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PATHOLOGICAL REPORT ON A CASE OF SARCOMA OF THE KIDNEY.

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Permission was obtained with difficulty for a partial autopsy only at the last moment, and on this account, some points of interest may have been overlooked.

The following is an analysis of the necropsy, and the histological findings.

Body of an emaciated female child, about 2 1-2 years. The skin presented a peculiar waxy appearance, and the absence of fat was marked throughout. The right kidney occupied almost entirely the abdominal cavity, and lay behind the ascending colon. At the right crus of the diaphragm, was a mass the size and shape of a large pear, the apex of which reached to the hilus of the kidney, without apparently involving the renal vein, or the vena cava. This homogeneous mass was composed of a very soft whitish tissue. No enlargement of the retroperitoneal or mesenteric glands could be felt. There were no adhesions present in the abdominal cavity, and the kidney mass was easily extracted. The ureter was not enlarged. On cutting through the diaphragm, the entire right lung with the exception of a small area in the upper lobe, was replaced by the tumor tissue, which it was impossible to remove intact.

The left lung was everywhere studded with whitish metastatic nodules. No other metastases were found in any part of

the body. The left kidney and other organs, were apparently normal. Gross appearance of the right kidney: weight 1167 gram, measuring 19x13x10 c.m. and reniform in appearance. Anterior surface: At the upper pole there are a few nodular outgrowths, and the suprarenal lies in its normal position and is intact. The centre is slightly lobular, while the lower part is greatly enlarged, and presents a smooth capsule.

Posterior surface: There are several small undulations at the lower pole, but otherwise the surface is smooth.

The hilus has to some extent disappeared owing to the marked hypertrophy of the lips, especially the lower. The relation of the vein, artery and duct is well shown, being widely separated from each other by the growth. The duct from the artery by 5.5 c.m. The surface coloration of a greyish white with patches of a light pink, is due to the white of the new growth and capsule, in contrast with the blood distribution.

On section it is seen that the neoplastic tissue has replaced the kidney parenchyma, with the exception of one or two small scarcely perceptible areas at the border. The tumor growth is very soft, of a greyish white color, and of a similar character throughout. At both poles there are a few small patches of brownish pigmentation: due, as is shown microscopically, to degeneration in an area of hemorrhage.

The kidney capsule is slightly thickened and intact.

The left lung shows beautifully the secondary masses, which everywhere stud the surface. The pleura overlying the pulmonary, is a mixture of grey and pink, and this contrasts with the white of the neoplastic masses. The organ makes a perfect specimen, and on this account has not been sectioned.

The right lung, as mentioned above, was almost entirely replaced by the new growth. Sections from the metastases were obtained from this organ.

MICROSCOPIC SECTIONS.

Low power: The predominant field is composed of grape-like bunches of the neoplastic cells, separated from each other, and supported by connective tissue. Numerous blood vessels traverse these strands of connective tissue, and lose themselves in the spaces that exist within the groups of new growth cells.

High power: The stroma varies from tough fibrous bands to a cellular network, which in places becomes rather intimately mixed with the typical cells of the growth itself. In some fields this cellular stroma assumes a somewhat round-celled sarcomatous appearance.

The round cell is the predominant feature of the growth, though there are a few oblong rather than spindle. In both types the nuclei are large and fragmentary from division and degeneration.

Mitotic figures are few, and the character of the nuclei suggests rapid and direct cell division. In many no protoplasm can be demonstrated, in others this is represented by a narrow margin staining faintly with eosin.

The grouping of the cells is in many fields distinctly glandular. Within the sarcomatous areas the blood vessels of the stroma merge into large vascular spaces and, while lined in some places by a thin, scarcely evident endothelium, usually the tumor cells from the sole wall to the blood channel.

Generally speaking the fields taken from different sections correspond closely. Nowhere was there found any evidence of other types of tissue, as muscle cells, cartilage, etc., nor were there any remains of the kidney parenchyma within the areas of new growth.

Sections taken from different areas failed to show any renal tissue, with the exception of those taken from the suspicious area close to the border mentioned in the gross description. Here the growth is confined by strong fibrous bands. Beyond this is an extensive area of sclerosis in which figure only the remains of tubules, and malpighian bodies. Gradually the amount of fibrosis lessens, and the parenchyma approaches to the normal as the distance from the sarcoma cells increases. Invasion of the degenerated epithelium by fibro blasts is shown in many fields.

The metastases in the lung show an almost identical reproduction of the primary focus, in type of cell and arrangement. The only difference that might be noted is the absence of the tougher fibrous tissue, the connective tissue being less in amount and more cellular in character.

With the idea of correlating some of the facts of the above case, with those reported by others, I have attempted in the following paragraphs to deal in a very incomplete fashion, with some of the data compiled. At the present time the clinical management of renal growths does not seem to be founded upon a definite pathological understanding of the conditions. In this connection Bland Sutton in his "Tumors, Innocent and Malignant" states that "it is earnestly to be hoped that in future full details of every case may be recorded until sufficient accurate data shall have accumulated to allow of the formation of

satisfactory pathological generalizations." Apparently it must be from the recent cases, and from those to be reported upon in the future, that these can be compiled, for the majority of the reports, in all but late years, fall so far short of the requirements, of an accurate and complete analysis, that they are practically valueless beyond a certain amount of clinical interest. Kelynack, in his treatise on Renal Growths, remarks that at the very outset we are baffled by the confusion resulting from the use, and the misuse of terms. "Much of the material compiled is rendered almost useless for satisfactory comparison in a great measure through faulty or misleading nomenclature."

ETIOLOGY.

The causative agents, as insisted upon by various authors, are large in number.

Cohnheim's theory of misplaced embryonic tissue—faulty segmentation of the provertebral somites, and consequent inclusion of some of these cells in the primitive kidney—seems especially applicable to those cases where, in addition to the sarcomatous tissue, muscle fibre, cartilage, bone, etc., is found.

Ebert, Osler, Gardner, Jacobi, and others support the embryonic theory, with slight modifications.

Trauma, despite the protected position of the kidney in many of the cases reported upon, has been especially emphasized.

In Walker's collection of 142 cases of renal sarcoma, trauma as a marked feature, such as a kick from a horse, blow; etc., is mentioned in 30. Other reports lay equal stress upon this point.

Weigert mentions the exanthemata as one of the incidents frequently preceding the growth.

Calculi: Bright, Morris, and others have reported cases where this factor seemed to be of undoubted etiological importance.

Other factors have in different reports been mentioned, but the above seem to have been most frequently of significance.

Among the predisposing influences are age, sex, and race, though the first is by far the most important. Upon this point there is great uniformity of opinion. Generally speaking the frequency increases from uterine life to six months; from six months to four years the percentage is much higher, and after four years it drops away, a distant period being marked by the 8th year. In fact after this age sarcoma of the kidney is extremely rare in comparison with the foregoing years.

Walker, in a collection of 138 cases, tabulates these as follows:—

7 to 8 months in utero. 2.17 per cent.	4 to 5 years..... 9.42 per cent.
Birth 6.52 “ “	5 to 6 “ 7.24 “ “
Under 6 months 5.07 “ “	6 to 7 “ 4.34 “ “
6 months to 1 year ... 13.04 “ “	7 to 8 “ 2.17 “ “
1 to 2 years 19.56 “ “	8 to 9 “ 0 “ “
2 to 3 “ 13.76 “ “	9 to 10 “72 “ “
3 to 4 “ 14.49 “ “	12 to 14 “ 1.44 “ “

Rosenstein in 30 cases includes 12 between the ages of 10 and 80, of which 6 are given as occurring between 40 to 60 years.

These cases are, I think open to criticism, and a possible diagnosis of hypernephroma which, as I will mention, occurs in adult life. Other reports, where a comparatively large percentage occurs in adult life, would come under the same objection.

Starr in a series of 54 cases gives the following:—

Under 1 year	9 cases
1 to 3 years.....	17 “
3 to 5 “	18 “
5 to 8 “	6 “
8 to 12 “	4 “

SEX: The concensus of opinion seems to favor greater frequency in the male. Birch-Hirschfield opposes this, and endeavors to explain a greater proportion in females, by an earlier disappearance of the wolffian body in this sex.

Kelynack in his book Renal Growths, page 30, gives the different collections of cases tabulated according to age.

From the numerous etiological data it seems possible to state:

First: That we know no more about the cause of pure renal sarcoma, than sarcoma found elsewhere.

Second: That in those tumors presenting types of tissue in addition to the sarcoma cells, the growth probably originated to some extent, from misplaced embryonic tissue.

Third: That the stimuli whatever they are, needed to irritate the tissues into rapid growth, are most frequently obtained during the early years of life.

Fourth: There seems to be no reason to exclude the pure forms from an embryonic origin, inasmuch as the sarcoma cells may completely outgrow the other forms of tissue.

Taking for granted that many of the sarcomata of the kid-

ney, are derived from embryonic inclusions, and also, that the hypernephroma arise from misplaced adrenal rests, one seems at a loss to explain why, in the first place, the growth should be confined so carefully, to the early years of life, and, in the second to adult life.

Facts of this character, added to such results as published, by Ehrlich and other investigators, on the gradual appearance of sarcoma, following a transplantation of carcinoma, seem to render untenable any of the usual theories regarding the etiology of new growths, as trauma, chronic inflammation, parasites, etc. In the search for an adequate theory for the origin of new growths, these opposing data seem to drive one to a study of the controlling forces of metabolism, where such features as chronic inflammation, trauma, parasites, embryonic inclusions, etc., are at best auxiliary or possibly incidental.

GROSS PATHOLOGY.

Of the 142 cases of Dr. Walker's report, 119 had some pathological description. Some of the points given are as follows:—The colon in 27 cases passed in front of the tumor; possibly in some instances this condition obtained and remained unreported. In those cases where the tumor was very large the intestine was flattened, and would have given no tympany. Adhesions to the surrounding structures were noted in 45 cases, that to the peritoneum being most common. Next in frequency come the stomach, liver, intestines, vena cava, pancreas and spleen. Thrombosis occurred in the vena cava in 5 cases, in the pulmonary vein in 2 cases. Erosion of the vertebra was present in 2 cases with pressure on the cord.

TUMOR: After removal the tumor varied from a typical kidney shape, to that of an oblong mass. Weight and size varied from a hazel nut, to 36 1-2, lbs, the average being 6 1-10 lbs. In one case the tumor was 22 lbs, while the remaining child was 35 lbs. The tumor as a point of diagnosis seems most important. In one set of 150 cases reported in *Trait de Medecine* it was absent in only three.

Chevalier, in 100 cases, found it absent in three. In Walker's set it formed the initial symptom in 45 or 31 per cent. and preceded all others by a period ranging from 2 days to 1 year, the average being 3 1-16 months. Generally the point of greatest prominence was over the umbilicus. On section the appearance varies considerably, usually the neoplasm when young is soft and greyish white, and this unfortunate resemblance to

the brain tissue, is no doubt the reason why so many of the earlier cases are classified as "Encephaloid Cancer" without any further gross or histological data. The older growths extend from a greyish red, to a dirty yellow. Muscle fibre and cartilage help to complicate the picture. Different degenerations take place, and increase the number of color shades. The consistency seems to vary from a fairly firm nodular mass, to one that is soft and almost diffuent. Thus the sensation obtained from palpation will vary in each case. Usually the kidney is subdivided more or less into lobules. In 22 of the cases (of Walker's 142) there was cyst formation varying in size from 1 c.c. to 500 c.c. and in contents, from a clear pale fluid, to a dirty brown debris. Absence of parenchyma and pelvis, is reported in the majority. The left kidney seems to be more frequently involved. In Jacobi's 40 cases the left was affected in 19, and both in 8 cases.

