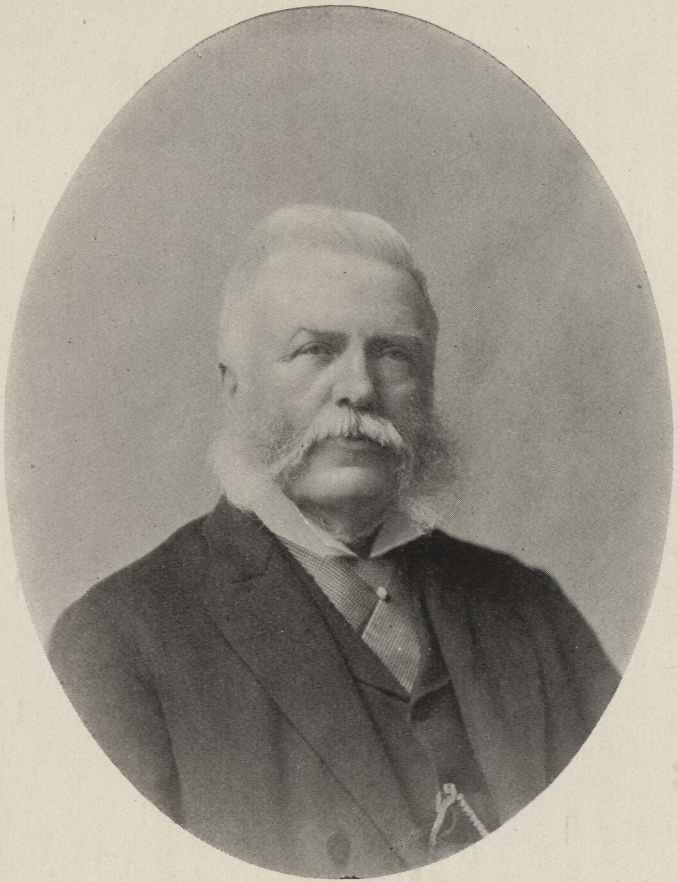

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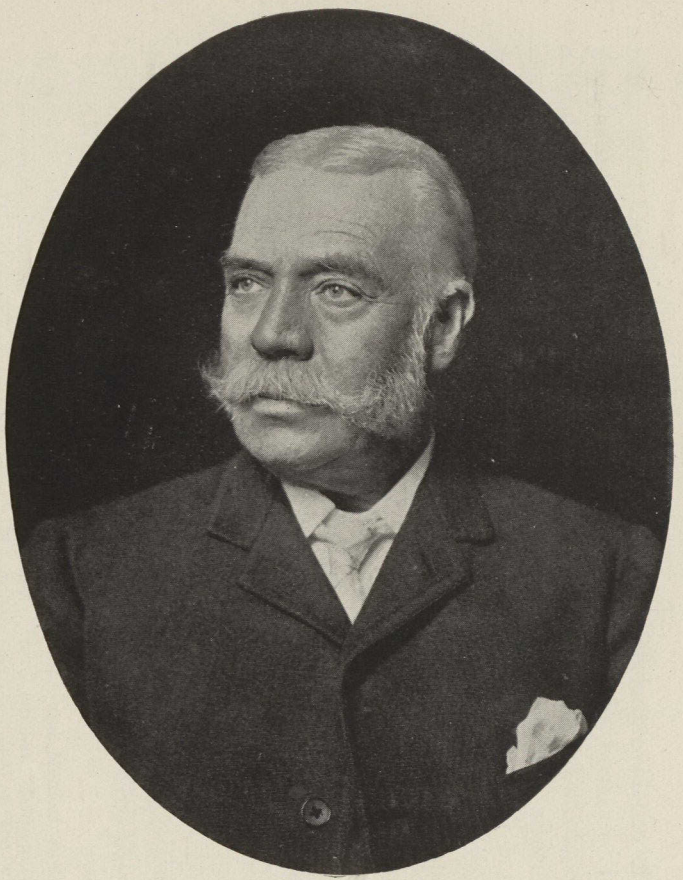

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SURGICAL TREATMENT OF NEPHRITIS.*

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THE surgical treatment of nephritis or Bright's disease was the title of a paper published by me on the 11th of March, 1899, in the journal of the American Medical Association. This is the first anouncement that has ever appeared recommending a surgical treatment for Bright's disease. The date of this publication has been overlooked by Dr. G. M. Edebohls, in all his articles. Dr. Edebohls' first paper, entitled "Chronic Nephritis Affecting a Movable Kidney as an Indication for Nephropexy", appeared in the *Medical News*, New York, on the 22nd of April, 1899, one month and eleven days after my first article.

