truly,

E. A. PRAEGER,
MARK S. WADE

Victoria, August 4th, 1893.

To the Editor of THE CANADIAN PRACTITIONER:

SIR,—Since posting you the joint reply of Dr. Wade and myself to Dr. Milne's letter in your journal respecting the recent election of the British Columbia Medical Council, I am in receipt of *The Ontario Medical Journal*, which also contains a letter from Dr. Milne, but one differing very widely in its tone from that he sent you.

I trust that you will favor me with space to remark on this. Having referred you to the very servile apology of the editor of that journal, who evidently feels proud of being "under the control of the Medical Council of the Province of British Columbia," and who further states that "to avoid all further trouble we will send all communications to Dr. McGuigan to be revised," I trust I shall have said enough to convince you that it is impossible for me to address any remarks to or take any cognizance of so narrow-minded an organ.

Dr. Milne says he has already answered us in THE PRACTITIONER. In that letter Dr. Milne practically admits the truth of the charge we brought against him, though he tries to dispose of it with a rather lame excuse (to the truth of which I hardly think he would venture to swear), for as time goes on more cases are coming to our knowledge in which the registrar furnished a list of candidates. Thus either Dr. Milne's excuse is not founded on strict facts, or, what is almost as remarkable, the instances in which he had to exhibit his courtesy by giving advice were more numerous than he has taken credit for. It is also rather astonishing that the list of names furnished by Dr. Milne contained only those of a caucus.

Our contention is that when asked who were candidates (as he says he was, by one practitioner), it would, to say the least, have been in better taste for Dr. Milne, remembering that he is the holder of a quasi-public office and practically the returning officer at the election, to have replied that every registered practitioner was eligible as a candidate, and that consequently no official list could be furnished. This would certainly have been more honorable than endeavoring to secure the election of a caucus. I join issue with Dr. Milne on his statement that he only sent the list to *one* practitioner in response to a private letter. However, as it is within the bounds of possibility that this part of the subject may yet be tested in the Supreme Court, and that Dr. Milne may have the opportunity of obtaining the opinion of a disinterested party on his action, I will not take up your space by arguing this point further.

I want, however, to call your attention to Dr. Milne's covert threat, that "were it not for taking up too much of your valuable space (*The Ontario Medical Journal*, under the control of the British Columbia Medical Council) I would show the ridiculous position these men take in endeavoring to advertise themselves." I learn for the first time, sir, that writing a letter to a medical paper is advertising. I am glad, indeed, to note that Dr. Milne has (apparently) at last adopted a high code of ethics, for, if my memory does not serve me very false, Dr. Milne about this time last year used a *lay* paper for the purpose of discussing a medical question, and attacked a prominent member of the profession in this province in an undignified manner, and, in effect, successfully *advertised himself* out of his position as health officer. I repeat that I rejoice to think that the registrar's views have now undergone such a change as to make advertising no longer compatible with registration; but has he not now gone to the other extreme?

Dr. Milne says it is only the work of a "few disgruntled and disappointed men who imagine that he is the Medical Council," etc. Now here, again, I join issue with him, and say that I have not for one moment considered him the whole council. My anxiety is that he should be made to understand very clearly that he is not, but that while he remains an officer of that body he must behave with something like decorum. Dr. Milne should have abstained from making charges of exaggeration and misrepresentation, for frequently, like a boomerang, they come back to the person himself. Dr. Milne should at least have allowed the events of 1892 to be forgotten before he makes charges of this nature against others. Dr. Milne should have borne in mind that the point at issue is confined to very narrow limits, *i.e.*, whether he intentionally or otherwise misused his official position for the purpose of securing the election of himself and a caucus to work with him? and that no amount of abuse or insinuations

from him can answer that question, even though written to a journal "under the control of the British Columbia Medical Council."

Dr. Milne says that we are "disgruntled (whatever that may mean) and disappointed men," and infers that we should not be listened to. The only sense in which I am disappointed is that the registrar should have degraded his office, as he undoubtedly has done.

It must be very soothing to his feelings to be whitewashed by the president of the council, but I do not imagine the profession generally will attach much weight to the opinions of the council; none of its members, with one exception, having succeeded in obtaining any favorable notoriety outside of their own small cities.