HISTOPATHOLOGY.

The cases reported, as I have mentioned, suffer from lack of accurate, and satisfactory detail, but it is from this standpoint of an histological examination that most are almost useless for statistical purposes. In the majority no microscopical report is given and in others a classification without detail.

The most accurately examined set that I have been able to find, is a surgical one of 74 by Walker, in the *Annals of Surgery*. These cases are divided into three sets;

1. 55 cases that died soon after operation, or showed subsequent recurrences. Of this number 19 are reported as round or mixed celled sarcomata *i.e.* 39.5 per cent.

2. 15 cases with an incomplete history of recovery. Of these 3 are round or mixed celled sarcomata, 20 per cent.

3. 4 cases reported as permanently cured, in none of which the round or mixed celled sarcomata are found, the diagnosis not being made in one case, and in the others rhabdomyosarcoma, alveolar sarcoma and adenosarcoma being given. From these results one can safely conclude that the purer forms of sarcomata are undoubtedly the most malignant. Also the percentage of this form is probably greater than usually reported, because many of those cases labelled as Cancer (very probably diagnosed as such from the gross) would prove themselves on section to be sarcomata.

Kelynack, in considering sarcomata from an histological standpoint makes the following classification of the primary

growths; 1. Round and spindle celled sarcomata; 2. Myosarcomata; 3. Lipo sarcomata; 4. Adenosarcoma; 5. Alveolar sarcomata; 6. Lymphosarcomata.

In the round and spindle celled forms, the pictures depicted correspond fairly closely with that given in the case described; the growth is usually very vascular and often in the areas of the neoplasm remains of the renal parenchyma are to be seen. It is in this form that early metastases are likely to take place. In gross weight and size many of these tumors equal that obtained in the myosarcomata.

The myosarcomata.—Mixed with round or spindle cells are the elongated and striated muscle fibres, that are variable in size and distinctness of striation, the sarcolemma usually being absent.

These growths may reach enormous sizes, one reported by Paul, weighing 6 lbs, while the remaining child weighed 10 lbs. Secondary deposits are uncommon, although such have been reported. Jacobi says, "Metastases, when they do occur, appear late in the course of the disease." This fact appears to be commonly recognised, but along with it the general opinion seems to state that this type is found more frequently than the other forms of sarcomata in very early years. This I do not think is sufficiently marked, if true at all, to be of clinical importance.

Regarding the alveolar sarcomata considerable difference of opinion seems to exist. That they may be confounded with the endotheliomata seems very likely, or possibly with the adenosarcomata, recognised and reported upon by Allen and Cherry as "large epithelial developments with distinct tubes or columns of epithelial cells, or masses of epitheloid cells arranged in sarcoma fashion, or even alveolar strictures resembling Carcinoma, but without sign of active spread."

The lympho-sarcomata are regarded by Kelynack as secondary growths, the primary most probably originating in the mesenteric or the retroperitoneal glands.

URANALYSIS.

The only condition that seems to be of importance is hematuria. In Walker's set it was present in 35 cases, and formed the initial symptom in 13.

Rohrer, in 115 cases, found it present in 37.

Dickinson and Ebstein, in 128 cases, report it in 81 and as the initial symptom in 48 or 31 per cent. Possibly it is present to a greater extent than these reports show, as no doubt it has

existed in some and has not been noticed. Palpitation may cause or will increase this condition of the urine. The color of the urine varied from a smoky tint, to a very dark red, usually it was of a uniform degree throughout, the first voided being similar to the last, which uniformity is a distinguishing feature of blood from the kidney. Microscopically the blood was found free, in fresh and in old clots. The passage of these clots is no doubt, one of the chief sources of pain so frequently found as an early symptom. Pus was found only where cystitis had set in.

Carr, of Washington, reports a case in which sufficient threads of the neoplasm were found to make a diagnosis.

Nowhere in the literature was I able to find any reference to segregation of the urine, or catheterization of the ureter, though in some cases this procedure should be possible. If either method could be adopted some important diagnostic information might be gained. In the present case the pelvis has been totally disorganized by the growth and the renal parenchyma, of which one can only be certain microscopically, does not seem capable of secretion.

If this be so, the absence of urine from the affected side, or even a marked drop in the amount will indicate almost complete disorganization of the kidney. Also those cases of hematuria when the blood is found free, and not in clots, will have much less renal involvement, and a fairly intact pelvis. Considering the fact that many renal growths are discovered by accident, and no definite time can be learnt of the onset, this may establish a point of considerable importance, as from it we may draw conclusions regarding the duration of the growth, and the possibility of metastases.

Again, when blood clots occur, they most probably result from hemorrhage into the new growth itself, and would indicate considerable involvement, the time of their occurrence depending upon the rapidity of the growth, and its malignancy.

Thus definite chronological relations between the various kinds of hematuria, and the palpation of the tumor, together with the gross and microscopic data, should be of considerable value.

FREQUENCY OF RENAL GROWTHS.

Primary renal growths as compared with secondary, are comparatively rare. And even secondary involvement of the kidney is uncommon.

Kelynaek, out of a collection of 1400 cases, found 195

showing malignant disease, of which number 69 were sarcomata, and 126 carcinomata.

Of the 126 carcinomata the kidney was involved in 10 instances, 6 of this number being males, with an average age of 49, and 4 females with an average age of 48.

Of the 69 sarcomata 10 presented secondary growths of the kidney. With regard to the proportion of primary malignancy of the kidney, and malignant disease elsewhere, Kelynack states that it is between 2 or 3 per cent., though he regards this as possibly high, except in hospitals for sick children.

Morris, in an investigation of 2,610 post mortem inspections found 5 primary, and 2 secondary areas of malignant renal growth. In the last 151 autopsies at the Toronto General Hospital, there have been 3 cases of secondary renal involvement.

For the permission of reporting this case, I am indebted to Dr. Ogden Jones and Dr. H. A. Bruce, at whose kind suggestion I was allowed to perform the autopsy.

PYO-SEPTICEMIA.

BY W. S. ENGLAND, WINNIFEG, MAN.

From all appearances it would seem that a heavy duty devolves upon me, being the only member of the Canadian Medical Association present from the so called "Great West." I regret that a large number of our medical fraternity from that part could not have seen their way clear to cease the reaping of No. 1 "Manitoba Hard" for a brief time and enjoy a holiday, a pleasant journey, the meeting of numerous old friends, and the making of new ones, as well as to benefit by our thirty-eighth annual meeting.

I realize that it is entirely out of the question for me, even in a humble way to represent the great and rapidly advancing Canadian West, but I considered it my duty to at least be present at this meeting, and give my support to the welfare of our Association.

In presenting the case reports of three, to me very interesting cases of pyo-septicemia, which have recently occurred in my practice, I shall endeavor to be as brief as possible.

CASE I. H. M. is that of a young man aged 32, height 5 feet 5 inches, weight 160 pounds; short, stout and inclined to be corpulent, occupation druggist. There is nothing noteworthy in the family history.

When ten years old he had an attack of typhoid fever, complicated by phlebitis of the right common iliac vein, the leg remaining at least one-third larger than the left in circumference since.

In 1901 he had two attacks of appendicitis and made a complete recovery after appendectomy. The patient is of a very nervous temperament and has suffered a great deal from indigestion. On inquiry I find that he has not been judicious as to his diet and mode of living. An aortic systolic murmur is present. Before retiring on the night of February 18th he partook of a supper consisting of cheese, biscuits, and a little whisky. The next day I was summoned and found him suffering from acute follicular tonsillitis, temperature 103 degrees F., pulse 102, headache and anorexia. The temperature gradually subsided under appropriate treatment, but in a few days the patient had an attack of bilious vomiting lasting twenty-four hours. These bilious attacks recurred about every five or six days for the next three or four weeks and at less frequent intervals later, notwithstanding the fact that he was kept on a rigorous milk diet; fever accompanied each of these attacks. February 28th patient complained of pain in the right ear with ringing and deafness, followed in a few days by tenderness over the mastoid. This was treated by hot boracic acid irrigations and instilling a 4 per cent. carbolic acid solution in glycerine into the ear, and the application of an ice bag over the mastoid. The ear trouble improved, and the pain practically ceased. March 1st the patient complained of pain in and tenderness over the wrist and shoulder joints. I may add that for all these "uric acid" manifestations salicylate of soda was administered with good effect. On March 6th a general erythematous eruption, probably septic, appeared all over the body, which persisted for two weeks. Dr. Prowse, an eye and ear specialist saw the case in consultation. On March 8th a bronchitis of the larger tubes developed with expectoration of a thick, blood-colored sputum, and the ear trouble returned with a temperature running up to 105 degrees F. The drum membrane ruptured this night, with great and immediate relief. Irrigations with a hot boracic solution and hot fomentations every hour, were applied. The sputum was submitted to Dr. Bell, our

bacteriologist, for examination, who reported that it contained a pure culture of the streptococcus. 2000 c.c. of antistreptococcal serum was given and repeated the next day, apparently with good effect. Strychnine was administered hypodermically. The patient complained of pain in the back, and on the 11th the urine was again examined and found to contain albumen casts and pus cells.

The temperature gradually came down to normal on the 13th of March, and remained so until the 17th. On this date he complained of pain in the left leg, and tenderness over the femoral vein, and the temperature rose to 99 degrees F. During the course of this phlebitis the temperature remained moderate, generally about 100 degrees F., until the 24th when it reached 103 degrees F.; but this gradually descended to the normal, which it reached on the 28th March. During the month of March the patient had severe attacks of dysentery, each lasting four days. During all this septic siege, in spite of a poor digestive system, and his inability to take much tonic treatment, the patient's general condition remained fairly good, his general state of nutrition kept up and he was hopeful.

On the 30th March, while using the urinal, he was suddenly seized with an acute and very pronounced priapism, which would not subside. The condition necessitated catheterization two or three times a day, and it was painful, as well as most distressing to the patient, for it remained chronic. Cold was at first applied, and later it was changed to hot applications. The temperature for the following three days ranged from 99 degrees to 100 degrees F. From April 2nd to the 9th chills were frequent and fever high and very septic, on three occasions reaching over 106 degrees F. This was probably the so-called "urethral fever." Antistreptococcal serum was again given on the 3rd and 6th but with no good effect, so far as I could perceive.

The patient's condition being very grave, I called in consultation a physician who makes medicine a specialty. After examining the case he said, on consulting: "Pyo-septicemia, no doubt, and I have nothing more to suggest in the way of treatment; but I don't like that heart murmur, malignant endocarditis. Bad prognosis." I replied: "But, Doctor, that murmur is ancient history; I discovered it ten years ago."

On April 10th patient complained of a wry neck, and again on the 13th went in for a general rheumatic inflammation of nearly all the joints of both arms and both legs, with an accompanying fever reaching as high as 103 degrees F. The

temperature gradually subsided, and became normal on the 19th. This condition of the joints was undoubtedly more or less septic, but gradually subsided under local antiphlogistics and salicylates. The swelling, tenderness and stiffness, remained in the left ankle joint for many weeks. Tonic treatment soon followed with as much forced feeding as possible.