On the 10th of February, 1899, a symposium on nephritis was the program of the Chicago Academy of Medicine, and the surgical treatment was assigned to me. At this meeting I related two cases of interstitial nephritis symptomatically cured by decapsulation and multiple punctures. I removed a portion of the kidney in each case, which was pathologically reported on by Drs. Klebs and Zeit and they pronounced it interstitial nephritis. In these two instances no positive diagnosis was made before operating.

At that meeting I related several earlier cases, but inasmuch as I had not examined a section of kidney tissue microscopically in any of them, I thought it wise not to publish anything but the two cases in which that was done. Dr. R. B. Preble, while denouncing splitting o the capsule, etc., as dangerous and useless, terminated his remarks as follows: "While Dr. Ferguson's paper was interesting, still the bulk of the cases do not apply to nephritis at all (claiming that my diagnosis was in error), and the latter cases which were demonstrated to nephritis have not recovered from their nephritis, but have been relieved of a purely subjective symptoms." (Journal A. M. A., March 11, 1899.) Time has proven him to be wrong.

History. In the *New York Medical Journal*, May 17, 1902, appeared an article from the pen of Guiteras, on the "Surgical Treat-

*Read before the American Medical Association at New Orleans, May, 1903.

ment of Bright's Disease," in which he gave an excellent historic review of work leading up to this subject. He, too, overlooked my first publication, March 11, 1899. He gives the more recent developments, and has added three cases operated on by himself. It is my intention in this short paper to briefly give the evolution of the surgical treatment of nephritis, and add a few more cases of this disease treated surgically.

Reginald Harrison made a mistaken diagnosis in three kidney cases (1878, 1887 and 1893) of an abscess in one and stone in the other two. He cut down upon them and found acute nephritis instead. It was fortunate for his patients that he and his associates were in error, for the operation cured the patients, and let me ask if in these cases a diagnosis of acute nephritis had then been made, would the knife have been recommended ? I think not !

Newman (1896) observed in two cases the beneficial influences fixation of the kidney had on albuminuria.

In 1899, Tiffany successfully incised the capsule and parenchyma of a kidney affected with chronic nephritis, complicated with nephralgia.

In 1886, Péan removed a kidney for nephralgia and chronic nephritis.

In October, 1899, Pousson collected 25 cases, and added two of his own : hematuric nephritis, 10 cases; nephritis with nephralgia, 2 cases; subacute infectious nephritis, 4 cases; acute infectious nephritis, 9 cases. The kidney was removed in 11 of these, opened in 13, and explored in one, with 21 reported cured. These operations mentioned by Pousson included those of Harrison, Weir and Israel, and were undertaken, not with the object of curing bright's disease, acute or chronic, but for some suspected surgical condition, such as abscess, tumor, stone, etc.

In 1899, Israel reported 14 cases of hematuria and nephralgia treated by nephrotomy. In 12 of these there was evidence of chronic nephritis. It must be remembered that Israel did not aim at a surgical treatment for bright's disease, and recommended an operation only when there was hematuria or nephralgia.

In November, 1890, Naunyn, in writing of nephrotomy for bleeding in nephritis, stated that " nephrotomy may some day play a far greater role in the treatment of Bright's disease."

Edebohls, in April 22nd, 1899; 1901, and 1903, has given to the medical world his conceptions of the surgical treatment of nephritis, his operations and results. I wish here to commend that work. He observed the beneficial effects of nephropexy eleven years ago. " My first case was operated upon as long ago as Nov. 29, 1892; my fifth upon April 1, 1897." (Edebohls, *New York Medical Record*, Dec. 21, 1901.) In

speaking of his sixth case, in the same article, he says: "This operation, performed on Jan. 10, 1898, constitutes the first operation ever undertaken upon the kidney with the deliberate purpose of curing chronic Bright's disease, and in so far marks a period in the history of the affection."

This case was published in his first paper (April 22, 1899), after my first publication.

Dr. Edebohls' example has been followed, and we are here and there hearing of good results from other surgeons. Physicians in the first rank recognize that there is a surgical treatment for nephritis. To Dr. Edebohls is due the credit of individually working out this surgical treatment, and operating on more cases of Bright's disease than any other surgeon. While I am constrained to claim priority (first in publication), I cannot but feel proud of the distinction and record the doctor has made for himself, in trying to solve the limitations of kidney decapsulation in nephritis. In the *Medical Record*, New York, (March 28, 1903,) Dr. Edebohls publishes his experience, which amounts to no less than 51 cases treated by operation. It will be seen in the description of my experience, our work has been developing contemporaneously.