I imagine that as soon as the profession here becomes alive to the fact that *The Ontario Medical Journal* is muzzled for the benefit of the British Columbia Medical Council, we shall have to look elsewhere for paper for starting our fires. Mine has always come wrapped up in a "goody-goody" Sunday-school paper (probably to meet the wishes of the British Columbia Medical Council), and has been handed to my Chinaman for fire lighting, but he has simply shrugged his shoulders and tossed it aside, saying, "Not muchee good, I tink."

E. A. PRAEGER.

Nanaimo, B.C., August 14, 1893.

(From the *Toronto Mail*, July 28th, 1893.)

TO THE MEMBERS OF THE MEDICAL DEFENCE ASSOCIATION.

GENTLEMEN,—I have been instructed by the executive of our association to report to you through the medium of the press—which is the only unobstructed avenue of access to you, at present, within our reach—the results of our first year's operations, and, especially, the issue of our efforts to secure such amendments to the Ontario Medical Act as seemed to be desirable in the interests of the profession. As you will observe, the changes in the law which were sought for, and procured, bear almost exclusively on the constitution and powers of the Medical Council. They are briefly as follows :

(1) We have changed the basis of representation in the council and increased the profession's contingent therein from twelve to seventeen members—the other elements remaining as before.

(2) We have secured the suspension of both the assessment and the coercive clauses of the Medical Act, and this—not merely by the grace of the Medical Council and during its pleasure—but by Act of Parliament, and in a form practically equivalent to their repeal.

(3) We have secured from the Legislature a full and explicit recognition of the principle—for which we were mainly contending—that “there shall be no taxation of the profession except by its own representatives.”

(4) We have secured an enactment giving to the elected members of council, and to them alone, the power of deciding whether the suspended clauses shall forever remain inoperative or not. Moreover, should these at any time, or on any special occasion, decide to levy a money contribution on the profession, they have the sole power of determining the amount (within the limit of an annual \$2), the conditions on which they agree to assess it, and the mode of its collection.

(5) By securing the exclusion of the appointed members of the council from all interference with the assessment or collection of professional taxes, we have merely restricted their functions. Moreover, having conceded to us the principle which this involves, the Legislature must inevitably, as soon as the matter is pressed on its attention, equally exclude them from any vote on questions involving the expenditure of professional funds.

(6) We have shortened the council's term of office to four years, and, by securing a new election in 1894, we have had the present council dismissed one year before its appointed time.

(7) We have removed from the council the power of playing fast and loose with the electorate in regard to notices of territorial elections. The registrar is hereafter constrained to notify, by letter or by postal card, every practitioner in the province of an impending election not less than forty, nor more than sixty, days prior to the date of receiving nominations.

(8) The council can never again repeat the procedure practised on Dr. Shaw and Dr. Sloan, or in any way settle disputed elections to suit its own views, since these are henceforth subject only to judicial decision.

(9) By increasing the number of the profession's representatives on the Board of Examiners, we have broken what almost amounted to a monopoly of these appointments by the schools. We have now restored the rights of the profession in this respect.

(10) We have, as a result of the whole, rudely disillusioned the Ontario Medical Council of its pet fancy, that, in its present composite form, it can successfully pose as the “Parliament of the Profession,” or the “Representative Body of the Profession,” and, in that capacity, persuade the Legislature not to give effect to any medical measure or enactment except such as are initiated or endorsed by it.

Although in our bill we ask for the exclusion of all appointed members from the council, we had agreed, as a compromise, before it was sent to committee, to the retention of the four university representatives, but we were led to expect that the functions of these should be strictly limited to

matters of curriculum. Section 6, Sir Oliver Mowat's substitute for our proposition, is not distinctly so restrictive, but, besides giving us much, it obviously contains the germ of all we asked for, and the full development of this is only a matter of time.

It will be thus seen that the Medical Defence Association has already engraved its mark broadly and deeply, and, we trust, also beneficially, on the medical legislation of Ontario. Notwithstanding the opinion ventured by the respected ex-president of the council, that the Legislature had refused to make radical alterations in the law, we think that the amendments secured are so vital in character, and so far-reaching in effect, as to strike to the very root of the council's constitution. Though not quite prepared to accept the changes obtained as a settlement in full of our claims, we are eminently well satisfied with the results of our first year's efforts. We have won a great victory over a very powerful array of hostile forces, and we feel that we can honestly felicitate ourselves and our association on the brilliant success of the campaign, and also congratulate the profession at large on the happy removal of the main causes of irritation and strife heretofore producing dissension in our ranks. We gratefully acknowledge our deep obligations to the Ontario Government and to the Legislature for the patient hearing given to our complaints, and for their impartial and enlightened endeavors to remove the worst of our grievances, as far as these were within their reasonable control.