A cold abscess developed at the site of the second injection of the serum some three weeks later, although every aseptic precaution was taken in its administration. In the course of a week the priapism gradually began to subside, and with it the breaking down of the bulbous portion of the corpus spongiosum, and extending forwards over an inch, anterior to the junction of the scrotum and penis, leaving a cavity in which blood, pus and urine accumulated under the skin. There was also a breaking down of the veins of the prostate. In passing a catheter at the junction of the movable and fixed urethra a foul-smelling serosaneous pus escaped, and pushing on, when the neck of the bladder was reached more of this came, then clear urine flowed. Owing to the destruction of the urethra catheterization was difficult and at times impossible. The urethra and bladder were frequently irrigated with boracic solution; urotropin was administered internally, also sedative for pain and sleeplessness.

From April 10th to the 18th a general septic condition with a temperature ranging from 99.1-2 to 103 degrees F. continued, but gradually subsided, and then remained practically normal for the next twenty-six days. On April 21st the patient sat up for the first time, and was out driving on the 30th. The abscess on the back was incised on May 7th, and on May 14th the patient was able to leave for the sea-side, where he remained a few weeks; but finding the atmosphere too irritating to his respiratory apparatus, he left for the Muskoka district, which agreed with him better. The patient returned July 31st looking the picture of health; he had regained his usual weight. While in bed the old swelling of the right leg had subsided, but it has reappeared. The patient has regained all the functions of the generative and urinary organs, although after urinating there is still a dribble, due to accumulation of urine in the old abscess sack, and precautionary treatment will be necessary to guard against strictures. The urine on last examination was reported normal, except for a few pus corpuscles.

CASE 2 is also of interest, although not presenting so many and varied complications as Case 1.

The patient, aged thirty-nine years, is a stout, thick-set, fleshy man, height five feet seven inches, weighing in health

about two hundred pounds, by occupation a hotel-keeper; popular with the public, and accustomed to stimulants, but never indulged to excess.

The beginning of his trouble dates from February 1st, 1905. While curling on the ice he became heated, and recalls rubbing the side of his nose with his mitten. An inflamed pimple soon appeared, which was followed within a few days by systemic disturbance. Two abscesses formed in his mouth, which were opened; septicemia followed, confining him to bed. His condition became gradually worse, and in March pain and tenderness were complained of in the right lumbar region; he also had chills and fever. He was taken to the Brandon Hospital, where he received constitutional treatment. Early in April he returned home, and soon after he was brought on a stretcher to Winnipeg for treatment.

April 12th, 1905. On examination I found the patient was weak and depressed; temperature 101 degrees F., pulse 102, appetite poor, bowels constipated. He complained of pain in the right hypochondriac and lumbar regions, and tenderness on pressure. The muscles in this region were rigid. Examination of the urine showed blood and pus cells, also a trace of albumen—no doubt due to pus. On April 13th, under ether anesthesia, I did a nephrotomy. Found the kidney substance very much congested and friable, with purulent infiltration. A rubber drainage tube was introduced. The hemorrhage, which was considerable, was checked by gauze packing. During the next day much blood appeared in the urine. Catheterization was necessary from this date till the 25th of April. The wound was dressed daily, and the packing gradually removed. To move the patient was like moving dead weight. He lay for weeks prone, listless, and helpless, speaking little, and only then in a low tone or a whisper.

A free purulent discharge soon flowed from the kidney substance, and later discharging sinuses appeared above, below, anterior, and posterior to the kidney. During the first three weeks after operation the temperature ranged from 99 2-5 to 102 2-5 degrees F., pulse from 106 to 120 per minute.

His general condition remained poor, and it was with difficulty that his nurses were able to induce him to take sufficient nourishment. He suffered from flatulency. The first four days after operation there was constipation, after which, until the end of the illness, there was a tendency to diarrhea. From May 9th to the 22nd. the patient was more restless, perspired freely at night time, and the temperature ranged from 100 2-5

to 105 degrees F., pulse 116 to 140, and respirations 20 to 44. Previously on several occasions large sloughs of kidney substance were removed at the dressings. He developed considerable cough, and at intervals it was accompanied by a copious thick mummular sputum. To relieve the bases of his lungs I instructed the nurses to keep the patient propped up on a bed-rest with pillows as much as possible (May 28th), also to change him from side to side occasionally.

On May 21st the superficial wound was again freely opened down to the kidney. This was followed by hot fomentations, which were changed every hour for the next ten days, and from that on every two or three hours until July 14th. From May 20th to June 6th the patient frequently voided urine involuntarily. Since the re-opening of the wound and the fomenting, the temperature has gradually subsided, generally ranging from 98 to 99 or 100 degrees F., on a few occasions reaching 101 degrees F. The general conditions also improved, the patient became brighter, slept better, was more easily handled, and began to take an interest in life; pulse improved in character, and ranged from 84 to 108; respirations 20 to 30 per minute; appetite improved.

He was taken out on the balcony on a stretcher, June 7th, and frequently from this date on. Since July 14th the patient has been able to help himself, and has been out in a wheel chair on the balcony daily, from morning to night, taking a sun bath. During this time two small abscesses developed in the scar tissue, which were opened and drained. The patient complained of much pain in the joints of the toes from June 4th to July 13th, which was much relieved by "green" Betgaul-Ol. On July 25th the patient was in good spirits, and attended the exhibition, driving there in a cab, since which date he has been out driving nearly every day, and is at the present time convalescent; the discharge being small, and the wound nearly healed. A large quantity of urine was generally voided from the first of the illness, and the last examination of the urine which was made August 1st showed only a few pus cells. The treatment in this case, in brief, was supporting and stimulating from the first, together with tonics, "Blaud's capsules" and urotropin, also good nursing and massage. I may add that the pus from the lumbar wound on examination showed a short bacillus. Dr. Bell, who made the bacteriological examination, stated that on growing the organism on agar, the aroma which arose on raising the lid filled the atmosphere, and smelled like sweet violets.

CASE 3. F. A. F., male, aged 32. I was called in consultation to see this case. It was one of typhoid fever complicated with otitis media, on the 26th day of the illness. On the 52nd day of the illness boils and abscesses became manifest in all parts of the body and extremities; many of these developed, some superficially, and others deeper, requiring repeated incisions and drainage. The temperature ranged in the neighborhood of 102 degrees to 103 degrees F. during the attack of typhoid, and from then until the 62nd day of his illness it gradually came down to the normal; from the 62nd to the 70th day of the illness the temperature remained normal, and the abscess healing. The patient was very anemic, and debilitated, but his general condition is now rapidly improving. The organism found in the pus in this case was a staphylococcus.

To Summarize: In the first case a streptococcus, apparently one of great virulence and persistence, attacked the patient's body in all parts, hardly an organ having escaped invasion. Nevertheless, in spite of poor digestive organs, by persistent treatment, and careful nursing, the organism was eliminated from his system, and in the end after a four months' struggle he made a good recovery.

CASE 2. Due to a short bacillus, is remarkable for many reasons; the profound poisoning, the duration of the sepsis for over six months, the fact that besides the two secondary abscesses in the mouth, the only other metastatic focus was located in the right kidney; also on account of the marked way the eliminating organs reacted, and began work soon after the operation, producing diarrhea, free perspiration, frequently polyuria, and at times a copious expectoration. This patient, too, with stimulating tonic, and supporting treatment, together with two special nurses, has battled and won.

CASE 3. Due to a staphylococcus was the mildest septic condition of the three. It is interesting to note, that this germ manifested itself superficially, principally in and under the skin. After withstanding the debilitating effects of a moderately severe attack of typhoid fever, he too has overcome the poison.

In conclusion, Mr. President and Gentlemen, I wish to thank you for having so patiently listened to me, also to thank you for having last year elected me Vice-President of this Association for the Province of Manitoba.

POST-OPERATIVE HEMATEMESIS.

BY E. RALPH HOOPER, M.D., TORONTO, ONT.

Though it may not improve our credit to repeat unfortunate histories, they are, however, none the less instructive and useful. The case I am referring to is one of tragic interest. Four features stand out with conspicuous prominence in this case.

The first is the simplicity of the exciting causes. The second is the brevity of the illness. The third the obscurity of the underlying cause. The fourth is the deplorable termination.

Mrs. R., aged 28, was well nourished and of florid complexion, and presented the appearance of health. On the morning of December 25th, the patient complained of pain in the right iliac fossa, of moderate severity. This was followed by nausea and vomiting. At 12 o'clock that night when I saw the patient pain was still present. There was rigidity of the right rectus muscle, and a mass could be readily distinguished, with its centre over McBurney's point. There was no departure of temperature or pulse rate from normal standard. The patient was treated after the suggestion of Ochsner, and received nothing by the mouth, except lemon albumen.

From the 25th to 29th there was a gradual but decided improvement in local condition, and on the morning of the operation the mass formerly present in the right iliac fossa could scarcely be detected.

The operation itself was simple in every detail. The appendix was readily found, quickly removed, and with no disturbance or exposure of other viscera.

The condition of appendix was one of congestion, with prominence of the larger vessels and injection of the smaller ones.

The anesthetic administered was equal parts by weight of chloroform and ether.

The condition of the patient from 10 o'clock till 2.30 p.m. was uneventful. The nurse at that time noticed a marked weakness of the radial pulsation, and met it with a hypodermic of strychnia. The patient was nauseated, and vomited some mucus. In as far as the voice is an index of strength, it may be inferred that the patient was profoundly depressed, as at five o'clock she spoke only with great effort, and with marked

feebleness. With the exception of the vomiting, the pulse rate and weak articulation, nothing unusual presented till Sunday morning. The vomiting and nausea were as follows:

Friday the 29th, 3 p.m., 6 p.m., 8 p.m., and 11.30.

Saturday, 31st, early morning, vomited four times, the quantity being three quarts of a dark brown fluid, with a fine coffee ground sediment. This was identified as partially digested blood.

Urinary System.—The urine was free from albumin, and normal in quantity till 6 o'clock of the 30th, when seven ounces only were passed. In spite of efforts it was impossible to obtain any more, even for analytical purposes. Complete suppression of urine had supervened.

Circulation.—As has been mentioned, the pulse rate throughout had been unusually rapid and feeble. On Sunday morning a remarkable inconsistency in the arterial pulsation was noticed. Though the radial pulse was scarcely perceptible, the abdominal aorta and femoral vessels had a vigor and violence of circulation that were startling. The rise was forcible, imparting to the palpating fingers a blow which was sudden in origin and decline. The volume immediately faded away.

Dr. Osler called this condition pistol shot pulsation. A haemic murmur was readily distinguishable over the sternum and precordial area. Mental condition throughout was dull and apathetic, due, possibly, to the marked weakness. The answers to questions were intelligent, but the interest, though aroused with little difficulty, was not sustained. On Sunday morning, from 9 a.m., unconsciousness was present, and it was impossible to arouse the patient by questions or ordinary stimuli. The pupils were moderately contracted, and reflexes were totally abolished. It seemed at this time to give the patient pain to raise the arms, and they yielded to attempts to move them by a measured response. The arm, for example, was brought to a position of extension by a series of jerks. The limb was rigid, and relaxed only by degrees.