I shall now very briefly refer to the development of kidney surgery before giving my personal work on nephritis. It is only thirty-five years since the kidneys have been operated on at all. Like many of the other internal organs of the body, diseases affecting them were treated by internal medication. We can appreciate how Peaslee (1868) felt when he removed a kidney by mistake, taking it for a solid ovarian tumor. Although the patient died on the third day of peritonitis, two lessons have been learned by his mistake. First, the feasibility of nephrectomy, and, second, that the urine was secreted abundantly by the other kidney.

Spencer Wells' case also died, but not from suppression of urine.

The following year (1869), Simon, of Heidelberg, purposely and successfully attacked the kidney for a ureteral fistula in a woman. I have no doubt that his experiments on dogs in this line better fitted him to successfully perform the operation.

Within seven years after the first removal of a kidney by Peaslee, no less than 233 nephrectomies were collected by Gross. It would take some considerable time to reckon the number of nephrectomies up to date. The operation was extended beyond its reasonable and legitimate limits. Chief among the indications for the removal of a kidney were stone, pyonephrosis, hydronephrosis, tuberculosis, floating kidney, nephralgia, hematuria, and tumors.

Nephrotomy for stone (nephrolithotomy) was first performed by Morris of London, only twenty-three years ago, (Feb., 1880). Then nephrotomy gradually supplanted nephrectomy in many cases.

Nephropexy, by Hahn, (1881), was the next important advance in renal surgery.

PERSONAL EXPERIENCE.

In 1889, I explored a kidney suspected of containing a stone, in a young man, 24 years of age, suffering with renal colic. There was blood in the urine, and the kidney was very tender on pressure. The exploration consisted in exposing the organ and passing a darning-needle, blunt end foremost, through it in many directions. No stone was found, but temporary relief from pain and hemorrhage was given. Within a year afterwards he returned to see me. Bright's disease became more and more marked, and four years afterwards he died of parenchymatous nephritis.

In my early fixation of floating kidneys, I used a stout cord of chromic catgut, and passed it through them four or five times, and while using this stout cord, no complaints came from our patients after the operation. But just as soon as we began to use fine catgut or silk, and grasp only the capsule, two cases returned, complaining of pain, as before, although the kidneys remained fixed. In 1900, I explored one of these for stone with the knife; found nothing; had free hemorrhage, which was checked with iodoform gauze. This made a symptomatic cure; the nephralgia completely subsided, and she is now well. After this I did some fixations by cutting through the capsule, rolling it a little to one side, and passing sutures through it and through kidney tissue as well, with satisfactory results.

My first decapsulation, deliberately undertaken, was for "Nephritis and Floating Kidney" In 1896, June 17, Edna L., aged 25, entered the Post-Graduate Hospital, complaining of a painful, tender, floating and enlarged right kidney. Urine scant, ℥xx in twenty-four hours; contained 30 per cent. albumin.

Operation. Nephrorrhaphy; capsule stripped off. Urine increased in quantity, and albumin decreased. Nephritis was diagnosed as a complication. Case lost sight of (hospital record).

"DOUBLE DECAPSULATION FOR NEPHRITIS AND FLOATING KIDNEYS."

On Sept. 9, 1897, Mrs. B. G., aged 30, entered the Post-Graduate Hospital, complaining of pain in the region of both kidneys. She had been suffering for twelve years, particularly from her right side. She was operated on three years previously for ovarian abscess, and one year previously (in 1896) for right floating kidney. Had one child twelve years of age. Her father died at 30 years of consumption. Her urine was very abundant, pale, and contained a trace of albumin. She was

considered hysterical. Interstitial nephritis diagnosed. Both kidneys were floating freely. Capsule stripped from both kidneys, and sutured to lumbar fascia. She made a good recovery, and marvellously improved. Within six months she was able to do all her housework. No cure was expected in this case, decapsulation being performed with the object simply of relieving her pain and tenderness. She was, two years later, symptomatically cured of her Bright's disease. It then occurred to me that all cases of tender and floating kidneys were cases of interstitial nephritis, and from this date, (Sept., 1897), I expressed my convictions at my clinics.

"*Microscopic Examination of Kidney Tissue for the First Time.*" *Left Floating Kidney; interstitial nephritis (Bright's).* Decapsulation and puncture. (Reported in Journal A. M. A., March 11, 1899.)