I am further directed to state for your information, and also in order to allay the solicitude developed in the Medical Council during its recent meeting as to the numerical strength of our association, that our enrolled membership now numbers 1,129. Of the printed post-cards issued by us to the profession, only 1,226 were returned; 1,136 came back dated and signed, and in nearly every instance answered affirmatively as to each question, and in every case answered "yes" as to the first and last questions. These names were enrolled. The remaining ninety, though answered "yes" in many instances as to some of the questions, were, through being unsigned or blank, or negative as to the essential questions, counted against us. One gentleman in the county of Lambton has since withdrawn his name without assigning any reason. Of the sixty-two gentlemen in Toronto who joined our association, six subsequently wrote to ask that their names be erased from our lists, in every case professing continued sympathy and agreement with our movement, but declining—as did a number of others in Toronto, who did not return the cards at all—to be publicly identified with us because of "the intensely bitter feeling manifested by the men connected with the medical schools towards all persons sympathizing with the association." These seven withdrawals are all that we have any knowledge of. I may further add, for the solace of those

concerned, that the returned cards were taken to Toronto, and carried to the House, under the impression that the committee might ask to examine them. No request to that effect being made, they were the following morning submitted to the inspection of Dr. Angus McKay, M.P.P., of Ingersoll, who was invited to examine them, and was at liberty to count them had he been so inclined.

As explained in our circular, last January, the "mission" of the Medical Defence Association will not be fully accomplished until the Medical Council shall have been made strictly elective and representative. Until that end is secured, it will not cease to exist. There is no longer, however, immediate need for aggressive action on its part. It has obtained very large concessions from the Legislature, in the removal or the mitigation of the evils of which it complained, and for a time, at least, it may profitably content itself with an attitude of alert watchfulness. The legislation it has secured is, at once, an evidence of its power and a pledge to the profession of the purity and integrity of its aim. It will now, therefore, lie comparatively dormant until occasion arises for its further active interference. Means will be found to secure the full discussion of the issues involved in the elections of next spring. Meanwhile, the executive beg you individually to remain true to the cause you have espoused. The ultimate independence of the profession is assured if we stand to our guns. It is hoped that in your respective neighborhoods you will be centres of intelligence as to the moderation and justice of our claims. Many of our professional confrères are not with us, because they have given little or no thought to the matters in dispute. Not a few are opposed to our contentions because they are not yet fully emancipated from habits of mental subordination, contracted during attendance at college. Perhaps a still larger number side with the educational bodies in return for favors received, or in anticipation of favors to come. It is deplorable that so many medical men in our province are moved by sympathies and influences that are extra-professional, and are thus led to lend themselves to the furtherance of the selfish ends of the schools. The school and university examinerships, by means of which these institutions have systematically sought to secure extraneous support, have, because of the aim and manner of their distribution, long since ceased to be a distinction, and, by sensible men, can scarcely any longer be regarded even as a compliment.

JOHN H. SANGSTER,
Secretary Medical Defence Association.

Port Perry, July 24th, 1893.

Book Reviews.