At 1 o'clock Dr. Osler, who was in the hospital at the time, kindly consented to see the patient, and rendered most helpful counsel and removed the perplexity as to the cause of the condition, by the diagnosis of post operative hematemesis; at that time the prognosis was regarded as favorable.

The importance of the hemorrhage was doubtless underestimated by me, as the patient at no time appeared to be exsanguinated. The countenance was ruddy and suffused, and the surface of the body warm; and I still find it difficult to reconcile it with the severe loss of blood.

The temperature was practically normal till 8 o'clock Sunday morning, when it gradually rose to 103 2-5 at 4 o'clock, when patient died.

The abdomen was not distended, and the wound presented the appearance of perfect health, and all agreed that the abdomen furnished no evidence of trouble from the operation area.

The mortality is high, being 72.5 per cent., in series of eleven cases, and 69 per cent. in a series of twenty-nine cases.

The Nature of Hemorrhage is usually of blackish-brown fluid, with the coffee ground of digested blood. Occasionally the clotted blood may be vomited.

Duration of Hemorrhage may be at frequent intervals, extending from fifteen to twenty hours. In many cases the bilious vomiting diminishes before the hematemesis occurs, which is usually within forty-eight hours.

General Condition is that of collapse, and asthenia into which the patient rapidly enters. The condition is many times an obvious toxemia from a recognizable cause.

Pulse is rapid, irregular, accompanied by pallor, faintness, coldness of extremities. In some restlessness and mental acuteness, marked by anxious though momentary interest.

Etiology.—(1) The administration of the anesthetic has been suggested, but it has occurred with such infrequency that this can scarcely be regarded as more than a contributing cause. Moreover, the same occurrence has followed cocaine anesthesia.

Laparotomy.—(2) It was felt that the site of the operation would afford an explanation, but reports show that hematemesis following operations on the abdomen, more frequently than any other class of operations, has also followed those on bladder—lithotomy and lithopaxy.

Vomiting.—(3) The strain from vomiting has been urged, but here again we find cases in which vomiting was slight, or even absent. In some cases it is true an ecchymosis of gastric mucosa may be produced, and an old ulcer caused to perforate a vessel.

(4) Fasting before operation can only be regarded as a predisposing cause.

(5) A fifth cause assigned is injury to stomach or duodenum by surgical handling.

(6) Von Eiselsburg has suggested that thromboses of the omental vessels after injury or ligature, followed by embolism in the wall of stomach and formation of ulcers.

(7) Sepsis has been held responsible for the duodenal ulcers

following burns. With this consideration, Rodman has sought to place the responsibility upon septicemia, which he knew produced hematemesis in four cases of appendicitis.

(8) Mayo Robson believes that this condition depends on a nervous reflex influence, and points out the absence of peritonitis and tympanites. The prognosis depends on the septic factors present. If the septic reaction is marked with presence of temperature and discharge, the outlook is more hopeful. On the other hand, should the infection be masked or subdued with subnormal temperature and rapid pulse, and rapidly increasing vital depression, the prognosis is grave.

Treatment is that of septicemia; gastric lavage, with normal saline or 2 per cent. soda solution, followed by agnos 1-1000. Collapse needs venous injection strychnia hypodermically, rectal feeding, calomel, ice to epigastrium, suprarenalin, etc.

MEDICAL THOUGHTS DURING LEISURE HOURS.

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.,

Author of "Medical Ethics," etc.

"Read not to criticize, but to accept, or reject, or to consider."—*Bacon*.

Da, pater, Augurium, atque animis illabare nostris (Aenidos Lib. III.)

Holy Father, glide into our minds and give us a prophetic sign.

Of the dead, one must speak with charity, respect and reverence, and especially do I while narrating an incident connected with the practice of Dr. Frank Buller, a fellow graduate, Victoria, 1869, who, for thirty-seven years was my friend indeed. Some ten or more years since, two of the wealthiest men of Renfrew, went to Montreal to consult him. "Mr. A.," Buller said, "in what business are you engaged?" and the reply was, "I am a merchant," and when the operation was finished, and the question asked in regard to the fee, the reply of the doctor was: "One hundred dollars." Mr. B's. turn for operation was then commenced, and to the question of the doctor: "What is your occupation?" Mr. B. replied: "I work in a mill," and

the necessary operative work being finished, and the question as regards the fee was given, to it Dr. Buller replied, "Since you work in a mill, Mr. B., my fee is \$5, for saw mill work is hard work." It may be mentioned that Mr. B. is one of the millionaire lumbermen and mill owners in his county, and his friend Mr. A., although very wealthy, counts the *ones*, while he counts *hundreds*. Although the oldest and dearest of friends, it has been said that A. and B. did not take the same seat in the homeward bound train, and the old friendship has been slightly soured; however the moral remains: "Do not wear diamonds and good clothes when visiting the specialist." The plainest of clothes and dress are necessary. "Working in a store" and plain clothes would have saved Mr. A. more than enough to buy his wife a hat, the fertile cause of much envy and jealousy in any Christian neighborhood.

Not long since, while walking with a confrere, down one of the principal streets of ———, he exclaimed, "Say, old fellow, I just saw something that put *wonder* to blush"—and retracing our steps he showed me a door plate with "Dr. Wunderr, Dentist," on it. A few days after this, while similarly strolling down a street I suddenly stopped him and said: "If this is not the biggest piece of brass associated with modesty I ever saw, then I am mistaken." I satisfied him, by directing his attention to an 18x36 brass plate, on which was plain J. Walsingham Smith, Dentist." It is needless to state we gazed for thirty full minutes at this evidence of modesty and wondered why the "Dr." was left off. We, at our hotel, saw in the "Daily Star and Beacon" his advertisement, and there was no "Dr." in it, nor was there "Honor Graduate of ——— University." These thoughts were pleasant—and indeed "pain-less"—and we simultaneously said, "why."

Recently while on a few days' visit to the dear old home in the Bay of Quinté District many old stories and pleasing incidents were recalled and needless to state, they had grown much in incredulity, and promise well before another year to reach a level of unbelief if not of serious doubt. It is reasonable to believe that I brought with me from my visit several new pleasant sketches from the homes of the U. E. Loyalists, and one is reported, and in memory, in which my old friend Dr. Oronhyatika (*by the way, he and I were born not far distant from each other.*) The story is as follows: A certain Mr. M., a descendant of one of the oldest Prince Edward County families, in whose great grandsire there is said to have been much Mohawk blood, was, a few years ago, present at one of the

big gatherings in the vicinity of Deseronto, at Foresters' Island inuagurated by our dear doctor, and much credit he commands for his fraternal work. Mr. M. is a prominent man and wished an introduction to the doctor. Such being obtianed, he said to the High Chief Ranger: "By the way, doctor, I claim some Mohawk blood," at which the doctor smiled, and going closer to him he gently stroked those parts of the spinal vertebræ in the vicinity of the Ligamentum Nuchae. Withdrawing his fingers and employing his characteristic smile, the doctor, smelling his own fingers, said to Mr. B. "Dear friend and brother, I detect no Mohawk, but there is a peculiar odor, and such is remarkably 'Nigger;' yes, 'Nigger,' surely." This is named as but a fragmentary and pleasing incident, and illustrative too, of the many instances wherein the chief Forester had a ready answer.

It is truly encouraging to the conservative doctor to read the following few lines of the address of my very learned and very dear friend, Dr. Hugh A. McCallum, London. The address, "A Clinical Lecture on Visceroptoses; its Symptoms and Treatment," was delivered, Feb. 18, 1905, at St. Michael's Hospital, London.

The encouraging words are: "In the last five years the female pelvis has been passing over from surgery to medicine. Indeed, it is not too much to say that the vast majority of operations for displacements and prolapse are both unscientific and unnecessary." Verified, indeed, are these decidedly expressed sentences in the estimation of careful and keen observers who are adherents of the prominence of medicine and are unbelievers in the slaughter of the innocents.

Never is surgery so beautiful and brilliant, says Lafranc, as when obtaining a cure without the destruction of any organ; without plunging the bistoury into quivering flesh, and without causing the effusion of blood.

The venerable Erichsen in "Finality in Surgery" (see London *Lancet*, October 4th, 1873, p. 489) in prophetic words reminds and warns us: But there must be a final limit to development of manipulative surgery. The knife can not always have fresh fields for conquest and, although methods of practice may be modified or varied, and even improved to some extent, it must be within a certain limit.

That this limit has nearly, if not quite, been reached, will appear evident if we reflect upon the great achievements of modern surgery. Very little remains for the boldest to devise or the most dexterous to perform. Those among us whose years are numbered by two sidereal revolutions of Saturn fully

agree with this master mind in surgery, and are fully realizing the truths of his prescience, and are encouraged to believe that medicine will come into possession of her rights, as the skies are clearing, evidently to all observable. In making somewhat of a daily study of synteresis and alexipharmics, not for one day only, but for two decades (not forgetting the price lists of drug houses), it is my belief, and soon repeated, that Hygeia will come into her own eventually; but not until many riddles are solved, will preventive medicine receive the crowning glory.

(To be continued)

THE AMERICAN TUBERCULOSIS EXHIBITION.

Under the auspices of the National Association for the Study and Prevention of Tuberculosis, and of the Committee on the Prevention of Tuberculosis, of the Charity Organizations of New York, the American Tuberculosis Exhibition was organized, and the first exhibit was held in the Museum of Natural History, in November 1905.

The object of the Exhibition was to show the methods that are being adopted throughout America and Europe to prevent and cure consumption, and by a practical object lesson, to arouse and interest the public and medical profession to concerted effort in preventing this white plague, and to awaken the conscience of the public to recognise the individual's responsibility.

The Exhibition was extremely varied and instructive to the Society, sociologists, and the medical profession. There were in all upwards of ninety exhibits by different Boards of Health, Sanatoria, Hospitals, Dispensaries, and Educational Associations, averaging more than 5000 square feet of wall space. Besides charts, and photographs, there were many models of appliances and buildings illustrating easy and cheap methods of treating tuberculosis patients in their homes. Moreover, a series of lectures was given, while the Exhibition was open, by various prominent sociologists, labor organisers and physicians, which were attended by appreciative and varied audiences.

The remarkable success of the exhibition was proved by the immediate and urgent request to have the Exhibiton re-

peated in various cities throughout the United States. During the past seven months seven cities have been visited, with an attendance of upwards of 200,000 persons. That interest has grown in this instructive exhibition is shown by the fact that while in New York only 17,000 persons visited it during the fortnight, in Milwaukee, where it has recently been, 54,000 people visited it during a like period. Reports show that wherever the exhibition has been there has been an enthusiastic interest aroused, and practical results in the campaign against tuberculosis have followed.

The National Sanitarium Association of Canada, has arranged to bring the exhibit to Toronto in August for a fortnight, beginning with the opening of the meeting of the British Medical Association. It is hoped thus that more than a local interest will be elicited, and the professional men through the Dominion, and laymen throughout the province, will take the opportunity of visiting this great object lesson on what is at present being done to prevent and cure tuberculosis.

The following were a few of the striking features shown at the New York exhibition, the greater number of which will be exhibited in Toronto:

In the exhibit of the New York City Department of Health, were included photographs and charts, illustrating in detail methods of reporting, recording, following up and treating tuberculous cases; maps of wards in New York city, showing grouping of houses in which cases of tuberculosis have been reported; illustrations and explanations of methods employed at the out-patient clinic of the Department.