Mrs. M., 37 years of age, and weighing 250 pounds, entered the Postgraduate Hospital complaining of just two symptoms: (a) Dizziness, and (b) pain in the region of left kidney. Taking morphine for the pain. Ill for three years. Began to have these symptoms after childbirth. Urine scanty, ℥xxiv. in twenty-four hours. Normal, except a few hyaline casts. Jan. 4, 1899, I decapsulated the kidney, made multiple punctures in it, fastened it up, and removed a portion for examination. The immediate relief was astonishing to all. Even the next day she declared she was free from her old pain. Microscopic examination of kidney tissue revealed interstitial nephritis. In 1900 she returned, complaining of pain in her pelvis, and through the vagina I removed a left ovarian cyst. At this time her urine was normal in quantity and quality, but occasionally, such as after a hard day's work, she had an aching feeling in her left side, for which electricity was used. I have heard from her repeatedly during the past year, and she is symptomatically cured, it now being over four years since the operation.

Interstitial nephritis (Bright's); right floating kidney. Decapsulation. Nephrotomy (drainage); nephrorrhaphy. (Published in Journal A.M.A., March 11, 1899.)

Mrs. W., aged 26; chronic pain over right kidney, which was freely movable. Was taking from two to eight grains of morphine per day for the pain. (See full report.) Had two confinements, one miscarriage, pulmonary hemorrhage, trachelorrhaphy, chills and fever (supposed to be malaria), cholecystotomy, and, finally, I operated on her right, tender, floating kidney. Owing to the septic condition of her urine, I thought the kidney was septic also, but it was not. Microscopic examination of kidney tissue revealed the unmistakable changes of interstitial nephritis. The immediate result was admirable. The albumin and casts cleared

away before she left the hospital. From the first three days after the operation, she did without morphine, even though a habitué. Two years later she was well, and a later report brings the same good news.

INTERSTITIAL NEPHRITIS; NEPHROTOMY AND DRAINAGE OF LEFT KIDNEY.

March 16, 1899. Mrs. H.; aged 32. From Livery City, Iowa. Complains of pain and tenderness in the region of left kidney, which began two years previously, and then lasted with severity for twelve hours, and had bloody urine. During 1897 and 1898 she had several attacks of pain and tenderness, referred to her left kidney, sometimes passing blood in urine, and often accompanied with chills and fever. During the last six months the attacks were more frequent, but no blood was passed with the urine. Mild chills and feverish sensations accompanied nearly every attack.

Upon going over the case thoroughly, a diagnosis of recurrent interstitial nephritis was made. Nephrotomy was performed, and kidney drained for twelve days. Patient left the hospital after three or four weeks, with marked general improvement, and entirely relieved of her pain and tenderness over the kidney.

Specimen of Kidney microscopically showed interstitial nephritis.

INTERSTITIAL NEPHRITIS (LEFT). DECAPSULATION AND MULTIPLE PUNCTURES. GAUZE AND TUBE DRAINAGE TO KIDNEY.

June 28th, 1899. Mrs. C., aged 43; dressmaker. In August, 1898, frequent urination; pain in the back and over left kidney. Urine contained blood, albumin, casts; was highly colored and scanty, as reported by her attending physician at that time. Ever since this attack, kidney has been tender, but the urine has become abundant, three or four times the normal quantity, of low specific gravity (1005), and always contained albumin and usually casts. Menstruation began at fourteen and has been irregular. Œdema of feet and hands; eyelids swollen and eyesight poor. Had pneumonia three times; inflammation of the bowels twelve years ago (probably appendicitis); abscess (1893) in pelvis opened into vagina; gonorrhœa from her husband fourteen years ago (1885). Her mother died of ovarian tumor and interstitial nephritis. The region of the left kidney was quite tender. Urine segregated, and that from the left side showed the following changes: "The specific gravity of both specimens is so low that I thought a mistake had been made, and we got water for examination. Doubting whether this was urine at all, I tested for urea, and found 0.2 per cent. in both urines (should be 2 to 3 per cent.). There are some chlorides and phosphates, but the centrifuge

shows no sediment of any kind, except a few squamous epithelial cells and oil globules in both specimens. No albumin; no sugar in either specimen; reaction, neutral in both specimens; no bacteria found in either urine; no casts." (Zeit.).

Report of kidney tissue showed interstitial nephritis.