- REPORT TO THE COUNCIL OF KING'S COLLEGE, London, on the Bacteriological Department, from Prof. Crookshank.
- CREMATION AND ITS IMPORTANCE IN CHOLERA. By Robert Newman, M.D., New York. Reprinted from *The Sanitarian*.
- GALLACETOPHENONE, a new dermato-therapeutic agent. By Dr. Hermann Goldenburg, New York. Reprinted from *New York Medical Journal*.
- THE PREVENTION AND CORRECTION OF DEFORMITY OF HIP DISEASE. By B. E. McKenzie, B.A., M.D., Toronto. Reprinted from the *Canada Lancet*.
- PRACTICAL DETAILS IN THE PREPARATION OF PLASTER OF PARIS BANDAGES. By Dr. H. Augustus Wilson. Reprinted from Philadelphia Poly-clinic.
- ON THE RELATION OF ECZEMA, WITH DISTURBANCES OF THE NERVOUS SYSTEM. By Dr. L. Duncan Bulkley, A.M., M.D. Reprinted from *The Medical News*.
- CLINICAL STUDY OF AN ANALYSIS OF 1000 CASES OF PSORIASIS. By L. Duncan Bulkley, A.M., M.D., New York. Reprinted from *Maryland Medical Journal*.
- THE INTERNAL TREATMENT OF LUPUS ERYTHEMATOSUS WITH PHOSPHORUS. By Dr. L. Duncan Bulkley, A.M., M.D., New York. Reprinted from *The American Journal of the Medical Sciences*.
- FREE INCISION OF ABSCESS OF OSTITIS OF HIP ; closure without drainage. By H. Augustus Wilson, M.D., Philadelphia. Reprinted from Transactions of the Philadelphia County Medical Society.
- THE PRESENT STATUS OF ELECTROLYSIS IN THE TREATMENT OF URETHRAL STRICTURES. By Robert Newman, M.D., New York. Reprinted from the *Journal of the American Medical Association*.
- EXTRACTION OF STEEL FROM THE INTERIOR OF THE EYE WITH THE ELECTRO-MAGNET. By Dr. Ahern A. Hubbell, Buffalo. Reprinted from the Transactions of the New York State Medical Association.

Medical Items.

DR. CHAS. W. COVERNTON, who has been in England for some time, returned to Toronto, August 5th.

PROFESSOR OSLER, of Baltimore, spent a couple of weeks in Toronto, and left for Montreal and the White Mountains, August 10th.

DR. CHARLES B. PENROSE has been elected professor of gynecology in the University of Pennsylvania, in the place of Dr. Goodell, resigned.

DRS. IRVING H. CAMERON and GEO. A. PETERS left Toronto, July 21st, to attend the meeting of the British Medical Association in Newcastle-on-Tyne.

THE annual meeting of the Dominion Medical Association will be held in London, September 20th and 21st, under the presidency of Dr. Chas. Sheard, of Toronto. A very interesting programme is expected.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—The third annual meeting of the American Electro-Therapeutic Association will be held in Chicago, September 12th, 13th, and 14th, at Appollo Hall, Central Music Hall Block.

DR. WILLIAM GOODELL, professor of gynecology in the University of Pennsylvania for many years, has resigned. The trustees accepted his resignation "with regret," and elected him honorary professor of gynecology, with the right of lecturing.

DR. EDWARD FARRELL, of Halifax, in a letter to the *Maritime Medical News* respecting the Johns Hopkins Hospital, of Baltimore, says: "In the medical department the Canadian visitor feels at home, for it is in charge of our distinguished fellow-countryman, Dr. Osler, late of Montreal. One cannot help feeling proud of the honor he reflects upon the profession in Canada by the splendid reputation he is making in his new field of labor."

WE have much pleasure in announcing that Dr. J. E. Graham, of Toronto, has passed the examination for M.R.C.P. Lond. He passed his final for M.B. in the University of Toronto in 1870, went to England and passed for L.R.C.P., London, in 1871. Since he commenced practice in Toronto he has steadily forged to the front, and is now well known in Canada, and other parts of the world, as a writer and teacher of medicine, and also as an able consulting physician. His numerous friends will rejoice at the distinction he has attained in becoming a member (by examination) of the Royal College of Physicians of London.

DR. WILLIAM WHITE, in his recent article on the late Dr. Agnew, relates the following incident: Sir Joseph Lister once told me that during his very early days in Edinburgh, when he was still uncertain whether to remain there or to begin his work elsewhere, he consulted Mr. Syme. The latter told him that he would probably do well to stay there, but remarked that it really seemed as though there were not much left to do in the way of advancing surgical science, little thinking at the time that the young man he was talking to, his future son-in-law, would, almost alone and unaided, effect the greatest revolution in surgery, and bring about the greatest step in advance which has been made since Harvey discovered the circulation of the blood.