The New York Tenement House Commission presented illustrations of the appalling conditions under which the New York poor live, making plain the hopelessness of the tuberculosis problem until the public conscience has awakened, and insisted that such things shall not be. They showed a model of a typical dark room in a tenement house, one of 360,000 of its kind in New York city. The only source of light and ventilation, is a window in a court, which is separated from this room by three other rooms. The interior is dreadful in squalor, and filth. The onlooker is only partly reassured by the statement that the articles he sees before him have been sterilized. In pleasing contrast, is a model of the same room after the visiting nurse has taken charge. Light has been admitted by cutting a window, and cleanness, neatness and comfort have replaced the conditions of misery. The commission showed also various models in plaster and papier-mache of tenement houses both typical and

ideal. One model of a block illustrates a type of building in which 4,000 persons have lived at one time.

The Committee on the Prevention of Tuberculosis (New York City) sent interesting charts illustrating the incidence of tuberculosis, and resulting mortality in different races, and nationalities under various social conditions, and at different periods of life.

The Maryland State Board of Health, and the Tuberculosis Commission of Maryland, showed a most instructive group of graphic illustrations of various sociological statistics both general and local.

The Chicago Department of Health, exhibited large charts of wards with reported cases of tuberculosis plotted thereon by different colored pin heads, the different colors representing different years.

Various associations in cities and larger towns formed to be both educational and practically helpful, exemplified their methods of organization, and the work that had been accomplished. As examples may be mentioned the Maryland Association for the prevention and relief of tuberculosis; The Cambridge Anti-tuberculosis Association, and the Boston Association for the Relief and Control of Tuberculosis.

The practical methods of the Visiting Nurses' Association of Cleveland, Boston, Baltimore and Chicago, were suggestive of how much might be done in every town that has the least interest in the detail of tuberculosis clinics.

The exhibition of the special dispensaries for tuberculous out-patients of the New York Department of Health, the Vanderbilt Clinic, the Presbyterian, the Gouverneur and New York Post Graduate Hospitals, and of the Henry Phipps Institute in both Philadelphia and Baltimore, were very helpful to those interested in the detail of tuberculosis clinics.

Some twenty-four Sanatoria and Hospitals were represented by photographs, charts graphically illustrating results, charts showing climatic conditions of various localities, also tables with details of cost of maintenance, various illustrations of clinical forms in use, and other matters of interest. In most cases there were also models illustrating simple and effective housing of patients living the out-of-door life. All the well-known institutions from the Atlantic to the Pacific were represented.

Of particular interest was the exhibit of Clinton Prison, at Dannemora, New York, showing what can be done in a large institution to control tuberculosis.

The Sea Breeze Hospital for children attracted much attention. It is the only institution of the kind in America.

The French and German exhibits were late in arriving, and only a few were in position when the exhibit closed. Maps of both countries showed the geographical position of the various sanatoria. Illustrative charts of the objects of and work done at several French tuberculosis dispensaries were shown, and there were some particularly interesting tables of the diets of various classes of working men, the actual being compared with the ideal, relative expenses also compared. Tables also illustrated the relative value of different articles of food.

Of especial popular interest were the laboratory exhibits. The Henry Phipps Institute showed admirable gross specimens, prepared by the Kaiserling method, illustrating tuberculosis in various organs at different stages. The New York College of Physicians and Surgeons, exhibited along similar lines. The Saranac Laboratory exhibit of Tubercle Bacilli from Koch's first culture and also of human, bovine, avian and piscine forms and the various products obtained from the tubercle bacillus was, as always, interesting. A collection of various acid-fast bacilli, showing the resemblance of the various relations of the tubercle bacillus, was shown by the Natural History Museum.

Practical object lessons illustrating the dissemination of disease were not wanting; culture plates illustrating dissemination of micro-organisms from sputum, by coughing, by sneezing, and by the agency of flies; a cotton filter which had been placed in the air shaft of an apartment house; and a collection of filthy pencils and chewing gum used by school children.

Enough has probably been said to illustrate the broad character of the exhibition. The various exhibits were placed under the headings of their respective states, and any point of interest could be readily found. Throughout the day and evening explanatory tours were conducted by various interested persons both lay and professional. Visitors were from all classes of the community, and the exhibit was not least appreciated by those who had personal experience of dreadful local conditions.

Canada was represented only by the National Sanitarium Association, and the Toronto Free Hospital for Consumptives. In the Toronto Exhibition it would be desirable to have some illustrations of the work done elsewhere in Canada up to the present time. There are various institutions and organizations which might well be represented.

The Toronto exhibition will be held in some building centrally situated but not yet determined upon. A program of addresses which should prove instructive and interesting is being arranged for every second evening of the fortnight. Stereopticon views will be given every evening, and there will be specially conducted tours for the purpose of explaining various features of the exhibit. Physicians are urged to attend and to draw the attention of the public to the exhibition.

Individuals or associations who would in any way care to assist will have their inquiries promptly answered and all information furnished by addressing, J. S. Robertson Secretary National Sanitarium Association, 28 Adelaide St. West, Toronto, Canada.

Already such inquiries are commencing to reach the Secretary, one to-day being from an official of the Women's Institutes, members of which desire to attend some of the meetings.

(Signed) CHARLES D. PARFITT, M.D., M.R.C.S., L.R.C.P.,
Muskoka Free Hospital for Consumptives,
Gravenhurst, Ont.

**BRITISH MEDICAL ASSOCIATION, TORONTO, ONT.,
AUGUST 21-25, 1906.**

For above occasion the following fares and conditions are authorized:

1. *Delegates from Canada, United States and Mexico.*—Lowset one-way first-class fare for the round trip on certificate plan from all points in E. C. P. Association territory. Passengers going by rail, returning Richelieu and Ontario Navigation Co., or *vice versa*, rate to be one and one-half rail fare. Certificates to be viséd and fee of 25 cents charged, (tendered connecting lines and associations.)

2. *Extension of Time Limit.*—On deposit with Joint Agent of properly validated standard convention certificates or return portions of round trip tickets on or before August 28th, 1906, and on payment of \$1.00 at time of deposit, an extension of time until September 30th, 1906, will be granted.

3. *Delegates from Outside of Canada, United States and Mexico.*—(a.) On presentation of certificate of forms, signed

by G. H. Webster, Secretary E. C. P. Association, and countersigned by F. N. G. Starr, Secretary of the Canadian Committee, or Guy Elliston, Secretary of the British Medical Association, one-way tickets to be sold between all points in Canada, at one-half lowest one-way first-class fare, round trip tickets at lowest one-way first-class fare, *Except* as per Clause b.

(b.) *To North Pacific Coast Points and Return.*—Agents at Montreal and Toronto only, to sell round trip tickets to North Pacific Coast points, viz: Vancouver, Victoria and Westminster, B.C.; Bellingham, Everett, Seattle and Tacoma, Wash., and Portland, Ore., as follows: Going and returning via direct routes, usual diverse routes to apply, at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom.

(c.) *To Los Angeles and San Francisco and Return.*—Agents at Montreal and Toronto only, to sell round trip tickets to Los Angeles and San Francisco, Cal., and return as follows: Going and returning via direct routes through Chicago, usual diverse routes to apply, at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom. Going via direct routes, returning through North Pacific Coast Points, viz.: Vancouver, Victoria or Westminster, B.C., Bellingham, Everett, Seattle or Tacoma, Wash., or Portland, Ore., or *vice versa* at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$75.00 tendered therefrom.

4. *Dates of Sale for Side Trip Tickets for Delegates from Points Outside Canada, United States and Mexico.*—July 1st, to September 30th, 1906, inclusive, *Except* that dates of sale to North Pacific Coast and California points will be July 1st to September 7th, 1906, inclusive, with going transit limit of September 20th, 1906.

5. *Return Limit for Side Trip Tickets for Delegates from Points Outside Canada, United States and Mexico.*—September 30th, 1906

6. *Side Trips from Toronto.*—Side trip tickets will be sold from Toronto only, to Delegates from the Maritime Provinces, from points west of Port Arthur, and from the United States and Mexico, on presentation of properly validated convention certificates, return portions or round trip tickets, or deposit receipt (*if extension of time is availed of as per paragraph 2*), at lowest one-way first-class fare for the round trip to all points in Canada, *Except* that fares to North Pacific Coast points are

to be made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom. Tickets may also be sold to North Pacific Coast points in the United States and to Los Angeles and San Francisco, Cal., and return, on basis of fares shown in paragraph 3, clauses *b* and *c*.

Side Trips for Ontario and Quebec Delegates.—Side trip tickets will be sold from Toronto only, to Delegates from Ontario and Quebec to all points in Canada west of and including Sudbury and east of and including Montreal, Que., at lowest one-way first-class fare for the round trip; *Except* that in ticketing to North Pacific Coast points in Canada, fares and routes as shown in paragraph 3, clauses *b* and *c*, will apply. Tickets may also be sold to Ontario and Quebec Delegates to North Pacific Coast points in the United States and to Los Angeles and San Francisco, Cal., and return fares and routes as shown in paragraph 3, clauses *b* and *c*. Tickets as per this clause will be sold only on presentation of properly validated convention certificate, or deposit receipt (if extension of time is availed of as per paragraph 2), or, in the case of Toronto local physicians, on presentation of certificate of form, signed by G. H. Webster, Secretary, E. C. P. Assn., and F. N. G. Starr, Secretary of the Canadian Committee, British Medical Association.

7. *Dates of Sale and Limits for Side Trips from Toronto for Delegates from Canada, the United States and Mexico.*—Thursday, August, 23rd, to Saturday, September 1st, 1906, inclusive. Tickets to North Pacific Coast and California points to bear going transit limit of September 20th, 1906. Final return limit September 30th, 1906.

8. *Validation of Return Portions of Tickets to North Pacific Coast and California.*—Return portions of tickets to North Pacific Coast and California points must be validated by Joint Agent at destination, for which a validation fee of fifty-cents will be charged.

9. *Stop-overs on Side Trip Tickets.*—Side trip tickets to all points in Canada will permit stop-overs at any intermediate point going and returning within the final limit, *Except* that on side trip tickets to North Pacific Coast and California points, stop-overs will be allowed on going trip within going transit limit of September 20th, 1906. On return trip from North Pacific and California points, stop-overs will be allowed within final limit on deposit of ticket with Agent at stop-over point immediately upon arrival, *Except* that tickets reading for return via Canadian Pacific, Great Northern or Northern Pacific will not require to be deposited.

10. *Additional Amounts Required via Steamer Lines.*—On several steamer lines extra charge will be made for meals, berths, etc. The following arbitraries have been advised:

Canadian Pacific Railway Upper Lake Steamships.—Going lake, returning same, \$8.50 additional to be collected. Going lake returning rail, or going rail, returning lake, \$4.25 additional to be collected.

Richelieu & Ontario Navigation Co., St. Lawrence Route.—Delegates holding return portions of round trip tickets reading all rail to Toronto may return via steamer on presentation of ticket to purser and payment of following amounts, viz.: \$6.50, Toronto to Montreal; \$3.50, Kingston to Montreal.