Left hospital in twenty-three days improved in all her symptoms. In three months, urine much improved, symptoms of nephritis almost absent. At the end of six months she resumed her dressmaking. Her gain in general was slow, but gradual. During 1900 she had to cease working for a week out of every six or eight. In November, 1902, she was confined to her bed for two weeks, and house for three weeks longer, with influenza. Both kidneys were sore and tender, but fortunately no active inflammation of them manifested itself. It was fully four months before she regained her usual health. Now, she replied, "I am well; that is, much better than before the operation. I am working all the the time, but have to be careful. But I enjoy life. It makes me feel happy that for six months there has not been a trace of albumin in my urine."

Nephritis. Decapsulation. April 2nd, 1901. Mrs. D., Redland, Iowa. Post-Graduate Hospital. Aged 34. Complains of:

1. Constant pain in the region of the right kidney, with some pain in the left off and on.
2. Inability to work for the last two years.
3. Urine irregular in quantity.
4. Shooting pains into back and thigh. Pain often severe all night, and during the day it is increased on motion.
5. Weakness, dizziness, constipation and palpitation of the heart.

Had a child two years ago, and has not been well since then. When fifteen years of age, was struck in the right inguinal region with a base-ball, following which she had colicky pains in that region for some time. Family history negative. Urine too abundant, ℥ cxvi. in twenty-four hours, of low specific gravity, 1005; a trace of albumin; no sugar; casts, granular, hyaline; and contained indican.

A diagnosis of interstitial nephritis was made.

Operation. Decapsulation of right kidney. At the end of the third week urine in quantity only ℥xlv in twenty-four hours, and much freer from casts. (Portion of kidney removed was lost in the operating room.) The patient left the hospital on the twenty-third day, free from her painful symptoms. Recent report not given. A year after the operation she was symptomatically relieved, and felt that she was cured.

Movable Kidney and Nephritis. Decapsulation; multiple punctures.

Mrs. J.E.B.; aged 45; married. Admitted May 7, 1901; discharged July 2, 1901. Housewife; Swedish. Diagnosed movable kidney and nephritis.

Family History: Parents both died from some acute lung trouble at an advanced age. Has seven brothers and sisters living and well.

Personal History: Has always been well. Married at 39; no children; never pregnant.

Present Illness: About five years ago she noticed pain in the right side of the abdomen, above the crest of the ilium and in back. About one year later she discovered a lump in the right side. It was easily movable in any direction, the limit being the center of the abdomen, costal cartilages, and below to McBurney's point. Has no severe pains at this time. Has worn elastic bandage for some time Was able, but with difficulty, to attend to her household duties. For the last six months a dull, aching pain in the region of the kidney has been constant. Menses now regular and normal. Bowels constipated. Lost some weight.

Operation: Placed patient in saddle, which brought the kidney well up to parietes. Incision four inches long Stripped kidney of its capsule. Made multiple punctures and anchored as usual. Drainage of gauze in wound.

Urine Examination: Before operation, specific gravity 1018; acid reaction; slight albumin; hyaline and epithelial casts; no sugar Temperature before operation, 98° to normal; pulse before operation, 80. Temperature after operation, maximum, 101°; pulse after operation, maximum, 110.

Result: Dr. E. M. Brown saw the patient December, 1902. She was then entirely well.

Parenchymatous Nephritis and stone. Decapsulation and Nephrotomy.

Mr. F. R., aged 38, of Luther, Indiana, entered the Post-Graduate Hospital on the 26th of June, 1901. Complained of (*a*) pain in left side, running down to the testicle; (*b*) attacks of sharp pains laying him up; (*c*) urine scanty, and high-colored. He passed gravel a year ago, after an attack of renal colic; then got some relief. The last few months the attacks have been more frequent, and recently the pain in the region of

the kidney has become constant. The urine contained pus, blood, casts, bacteria, albumin, increase of chlorides, and some bile.

Operation: Decapsulation was made, because the capsule was firmly adherent. Nephrotomy was then performed, and several small calculi removed. Removed a section of the kidney and drained the kidney with a tube. This tube was left *in situ* until the discharge was free from pus and germs. He made a good recovery, left the hospital on the 19th of July, 1901, free from pain, and greatly improved in his general health. The pathological report of tissue by Zeit and Klebs was that of parenchymatous nephritis, with cloudy swelling, degenerated epithelium, with granular and epithelial casts in tubes.

Result: Both immediate and remote, excellent.

RIGHT FLOATING KIDNEY; SUBACUTE NEPHRITIS. DECAPSULATION AND NEPHRORRHAPHY.

Admitted April 16, 1902. P. and S. Clinic. Discharged May 18, 1902.