DR. WILLIAM WHITE (*University Medical Magazine*) relates the following anecdote respecting the late Dr. Agnew: A man residing in Williamsport had half swallowed his artificial denture, which became impacted in the esophagus. He was sent down to Dr. Agnew, who met him at the Colonnade Hotel and extracted the plate. An enterprising reporter who heard of it rang Dr. Agnew's bell at one o'clock the following morning. Mrs. Agnew, who often interposed between her husband and unnecessary demands upon his time and strength, spoke to the visitor from the window. He said he had learned that

there was a man in town with a set of teeth in his throat, and he wanted to get the particulars. She reported this to Dr. Agnew and asked what she should say. He said: "Tell him that if he doesn't go away from here promptly there will be another man in town in a few minutes with a set of teeth in his throat."

A SAD and unusual accident is reported to have occurred recently in the operating theatre of one of the London hospitals. One of the surgeons was engaged in sewing up the wound after a laparotomy, and, while in the course of doing so, he seems to have given a flourish to the needle in his hand, which penetrated one of the eyes of his assistant. The latter continued for some moments to attend his duties, but was afterward compelled, owing to the pain in his eye, to leave the side of the operating table and sit down on one of the benches in the theatre. As soon as the operation had been completed, the surgeon examined the injured eye of his assistant, and found that the lens was lying outside the organ, the sclerotic extensively torn, and the vitreous protruding.

NO "SUN-DOWN" MEDICAL STUDENTS IN NEW YORK.—The *Sun* has made a fitting answer to the following query:

"Will you, please inform me if there is a medical school in New York in which the lectures for the first year are given in the evening or any time after 3 p.m.?"

DUFFY."

The *Sun's* reply is as follows: "Duffy, you and dozens of other 'would-be doctors' think you can study medicine in a happy-go-lucky way the law-pills study law—lectures in the afternoon, office work in the morning. You must give up that idea at once. Medicine requires twenty-five hours out of twenty-four, and more on Sundays and holidays. The lectures in every medical school are given when the professors and lecturers can find time for them. They're given in the morning, and in the afternoon, and in the evening; and some of the private 'quizzes' begin at 10.30 or 11 p.m., and stop in time to get ready for breakfast, if you dress quickly. Now, Duffy, if you ask because you think medicine is a snap like these afternoon law schools, you'd better keep out of it; but if you can stand the pace, and ask simply because you're ignorant, why, go ahead, and with good health and hard work you may get your license to 'kill, kill, kill, kill, kill.'"

A NEW TREATMENT FOR CHLOROFORM SYNCOPE.—The method of treating cases of chloroform syncope resorted to in the clinique of Prof. Koenig, of Gottingen, is said to have given very good results, and as it is simple enough it may be worth trying. It consists in applying manual compression over the cardiac region some thirty or forty times a minute, another assistant compressing the thorax as a whole at regular intervals in order to facilitate respiration. The compression is claimed to have for effect to empty the right ventricle, which, in these cases, is engorged with blood, and thus to bring about a return of the circulation. Prof. Koenig's assistant, Dr. Maas, recommends pressure more frequently repeated, and at much shorter intervals, and by this means he succeeded in reviving two patients who had shown no signs of improvement.

under the original plan. The operator stands to the left of the patient and presses the thumb deeply at a point midway between the apex beat and the edge of the sternum, repeating the process about 120 times a minute. Almost at once the dilated pupils contract, and the presence of an artificial carotid pulse can be felt. After a time spontaneous respiratory effects are noticed, which are the signal for discontinuing the pressure and the artificial respiration, so long as the contraction of the pupils is maintained and the respiratory effects do not again cease.—*West Medical Reporter*.

AS a fitting sequence to the above editorial comes the following, in a later number of the same journal :

“OPERATING UNDER GLASS.—Some surgeons, especially those abroad, whose antiseptic technique has reached such a fine state of elaborateness, will probably be glad to hear that quite a novel suggestion has just been carried out to keep lively germs from feasting in wounds made by operators. We learn that the faculty of medicine at Madrid have just inaugurated a new antiseptic operating theatre, to which the cognomen ‘Quirofano,’ or ‘Transparent surgery,’ has been given. The principle is novel. The spectators are separated from the patient and the surgeon and his assistants by a wall of glass, through which it is possible to follow the details of the operation and to hear the remarks of the professor. Everything, saving what is absolutely necessary, is, by this means kept isolated from the patient. Before very long, perhaps we shall hear of operations being done under glass; that is to say, of every ideal operating theatre being provided with a glass chamber fixed in the centre of the floor—a sort of antiseptic conservatory, where the surgeon and his assistants can shut themselves in with the patient until the operation is completed. The transcendental antisepticism of some antiseptic enthusiasts is apparently illimitable, but there are grounds for astonishment that this latest antiseptic novelty should have originated in Spain, where, judging from past experience, the antiseptic treatment of wounds has never been much in vogue.”