Northern Navigation Co.—One-way meal and berth arbitraries. From Collingwood or Owen Sound: to Sault Ste. Marie, \$5.00, Mackinac, \$7.00, Petoskey, \$8.50, Killarney, \$2.00, Parry Sound 75c. From Sarnia: to Sault Ste. Marie, \$3.50, Port Arthur and Fort William, \$8.50, Duluth, \$11.00.

Algoma Central and Hudson Bay S. S. Line.—Meals and berth arbitraries. From Southampton, Kincardine, Goderich and Sarnia to Sault Ste. Marie and Manitoulin points, one way, \$4.00; round trip, \$8.00.

11. *Joint Agency at Toronto.*—Joint Agency at Toronto will be located at Room 101, Union Station, and will be conducted in the name of G. H. Webster, from August 21st to September 24th, 1906. Office hours, 9.00 a.m. to 6.00 p.m.

Clinical Department.

The Management of Occipito-Posterior Positions. By ARTHUR H. BILL, M.D., of Cleveland, State House-Surgeon of the New York Lying-In Hospital, in *The Cleveland Medical Journal*.

There is perhaps no one thing in obstetrics which is more annoying to the physician than a persistent occipito-posterior position, so that in general discussion of obstetrical problems, one of the first questions asked, as a rule, is "How do you handle posterior positions?"

In this short paper I shall not attempt to discuss the various methods employed for preventing these positions and for correcting them when already present, previous to the onset of labor and during labor before the rupture of the membranes—I mean such methods as postural treatment, external and combined manipulation, etc.—but I shall confine myself to those occurrences of posterior position which, in the course of labor, form such an obstacle that it becomes necessary to resort to operative interference for the accomplishment of the delivery. It is in these cases that there is such a marked difference of opinion and uncertainty as to the safest and best method of procedure, and on account of this uncertainty there is usually a tendency to let the case take its own course and only interfere, often too late, when this is an absolute necessity in order to save the life of the mother or child.

Of the more important methods the following may be mentioned: (1) The internal procedure known as podalic version, which, however, only comes into consideration in cases in which the head is unengaged, and in these cases there is in all probability a contraction of the pelvic inlet, which would in itself entirely govern the method of procedure, and perhaps form a contraindication to the version. Then, too, the version is often impossible on account of the extreme degree of contraction of the uterus. For these reasons it would seem that the cases in which podalic version could be performed, for the correction of the faulty position alone, are rare indeed. (2) The various methods of delivering with the aid of forceps. Of these may be mentioned:

(a) That in which no attempt whatever is made to rotate the head to an occipito-anterior position. Here the forceps are applied in the axis of the pelvis and irrespective of the head, and are kept in this position grasping the head obliquely, unless spontaneous rotation occurs, which, however, is usually not the case, for the forceps when applied in this position form in them-

selves an additional obstacle to the rotation. If the head fails to rotate, which is usually the case, it is delivered in the posterior position. In connection with this method, it is noteworthy that in the clinics in which it is in vogue, namely, in Germany and Austria, the number of lacerations of the perineum and of episiotomies is exceedingly large, as is natural to suppose when a head is delivered with the occiput to the rear.

(b) Another method used considerably in this country, as well as in certain foreign clinics, consists in applying the forceps in the same way as in the previous method, namely, with regard to the pelvis, and in attempting to rotate the head at the same time as the traction is made. Here it is evident that forceps applied obliquely to the head, that is to one of its longer diameters, are in no position to act well as rotators, for, when the attempt is made, they frequently slip around the head instead of turning it, and thus causes injuries to it, and, furthermore, the wider separation of the blades is conducive to lacerations of the maternal soft parts.

(c) A third method is the one first described by Scanzoni, of Prague, in his text-book of obstetrics and commonly known as the Scanzoni manœuvre. This manœuvre, which was strongly opposed in Germany, as well as in Prague and other parts of Austria, was taken up and developed by the French, especially in the Tarnier and Baudelocque Clinics in Paris. It consists of two distinct applications of the forceps. First, they are applied directly to the sides of the head with the concavity of their pelvic curve anterior, as if to an anterior position. Thus the pelvic curve of the forceps looks toward the face instead of toward the occiput as in anterior positions. Then, with a large swinging movement of the handles, so as to keep the blades of the forceps in the pelvic axis, the head is rotated until the occiput is anterior. This part of the manœuvre is a rotation pure and simple without simultaneous traction. When the occiput is anterior, the forceps are naturally inverted and must be removed and reapplied, as to a head in a normal anterior position, in order to complete the delivery. After the rotation is completed and before removing the inverted forceps it is well to draw the head down slightly to fix it more firmly in its new position and thus prevent a return to its former posterior position.

In this country, this manœuvre has been recommended chiefly and almost exclusively by Williams, of Baltimore, nearly all of the other American writers on obstetrics failing to mention it at all, and condemning attempts at rotation in general as dangerous and usually impossible. Edgar has experimented with a modifi-

cation of this manœuvre, in which he applies the forceps in an inverted position, that is with the concavity of their pelvic curve to the rear and looking toward the occiput, and then rotates and delivers without a second application, but this original application is so difficult and confusing as to be impracticable, except in those cases in which the sagittal suture is nearly transverse, the occiput being only slightly posterior.

The various methods of increasing the flexion of the head serve a useful purpose in cases in which this is possible, but inasmuch as the purpose of this paper is to consider only those cases in which immediate delivery is indicated, I shall not consider them in detail. Other methods of performing rotation, such as the use of the vectis, of one blade of the forceps, etc., I shall not describe.

In view of the slowness with which the Scanzoni manœuvre, which I have found to be an excellent one, and to give far the best results of any so far described, is being adopted in this country, it would seem that any good results obtained from its use would be worth reporting, and so I wish to mention several cases in which I used it while connected with the New York Lying-In Hospital.

The first case is that of Mrs. K., a primipara, who had been in labor 36 hours before admission to the hospital. The membranes had ruptured eight hours previously. The uterus was dry and firmly contracted. On abdominal palpation the fetal head could be felt above the brim of the pelvis, and could not be forced into it. The fetal heart sounds were heard to the right of and below the umbilicus, rate 110 per minute. The external measurements of the pelvis were:

Between the iliac spines	23 cm.
Between the iliac crests	27 cm.
Right oblique diameter.....	21 cm.
Left oblique diameter.....	20.5 cm.
External conjugate diameter.....	18.5 cm.

Internal examination showed the head to be above the brim in the R.O.P. position. The membranes were ruptured and there was a well marked caput succedaneum present. The diagonal conjugate measured 10 cm., from which the true conjugate was estimated as 8.25 cm. Anterior rotation with the hand was impossible, and the Tarnier axis traction forceps were applied to the head in the occipito-posterior position, the application being made with reference to the pelvis and grasping the head over the mastoid and temporal regions. The head was then

drawn down into the pelvis with some difficulty, and when entirely through the cervix, the axis traction forceps were removed and the solid blade forceps applied directly to the sides of the head and the latter rotated and delivered by Scanzoni's manœuvre. The child weighed 3,400 grams. There was a slight laceration of the perineum which was started by the high forceps. No difficulty was encountered in performing the rotation.

The second case is that of Mrs. M., fourth pregnancy, who had been in labor 28 hours. The membranes had ruptured six hours previously. An unsuccessful attempt had been made by the physician in charge of the case to deliver the child with forceps before the patient was brought to the hospital. When seen at the hospital, the uterus was thoroughly contracted. The head was above the brim in the R.O.P. position. The os was large enough to admit the whole hand. The external measurements of the pelvis were:

Between the iliac spines	24 cm.
Between the iliac crests	26 cm.
Right oblique diameter	21.5 cm.
Left oblique diameter	21.5 cm.
External conjugate diameter.....	19.5 cm.

The diagonal conjugate measured 10.5 cm., from which the true conjugate was estimated at 8.5 cm., there being a simple flat pelvis of moderate degree. Here as in the previous case it was impossible to rotate the head with the hand on account of the firm contraction of the uterus, and a version was out of the question for the same reason, and so the Tarnier forceps were applied to the head in the R.O.P. position and the latter drawn into the pelvis, although still in the R.O.P. position, as I made no attempt to rotate the head while it was within the cervix. The Tarnier forceps were then removed and the solid blade forceps applied to the sides of the head, the latter rotated, the forceps reapplied to the head in its anterior position and delivery completed. The child weighed 4,000 grams. There was no laceration of the maternal soft parts.

CASE 3.—Yetta S., second pregnancy. The position was R.O.P., giving rise to prolonged and difficult labor. Operative interference was resorted to in the interest of the child, the fetal heart having fallen in rate to 90 per minute. In this case the head was engaged and the largest diameter had passed the pelvic brim, but was well within the cervix, which was dilated to about the size of four fingers. The cervix was dilated manually to full

dilatation and the solid blade forceps applied to the sides of the head, that is, in the oblique diameter of the pelvis. Here again I made no attempt at rotation until the head had been drawn entirely through the cervix, and then the Scanzoni manoeuvre was carried out without much difficulty, and without injury to the maternal soft parts. I think that the importance of avoiding all attempts at rotation within the cervix is self-evident, on account of the danger of rupturing the lower uterine segment, for the cervix grasped the head very firmly.

CASE 4.—Catherine G., second pregnancy. The position of the head was R.O.P., the sagittal suture being in the oblique diameter of the pelvis. The case was almost a parallel of the preceding one, and the indication for forceps was the same, and I shall not take your time in giving the details. No difficulty was met with in rotating the head after it had been drawn through the cervix. There was no injury to the mother or child.

CASE 5.—Bessie H., first pregnancy. The position of the head was L.O.P., the occiput being just posterior to the transverse diameter of the pelvis. There was absolutely no progress in the labor, and forceps were resorted to in the interest of the mother. The head was entirely out of the cervix and just at the spines of the ischia. In this case, as would be expected, the application of the forceps to the sides of the head was somewhat more difficult on account of the nearly transverse position, and no doubt was greatly facilitated by the use of the solid blade forceps, of which I have spoken. The forceps used as rotators in all these cases were those known as the Tucker-McLane solid blade forceps. They have a peculiar advantage in these cases over the fenestrated forceps in that they have a perfectly smooth surface and are somewhat thinner and narrower, allowing them to slip around the vaginal wall without difficulty and without danger of damaging it. This greatly facilitates the manoeuvre both in making the original application and in rotating the head after the application. In the present case the forceps were applied with the concavity toward the occiput, and after rotation a second application was unnecessary. This was almost as easy as the reverse application would have been, since the sagittal suture was almost in the transverse diameter. There was no laceration of the soft parts.

CASE 6.—Nellie C., first pregnancy. The case was one of protracted and difficult labor. The operation was performed in the interest of the child. The position was L.O.P., the head being in the pelvis and entirely through the cervix. The pelvis was normal, with the exception of a very prominent spine of the

ischium on the right side, which projected about 3 cm. into the pelvic cavity. This spine had caused an obstruction to the further descent and had promoted anterior rotation of the sinciput. Fortunately the other side of the pelvis was of normal size and by forcibly flexing the head and forcing it to the left side it was possible to rotate the occiput to the front and deliver it in this position. Here as in the preceding cases, the forceps were applied directly to the sides of the head. In this case especially it would seem that rotation with any other application would have been absolutely impossible on account of the small space in which to work.