Condition improved. Examined by Dr. E. M. Brown, March, 1903. Well.

Miss H., single; aged 32; musician; American.

Family History: Father and mother living and well. Four sisters and one brother living and well. One sister died during confinement.

Personal History: Diseases of Childhood. Always well until ten years ago, began to get pale and weak. Exhausted upon the least exertion, also very nervous. Bowels constipated. Appetite fair. Uncomfortable after eating. Began menstruating at the age of thirteen years. Always regular; but painful. Eight years ago had dilatation and curettement for painful menstruation.

Present Trouble: About eight years ago the patient had a fall from horse, since which time she has noticed a lump in the right side of abdomen, which is quite movable. Also complains of pain in right groin and appendiceal region. Tenderness of gall bladder also.

Urine Examination: On admission, color amber. Specific gravity, 1012. Reaction acid. Albumin, none. Sugar, none. Epithelial and granular casts. Urates and mucus.

Operation: Usual kidney incision; kidney brought up and stripped; anchored to fascia. One strip gauze for drainage. Appendix found suspicious and removed. Microscopic examination of removed section of kidney shewed slight changein interstitial tissue and parenchyma.

Temperature, before operation, normal to 99°.

Pulse, before operation, 76 to 90.

Temperature, after operation, Max., 101.06°.
Pulse, after operation, Max., 112.
(Synopsis by Dr. E. M. Brown.)
Recovery uneventful.

DISPLACED AND FIXED KIDNEY. DECAPSULATION AND NEPHRORRHAPHY.

April 22, 1902. Mrs. B., of Ashkum, Ill., aged 33. Referred by Dr. Ernest. Entered Chicago Hospital complaining of (1) pain in abdomen, especially on the right side; extreme tenderness on pressure; (2) Intense pain, as if on fire, which patient insisted was the case; (3) great weakness, loss of weight and strength; (4) considerable derangement of mental and physical condition.

History of Illness: Very unsatisfactory history, except that symptoms began after an attack of measles, followed by typhoid in February last, since which time patient has been gradually growing worse. In bed, and unable to rise for over three months.

Physical examination revealed a firm, movable tumor, of the shape of a kidney, on a level with the umbilicus on the right side. This could not be returned to the kidney fossa.

Urine: Specific gravity, 1014; urea, 2.2 per cent.; albumin, peptone, indican, pus, epithelia, cylindroids and phosphates all present.

Feces: No pus or blood, very fetid.

Blood: Hemoglobin, 45 per cent.; red corpuscles, 4,500,009; leucocytes, 11,000; no Widal reaction.

Treatment: Exploratory incision down on tumor, which proved to be the kidney. All the abdominal organs examined and found normal. Incision closed. Lumbar incision made and kidney drawn up into it Kidney congested and capsule thick and firm. Capsule stripped off and section of it and kidney removed for examination. Kidney sutured in place and drained with gauze, and incision partly closed. Patient transfused, 1,000 c.c. of normal salt solution on table.

After-Treatment: Patient given normal salt, one pint per rectum, every four hours for several days, and liquids, *ad lib.*, by mouth. Pulse 120 and irregular. Temperature 102.8°. During first four days patient had involuntary bowel movements, after which she began to retain normal salt and rectal feeding. Wound received daily attention, and was kept clean.

On twelfth day temperature was normal and pulse stronger and regular. Patient was able to be up on the twenty-seventh day, and on the thirty-eighth day following operation was able to be taken home.

Pathological Report of Kidney : Specimen normal, except for a few inflammatory cells. Present condition, patient in good health and well.

Remark : I fail to see what my operation had to do with her recovery. (A. H. F.)

RIGHT FLOATING KIDNEY. DECAPSULATION AND NEPHRORRHAPHY. GALL STONES. CHOLECYSTOTOMY.

May 26, 1902. Chicago Hospital. Dr. McKibbon, referred.

Miss F., of Kalamazoo, Mich. Aged 24. Stenographer. Complains of (1) pain in right lumbar region, aggravated by exertion ; (2) some swelling of ankles and of eyes ; (3) headache and nervousness ; (4) loss of appetite and constipation.

Illness began two years ago with pain in right side, which pain extends up to shoulder and down right leg. In February last it became worse and patient is now in almost constant pain. Urine : Specific gravity, 1024 ; no albumin nor casts. Epithelium (squamous). The kidney was found movable and prolapsed, and the gall bladder was palpable. Kidney decapsulated and punctured, and sutured to lumbar wall. Gall bladder drained after removal of stones from it and the cystic duct.