Superficial show seems to take the place of depth of mind and common sense in these later days. After the ovary craze came the appendix craze, and now it seems as if we were drifting into a craze for stitching movable kidneys. What next?

BREVITY IN MEDICAL LITERATURE.—In an editorial in the *Medical Press* you will find the following: “Attention has recently been drawn to the want of condensation in medical articles. A physician has to report a case or read a paper at a medical meeting, and he too often thinks that he will be heard for his much speaking, and feels dissatisfied if his contribution to medical science has not occupied at least half an hour in the reading. We find the chaff round the proverbial grain of wheat in more than usual abundance in those who commence their paper with numerous extracts from text-books and a wearisome statement of details of the case, and compliments to those who saw the case, from the clinical clerk and the trained nurse to the distinguished colleagues who fully approved and coincided with the treatment of the case by the eminent physician who elaborated the paper. Hardly worse is the brilliant operative surgeon who gives the regional anatomy

of the part operated on and commences to tell the many different ways he might have treated the case, and the comparatively poor results which would have followed any plan but that adopted by him with intuitive surgical acumen. Antiseptics furnish abundant material for padding. He tells of the relative merits of the discarded ones and the surprising advantages of the latest synthetic drug from Hamburg. He revels in antiseptics, they intoxicate him, and his garrulity and verbosity find scope in describing how he sterilized himself, his clothes, his instruments, his operating theatre, his patient, his attendants. Ligatures, vegetable, animal, and metallic, have likewise gone through the burning fiery furnace, and all must be recounted. The paper proceeds with a glowing account of how, thanks to the antiseptic dressings and antipyretic remedies, the temperature never rose above normal, but that, unfortunately, owing to some inherited delicacy, the patient succumbed, and the specimen exhibited is a complete proof of the diagnostic power, skill, and so forth of the surgeon, and an undoubted evidence of the value of antiseptics, antipyretics, and all such modern remedies, and in every sense conclusive that we have attained to perfection, and that we are in the golden age of medicine. Cannot a paper, telling a plain story without garnishing of text-books, anatomical details, or such information as all decently educated medical possess, be read and published? It would tend to spread information, make journals less bulky and more readable, and altogether benefit medicine."

THE INTERNATIONAL MEDICAL CONGRESS.—From Rome, under date the 17th ult., *The Lancet's* correspondent writes: "There can now be no doubt that in point of numbers alone, to say nothing of the importance of the monographs which were announced in my last communication as being expected from such *dii majorum gentium* of medicine as Virchow, Charcot, and Nothnagel, the coming congress will be superior to the most frequented of its ten predecessors. In the first place, take Italy herself. There are about 20,000 possessors of medical diplomas in the peninsula, and of these it is safe to assume that no fewer than one-fourth will make an appearance at the sections. To these 5,000 Italian medical men may safely be added the 3,000 practitioners and teachers of other nationalities who are already pledged to come, to say nothing of the fact that 'adesioni' to the number of 3,000 more are all but committed to be present. Allowing for abstentions and 'false starts' due to unforeseen causes, which affect no profession more than the medical, we may deduct 1,000 from the 11,000 thus compiled, and the balance of 10,000 'Congressionisti' remains—a total exceeding by more than 4,000 the attendance at the Berlin Congress in 1890. It is, I find, from Germany that the majority of the foreign participants at the sittings will come. Certainly, there is nothing of that international jealousy between Italy and the two other members of the Triple Alliance that caused French representatives to be 'conspicuous by their absence' at the Berlin Congress. America also, both from her northern and southern divisions, will send many delegates—the physicians and surgeons of the United States especially."

A cable despatch from Rome, dated August 2nd, reports that the congress has been postponed until April next by reason of the prevalence of cholera.—*Medical Record.*