CASES 7 and 8.—The next two cases I have put together and they are very similar. Both were primiparæ. The occiput in each case was directly in the hollow of the sacrum and the head was at the pelvic outlet. In these cases the application of the forceps was as easy as in a completely rotated anterior position. It would have been comparatively easy to deliver the head in the posterior position, but on account of the greater chance of saving the perineum, the head was rotated through an angle of 180 deg., bringing the occiput to the front, after which the forceps were reapplied and the delivery completed without a laceration of the perineum in either case.

To hurriedly sum up these cases, it will be seen that they furnish examples of occipito-posterior position in all the various planes of the pelvis; at the brim and complicated by a moderate contraction of the pelvic inlet, engaged but within the cervix, in the true pelvis, but above the spines, and at the pelvic outlet. In all of these cases practically the same manœuvre was carried out to accomplish the rotation, and in each case it was successful. In the last two cases, in which the occiput was in the hollow of the sacrum, it is barely possible that in time there would have been a spontaneous though difficult delivery. Of course the occiput would have been to the rear, and as the heads were both large, the delivery would probably have been accompanied by a laceration of the perineum, which was avoided in both cases by bringing the occiput to the front, even though it was necessary to rotate the head through an angle of 180 deg.

In view of the good results accompanying this procedure, it would seem to be a perfectly justifiable and advisable one in all such cases, to prevent the unfavorable delivery in the posterior position. It is an operation which naturally appeals to one, since it converts the abnormal into the normal position.

In regard to the effect upon the child, no bad results were noticed in any of these cases, and it would seem that, from a con-

sideration of the safety of the child, the rotation of the head may be said to be a perfectly safe procedure. After experimenting with this manœuvre, and after trying it thoroughly in the Tarnier clinic in Paris, Budin and Demelin have concluded that there is no danger whatever to the child even in those cases, which are rare, in which the shoulders do not follow the head in its rotation, and even though the head be rotated through an angle of 180 deg.

I have reported this short series of occipito-posterior cases in view of the fact that this method of treatment is not generally adopted, and by many held to be impracticable and usually impossible. It would certainly seem that failures were due more often to the method of performing the manœuvre than to a faulty principle. It is an operation in which all the details should be closely followed, and in closing I wish to mention a few points which are essential to its success and safety.

(1) The blades should be applied accurately to the sides of the head, and not simply with regard to the pelvis. This is more easily accomplished, especially in the oblique and nearly transverse positions, by means of the solid blade forceps.

(2) The head should be held firmly in the grasp of the forceps during the rotation to prevent slipping and a possible consequent injury to it.

(3) In cases in which the sagittal suture is in the oblique diameter of the pelvis it is absolutely necessary to draw the handles of the forceps well over to the thigh opposite the occiput before rotating.

(4) In performing the rotation, the blades of the forceps should be kept as nearly as possible in the axis of the pelvis by a large swinging movement of the handles, which thus describe a large circle externally. If the last two rules be strictly adhered to, it will be found that the pelvic curve of the forceps will offer no obstacle whatever to the rotation, and furnish no disadvantages when compared with perfectly straight forceps, the use of which has been suggested.

(5) No attempt at rotation should be made while the head is within the cervix, as it is a dangerous procedure, liable to be followed by a rupture of the lower uterine segment. In cases in which the head is high up and partially within the cervix it is far better to draw it entirely out of the cervix first of all, and to perform the rotation lower down in the pelvis.

(6) If there is a tendency for the head to return to its posterior position immediately after removing the forceps for the reapplication, this may usually be overcome by drawing it down

somewhat after complete rotation and before removing the blades. In more obstinate cases the head may be held with the fingers of one hand applied along its side during the removal and reapplication of the forceps, or simply one blade of the forceps may be removed and reapplied before the removal of the other, and thus one blade is kept constantly in a position to prevent a return to the posterior position. This latter procedure is, however, rarely necessary.

If these essential points are carefully followed, the operator will meet with success in practically all posterior cases, and be able to avoid lacerations of the maternal soft parts which would in all probability occur if the head were delivered in the occipito-posterior position.

A wedge of hard wood makes a gag quite useful, often, when administering anesthesia. A discarded thermometer case (or a hard rubber douche point) is a serviceable handle in which to mount, with candle grease or adhesive plaster, a stick of silver nitrate. Steel spring tape-measures are better than the wires generally sold for the purpose, for conducting to an X-ray tube the current from the coil or static machine; easily kept taut, and quickly adjusted, they are safest for the patient and most convenient for the operator; that they are not insulated is inconsequential—the coverings on the regular wires do not insulate the induced current. Cheap powder blowers, such as are used for insecticides, may be employed as insufflators in surgical work, and pepper boxes are useful for dusting powders.

If a small child has been pulled by the arm and thereafter has disability in that member, attention should first be directed to the upper end of the radius. Here one is apt to find a subluxation of the head of the bone ("pulled arm") or an epiphysial separation.

IN a tuberculous patient with supposed chronic appendicitis it is well to suspect tuberculous disease of the ileo-cecal valve.—*American Journal of Surgery.*

Physician's Library.

A distinction of no mean degree has been conferred upon an American book, the joint authorship of Drs. J. Madison Taylor and William H. Wells. The revised second edition of their treatise on "Diseases of Children," published by P. Blakiston's Son & Co., of Philadelphia, has been translated into Italian by DR. MARIO FLAMIMI, of the Pediatric Clinic of Rome, with contributions by Prof. Concetti and Dr. Valabussa. The translation has proven very popular abroad, and the occasion is one of felicitation, not only to the authors but to American medicine generally, inasmuch as the work was chosen as being especially adapted to clinical teaching in Italy. Few American books have attained such honor. Its success abroad is but a repetition of the favor which it enjoys here.

Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By WALTER M. BRICKNER, M.D., Chief of Surgical Department, Mount Sinai Hospital Dispensary, New York; Editor, *American Journal of Surgery*, and ELI MOSCHCOWITZ, M.D., Assistant Physician, Mount Sinai Hospital Dispensary, New York; Editorial Associate, *American Journal of Surgery*. Duodecimo; 60 pages. New York Surgery Publishing Co., 1906. Cloth, 50 cents.

This little book is most novel, not only on account of the many original, terse and epigrammatic practical suggestions given, but its general appearance and attractive form. It contains 250 suggestions grouped under proper headings and its contents are carefully indexed. While some of the items are familiar to the practical surgeon, they are presented in a manner that will impress them on the reader's memory. The book is bound in heavy cloth, stamped in gold, and the text is printed upon India tint paper with marginal headings in red. This book will be much appreciated by the general practitioner, not alone on account of the value of its contents, but as an artistic bit of book making.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 19Q1

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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TORONTO, AUGUST, 1906.

No. 2.

COMMENT FROM MONTH TO MONTH.

Do not forget the date of your own national medical organization, the Canadian Medical Association, at 2 p.m., Monday, August 20th, at the new Science Building, College Street, Toronto, at the head of McCaul Street. This meeting is very important as plans for complete re-organization will be presented by the Special Committee appointed last meeting at Halifax. At no time before in the history of the medical profession has there been manifest such earnest desire to cohere, and to work for all that is good, both for the profession and otherwise than at the present time. For the time being, the meeting of the British Medical Association may overshadow the meeting of our own association in importance; it will of course, in point of scientific work. That is granted. We should not, however, forget that we owe a great deal to ourselves, and that we are CANADIANS; and that we have problems to work out which demand careful and thoughtful consideration, from diffuse sources. So it is that it is most important that this meeting should be representative, that every province should have a large contingent present so that all may be heard on the vital question before us at the present time—re-organization.

There will be held also in the same place at 8 p.m. the annual meeting of the Ontario Medical Association. This is an organization which has done a great deal of good in the past and, under its present management, Dr. George A. Bingham, President, and Dr. Chas. P. Lusk, as secretary, ought to receive the cordial support which it deserves. True, it is provincial in its scope, but our Ontario readers have a live, and enduring interest in its aims and objects. It is quite the right and proper thing that every province should have its own provincial society, and we can be loyal to it as we can be to the national organization. Indeed, every county or group of counties in the different provinces of the Dominion of Canada should have their societies, and they should be properly conducted and well organized and attended. The time has long since gone past when the medical man can be content with remaining in his own shell; he must come out and fraternize. We bespeak, therefore, for the annual meeting of the Ontario Medical Association, a full attendance.

But there is still another medical society which will hold its annual meeting here in August; and it is a society which ought to receive most cordial support from the medical profession, namely, the Canadian Medical Protective Association. We doubt if there is existing in Canada to day an organization of medical men of more solid importance to the Canadian medical profession, if every single, individual member would only see it in this light, than the Canadian Medical Protective Association. It will meet on the adjournment of the first session of the Canadian Medical Association, in the same place, *i.e.* probably about 5 p.m., Monday, the 20th of August. We understand that since the report of the President, Dr. R. W. Powell, Ottawa, last year at Halifax, the intervening twelve months have been exceptionally prosperous and hopeful. Among other things we understand that there has been an increased membership; that no cases have gone wrong; that there is at present only one case pending, a trivial one in the Province of British Columbia; that all bills are settled; that there have been no large legal expenses during the past year; and that the association is in a very comfortable position financially. This speaks a great deal for the wise and business-like administration of the President, Dr. Powell, and he is to be congratulated upon it. Need we add anything further? It seems folly that all are not banded thuswise together.

Whilst we laud our own, we are not undmindful of those who are coming. The Toronto profession have worked very laboriously and faithfully to make the meeting here of the British Medical Association a pronounced success.

We are of course all interested in the scientific part of this meeting, and the indications are that its attendance is going to surpass anything ever held in Canada; indeed, it will probably rival the best meetings of the American Medical Association. We are told that from England and other parts of the Empire they are coming by hundreds; that Canadians will turn out as they never have, even to their own national medical meetings; that the United States profession will fairly swarm over us. The more the merrier; so we are going to have a bumper house. As Torontonians we are proud of our city; the medical men will compare here with any the world over. They certainly will do their level best to fulfil what is expected of them, and will hope that all are seen after properly.

The hay-fever season is upon us and many are looking for palliatives for this distressing malady. Solomon Solis-Cohen, in the Journal of the American Medical Association, July 28th, 1906, states his observations during an experience of several years past in the treatment of this condition. In the treatment of this condition, and the treatment is far more palliative than curative, three substances or preparations are new before the profession, namely: Adrenalin chloride solution of Takamine; suprarenalin; pollantin. Speaking of the first, and this we have found very useful in the treatment of hay fever, Dr. Cohen says it is not eligible for lingual administration, *i.e.*, the effect produced by the amount you could safely place for dissolution on the tongue would not be effective, but must be administered by instillation into the conjunctival sac, or into the nasal passages. Speaking of suprarenalin, Dr. Cohen finds it advisable to use a snuff more frequently of suprarenalin, as follows: Suprarenalin, one part; bismuth subcarbonate, three hundred parts; zinc oxide, three hundred parts; zinc stearate (Comp.) two hundred parts. These are to be mixed and well triturated. This powder may be either snuffed or insufflated. Of course there are many other substances, as boric acid, etc., which may be used as diluents. In from thirty to fifty per cent. of the cases met with, Solis-Cohen states that pollantin produces positive effects, although he has found it nothing more than a palliative. With the above suprarenalin powder relief is obtained lasting from two to ten hours, according to the environment.

Science Notes.

Is There any Cure for Color-Blindness?