Kidney was drained for two weeks. Patient had temperature of 100° till the eighth day, when it rose to 104°. This was accompanied by great nausea and vomiting. Wound was dressed. Stomach washed out, and patient given hypodermoclysis, a pint and a half of normal salt, and a pint per rectum every four hours. Temperature dropped to normal in two days, and patient made a good recovery, leaving hospital on thirty-second day, with small sinus, which soon closed. Now satisfactorily relieved.

PARENCHYMATOUS NEPHRITIS. DECAPSULATION OF BOTH KIDNEYS.

August 19, 1902. Case referred by Dr. Wm. E. Quine.

Mr. B., aged 37. Complains of (1) pain in both kidneys, greater in right ; (2) highly albuminous urine ; (3) general anasarca and ascites, with pitting over tibiæ on pressure.

When attending college about seventeen years ago, patient contracted syphilis, for which he was treated three years and declared cured. Three years ago came to Chicago, suffering from anasarca, ascites and albuminuria. His life was despaired of, but by mercurial inunctions all symptoms except albuminuria cleared up. Patient was sent to warm climate, where he improved rapidly, stopped the treatment, grew worse, and under the doctor's instructions began treatment again. Improve-

ment now was slow and unsatisfactory. Recently patient has not been so well and was referred for decapsulation.

Right kidney is palpable and tender. Left kidney not palpable, but tender on pressing over it.

Urine: Twenty-four hours, ℥XXXII. Albuminous (50 per cent.) Granular casts in abundance. Pavement epithelia. Blood and bacteria present.

Operation. Right kidney exposed; the capsule which was firm and adherent, was stripped off and the kidney punctured. Gauze drainage inserted down to kidney.

Patient made good recovery. Urine began to increase from the beginning, ℥XLI on the second day. The albumin likewise decreased, until on leaving on the eighteenth day, there was only about-half of one per cent. There was a slight fistula which was rapidly closing.

Patient returned Sept. 30th, for operation on left kidney. Urine: Twenty-four hours ℥31. Albumin 2¾ per cent. Casts: Hyaline and granular. Left kidney drawn into wound and decapsulated. Drained down to kidney with plain gauze.

Patient made good recovery, leaving hospital on seventeenth day, with incision closed. Urine improved in quantity almost from the first day, the following being the daily quantities in ounces: 31, 31, 21, 32, 40, 53, 38, 58, 52, 66, 62, 82, 94, 65, 74. The albumin decreased to 3/20 of one per cent.

April 26, 1903. Mr. B. now reports that his general health is good, and sends the following report of his urine:

Twenty-four hours, ℥85; color, light amber; reaction, acid; specific gravity, 1015; albumin, 1-20 per cent, (by centrifuge); leucocytes, a few red cells, small, as if from the kidney. Renal cells, some fatty and a few fine and medium casts. Pathology: Microscopic examination of removed section shews parenchymatous nephritis with hyaline degeneration.

Floating Kidney: Decapsulation and Fixation.

October 4, 1902. Miss B., New Port, Wisconsin, aged 24, nurse. Complains of (1) severe pain in gall bladder, but no colic. (2) Jaundice, which is sometimes marked. (3) Pain in back, which radiates down the right iliac fossa and leg. (4) Drowsiness. (5) Puffiness of eyes and swelling of wrists and hands. (6) Temperature, 99° to 100°. (7) Loss of weight. Lassitude.

Urine normal. Has a soft compressible tumor continuous with the liver, and another movable and firm, which can be replaced to kidney fossa. Patient had a severe attack of pain radiating down the right leg in September, 1900, and a second in March, 1901.

In August, 1902, pains returned in right side, and shortly after this she noticed jaundice for the first time. A second attack compelled her to stop work, and after a short time she returned for operation.

The gall bladder was drained. The kidney was decapsulated and punctured freely several times, and drained; then sutured in place. Kidney drained two weeks, and closed. Patient made a good recovery.

Pathology: Microscopic examination reveals, practically, a normal kidney; the slight cloudiness and congestion being due to the chloroform and manipulations.

Present condition: Free from symptoms. Urine normal. Has some pelvic pain at and following menstruation.

Bright's Disease and Pelvic Disease. Decapsulation of one Kidney and Laparotomy.

Dec. 4, 1902. Mrs. J. C. W., Chicago, aged 41, housewife.

Complains of (1) backache; (2) pain in left side in lumbar region, extending up into shoulder and down into leg; (3) burning pain in feet, with swelling; (4) pain in pelvis; (5) dysmenorrhea; (6) headache, nervousness, sleeplessness; (7) frequent micturition; (8) nausea and at times vomitting; (9) constipation; (10) belching of gas after meals, but has good appetite.