The question came up recently, according to the *Central Zeitung für Optik und Mechanik*, if the use of rosalin-colored glasses sometimes recommended was a certain cure for, or help in, the case of that class of color-blindness in which red and green cannot be distinguished from one another. This question is answered in the periodical named, by Herr Pichon, of Cologne, in the negative, but with some reservations.

Color-blindness is inborn; and it is impossible by means of glasses of any special color or kind to implant in a color-blind person that sensitiveness to color with which Nature has not endowed him. The fault lies with certain fibers in the retina. There is, however, a means by which even the perfectly color-blind can be enabled to recognize and distinguish every color, and even every shade of every color—without, however, being able to distinguish the colors as can a normal eye. This help is based on that principle of any colored glass, by which it permits most easily the passage of those rays which correspond to its own color; and tends to arrest all rays of the complementary color. Those who are color-blind red and green cannot normally distinguish between these colors, both of which appear to them yellowish or bluish. If, however, one afflicted with this species of color-blindness looks at both red and green objects through a red glass, he will at once note a difference in the two colors, in that the red appears unweakened in brightness. In other words, red objects will appear to him lighter, while green rays will be absorbed by the red glass and hence green objects seen through it will appear to him darker than when seen with the naked eye. As a complement to this, the red-green color-blind person will by the use of green glasses see objects that are really green brighter than with the naked eye, while red objects seen by him through the same green glass will appear to be darker than when viewed with the naked eye alone.

If we ask one who is color-blind to red and green what color certain well-known red and green objects have—as for instance the foliage of an ordinary cherry tree and the cherries thereon—he will answer correctly, because he has heard from others what the colors of these objects are. But if we give a red-green color-blind person either red or green glasses, he can by

their aid tell what color he observes, by the degree in which the glass affects the brightness of that which he sees.

In the same way one who is color-blind to yellow and blue can be helped to distinguish these colors, by means of either yellow or blue glasses, although otherwise undistinguishable. Through the yellow glass, yellow objects will appear brighter than with the naked eye alone; and conversely, the use of a blue glass will brighten to him all really blue objects and dull the brightness of all that are yellow.

As regards those who are color-blind to all colors, they are to be helped by a set of three different glasses—red, green and violet. If one who is color-blind to red and green wishes to be able to distinguish between the various shades either of red or of green, the proper course is for him to supply himself with a set of three or more glasses, mounted in the manner of the lenses in a pocket microscope. If in looking through these at a red or a green object he notices no difference in brightness, no matter through which of the glasses he observes it, then he must look again through two of the glasses at once—side by side—until he does observe a difference.

In case a totally color-blind man wishes to distinguish slightly differing shades of color, he must make combinations of red and green, yellow and orange glasses, and with these combinations he can distinguish twelve different shades. In this case it will be best to have the glasses set in pairs, each of the above-named combinations in a frame by itself. Of course these helps are of no use for railway men, or those whose duty it is to observe the colors of signals at sea; as in their case the use of such appliances is not admissible. In conclusion it may be remarked that there is a special kind of color-blindness caused by a disease of the retina, and which results in the inability to distinguish blue at all, and one of the optic nerve, which results in total inability to see red.—*Scientific American*.

News Items.

ESTERHAZY, Sask., has fifteen cases of smallpox.

SMALLPOX has broken out in Dawn, Kent County, Ontario.

THE deaths in St. John, N.B., January to July 1st numbered 374.

DR. JOS. W. CHISHOLM was drowned in Big Glace Bay, C. B., July the 23rd.

THERE were 74 more typhoid fever deaths in Ontario in June, 1906, than in June, 1905.

DR. BERWICK, of Grand Valley, has been appointed associate coroner of Dufferin county.

DR. C. D. SECORD, of Harrietsville, leaves for Edmonton this week, where he intends to locate.

DR. A. T. STEELE, of Shelburne, has been elected president of the Central Dufferin Telephone Co.

DR. J. W. SLAVIN, one of the oldest and most respected citizens in Orillia, is dead at the age of 71 years.

DR. F. MONTIZAMBERT, Ottawa, Director-General Public Health, is inspecting in the Maritime Provinces.

DR. LABERGE, of Montreal, the civic health officer, is strongly urging the establishment of a Federal Health Department.

DR. W. A. HUTTON, formerly house surgeon in the General Hospital at Winnipeg, perished in the disaster in Vancouver Harbor a short time ago.

DR. ROBERT has returned to Delhi, Ont., from New York City, and commences the practice of medicine in the office formerly occupied by Dr Wells.

DR. J. M. GORDON has sold out his practice at Ripley. The Doctor's health has not been good for some time, and he has gone to Gravenhurst to recuperate.

DR. C. J. FAGAN, Secretary of the British Columbia Board of Health, reports the salmon canneries in that province sanitary, and packing conducted in a cleanly manner.

DR. W. K. COLBECK has sold his medical practice in Grand Valley to Dr. Chas. Gaviller. Dr. Colbeck intends to spend some time in the hospitals of New York and Baltimore.

DR. ALLAN McINTOSH, of 120 Huron Street, Toronto, died recently as the result of an overdose of morphia. He had been suffering from insomnia for over a year, brought on from overwork while living at Bear Creek, Minnesota, where he went after graduating from Trinity Medical College.

DR. J. P. KENNEDY has met with successful results in his efforts to establish a hospital in Wingham, and we understand that the amount necessary has been nearly all secured, and the prospects are that before many days the entire amount required for purchase of the building and fitting up in first class style, will have been provided by leading citizens.

The death is announced at Traverse City, Mich., of Dr. Albert H. Holliday, a graduate of Toronto University, and subsequently of Victoria Medical College, Cobourg, where he received the degree of M.D., C.M. At the time of his death he was president of the local medical association. Deceased, who was 47 years of age, was a native of Brooklin, Ont. He is survived by a widow and three children.

THE Thirty-ninth annual meeting of the Canadian Medical Association, will be held in Toronto on the afternoon of the 20th August, and the forenoon of the 21st. The meetings which will be of an executive character will be held in the New Science Building on College St., at the head of McCaul St. The first session will convene at 2 o'clock p.m. in the north lecture room. The chief item of business will be the reception of the report of the Special Committee on Re-organization, and for this alone there should be a large and representative attendance.

DR. J. ALEX. HUTCHISON, Montreal, Chief Medical Officer for the Grand Trunk Pacific, has been on a tour of inspection, 160 miles driving west of Winnipeg.

DR. F. G. FINLEY, Montreal, was severely injured in a street railway accident recently. He is in the Montreal General Hospital, and we are glad to announce that good-hopes are entertained for his recovery.

DR. A. W. KEANE, late resident house physician and surgeon to the Toronto General Hospital, and a recent graduate of the College of Physicians and Surgeons of Ontario, has returned to Essex, and has opened up an office there.

SAD indeed was the death of Dr. D. George J. Campbell, of Halifax, who fell a victim to pneumonia on his wedding tour. He died on the 19th of July, and was the only son of Dr. D. A. Campbell, of Halifax. Dr. Geo. M. Campbell, of Halifax, was his uncle. Delegates to the Canadian Medical Association last year will remember his extreme desire that their entertainment in Halifax should be of the first order.

WE regret to have to announce the death of Dr. J. J. Elliott, Toronto. Dr. Elliott, who was in his 31st year, was a graduate of Trinity Medical College 1896, and of the Toronto General Hospital, the following year. He was devoted to his practice, unassuming and of a kindly jovial nature. His early demise is extremely sad after but ten years' service in his chosen profession. Carcinoma of the stomach is said to have been the cause of death.

THE Samaritan Hospital for women at Montreal is now installed in its new building, 394 Dorchester street west, which was recently purchased for it by one of its wealthy friends. By the will of the late Miss Orkney, it will receive a bequest of over \$6,000. The Hospital has now room for thirty beds, of which seven are free, and the others semi-private and private. All the private rooms are open to any physician of Montreal in good standing for gynecological cases only, including abdominal surgery. According to its charter medical students are not admitted, but medical graduates are always made welcome to visit it.

Correspondence.

REFORMATION OF INEBRIATES.

To the Editor of DOMINION MEDICAL MONTHLY :

Sir.— The Ontario Society for the reformation of inebriates desires space for calling the attention of the benevolent public to its work and to its needs. Its object is the reclaiming of inebriates. Its methods are as follows: Home treatment is given in suitable cases and such cases as require hospital care are treated from one to three weeks in hospital. A friendly visitor, called a probation officer, takes the supervision of inebriates subsequent to treatment, finds them employment, and endeavors to bring them into touch with the church of their choice. The medical officer of the society administers the treatment, and associated with him is a consulting committee of three leading physicians of Toronto. Arrangements have been made with the police authorities whereby persons arrested for drunkenness (when not hardened offenders) may be committed to the care of the society instead of being sent to jail, and forced to associate with the vicious and the depraved. The medical treatment is conducted on strictly ethical lines, no secret remedies being used, and it is continued for three weeks, while the probation on parole is continued for several months. The scheme is a unique economic measure, which for the class referred to renders prolonged detention in an institution unnecessary. It is combining maximum efficiency with minimum expense. We wish to put this unique economic system to a crucial test on a sufficiently ample scale, to be used as an object lesson, before the next meeting of the Ontario Legislature. The result, we do not doubt, would be eminently satisfactory, and would more than justify legislation along the same lines. An eminent Oxford professor, and a Canadian, in a letter to the secretary of this society, speaks of the proposed legislation as follows: "I think the plan you propose is an excellent one, and I do hope it will be carried out."

At the last quarterly meeting of this society the report of the officers was most gratifying, inasmuch as 60 per cent. of the cases of inebriates treated and cared for were doing remarkably well. In view of the satisfactory character of the report it was

decided to make an appeal to the benevolent public for financial help to carry on the work efficiently, and as an object lesson before the next session of the Ontario Legislature. Remittances may be made to the treasurer, Confederation Life Building, or to the secretary, 76 Prince Arthur Avenue, Toronto.

E. J. BARWICK, M.D.,
Chairman of Medical Consulting Committee.

A. M. ROSEBRUGH, M.D.,
Secretary.

S. C. BIGGS, K. C.,
Treasurer.

Toronto, July 10, 1906.

Publishers' Department

HOT WEATHER DIET.—In hot weather the average person takes too much food and particularly an excess of meat. The digestive organs are kept at hard labor assimilating a heavy diet and forcing every organ in the body to do an unnecessary amount of work. The digestive apparatus faithfully performs its function until insulted nature rebels and enforces a period of rest for the exhausted organs. Another danger from eating too much meat in summer is that of ptomain poisoning following the ingestion of tainted meats. During the hot months the question of diet is largely one of the class of food material best adapted to sustain mental and physical energy without unduly increasing the production of heat. A diet of milk, eggs, fruit and EGG-O-SEE is most suitable for the summer months. EGG-O-SEE with cold cream makes a delightful basis for every meal as it offers the full food value of whole-wheat. The EGG-O-SEE Cereal Co., of Quincy, Ill., will send on request a full size package of EGG-O-SEE to any physician.

PROTECTION FOR SURGEONS.—Not life insurance, but health assurance. In the operating room, the office, the lecture amphitheatre, the buggy, the street, day or night, rain or shine, summer heat or winter cold, you owe it to yourself to have your "immediate environment," with regard to temperature and humidity, as equable as possible. To this end wear the Dr. Deimel Linen-Mesh Underwear