Symptoms began eight years ago with nervous prostration. Following recovery she had a pelvic abscess, which was drained. Had excellent health until about two years ago, when she was treated for uterine troubles. Gives no good history as to when her kidney trouble began, but bladder has given her trouble for four or five years. Her kidney is easily palpable in abdomen, and replaceable to kidney fossa. She has some uterine displacement and strong pelvic adhesions, involving the ovaries and tubes.

Urine: Quantity in twenty-four hours, ℥ xxx; specific gravity, 1030. Strongly acid. Hyaline and granular casts. Epithelium—small, round, spindle and pavement. Red blood cells and leucocytes. Bacteria. Cylindroids. Uric acid. Calcium, oxalate and urates in heavy deposit.

Operation: Curettage. Freeing of pelvic adhesions. Removal of both tubes and part of each ovary. Kidney decapsulated, punctured, fixed and drained.

Patient's temperature for a week was from 101° to 102°. During the second week patient was wandering mentally, but later became rational and made a good recovery, leaving the hospital on the twenty-ninth day. Kidney tissue changes are both interstitial and parenchymatous.

Present condition: Relief of all symptoms (except the bladder). Gaining rapidly in strength and weight.

RIGHT FLOATING KIDNEY; NEPHRALGIA; DECAPSULATION; NEPHRORRHAPHY; APPENDECTOMY; KIDNEY TISSUE NORMAL.

February 25, 1903. Miss. H., Bradford, Ill., aged 24. Dr. Hawkins.

1. Burning pain in right kidney, with exacerbations. Pain radiating down in region of appendix, which region was also troubling her. 2. Pain over whole right side of abdomen, and down the right thigh. 3. Inability to work. 4. Loss of strength, and confined to the house. 5. Attacks of pain in lumbar region, which would disable her for a week at a time. Frequent and painful urination.

Patient has been complaining about three years, with symptoms referable to this kidney, and the pain in the region of the appendix was grafted on it in the last two months.

Right kidney floating, enlarged and tender. Kidney could be pushed down into the iliac region. There was also tenderness over the appendix.

Urine: ℥ XLV. Pale and clear. Specific gravity, 1007; neutral. Urea, 2-10 per cent. No albumin and no casts.

Operation: (1) Curettement and packing of uterus. (2) Appendix removed through kidney incision. (3) Kidney drawn up; decapsulated; capsule sutured to wall and incision closed.

Patient did well for three days following operation, when she had a slight rise in temperature to 99.6 degrees, and in pulse to 100, with pain in region of right ovary and tube, which spread over the whole abdomen. There was nausea and slight vomiting. Blood examination—57,800 leucocytes, mostly polymorphonuclear form.

On the fifth day incision opened and gauze drainage inserted. There was no exudate, and there were no signs of infection.

Patient continued with signs of peritonitis, and died on March 9th, just twelve days after operation.

Post-mortem held. Peritoneal cavity had considerable fibrinous exudate. Kidney and wound normal. Cultures sterile. Appendix stump normal. Right tube slightly inflamed. Left tube and its region congested and inflamed. Cultures shewed streptococcus. Descending colon as high as splenic flexure, and the sigmoid congested and inflamed, with fibrinous exudate. Cultures shewed streptococcus infection. Death caused by streptococcus infection; probably an old infection of the left tube lighted up by the curettement, or by an infection following the curettement, which is doubtful.

March 20, 1903. Mrs. H., Chicago; aged 48. Dr. Peacock. In Chicago Hospital. Dr. Ferguson, consultant in operating room. Patient complains of: (1) Pain in the back radiating down the right side and right thigh. (2) No urinary control. Up several times at night and during the day. (3) Pain in right iliac fossa.

Previous History: Ten years ago patient had ovaries removed. The commencement of pain is very indefinite, but it became quite severe during the last year.

The kidney is freely movable and quite tender. Urine: Specific gravity, 1020; acid; urea, 1.5; hyaline and granular casts; small round epithelium. Considerable blood.

Operation. Appendectomy, by Dr. Peacock. Kidney decapsulated and punctured. Sutured in position. Gauze drainage inserted down to kidney. Incision closed. Patient made good recovery, leaving the hospital on the nineteenth day.

Present Condition: Patient up and around the house. Relieved of all symptoms. Does not have to get up during the night, and urinates about every four hours during the day.

Observations.

For a synopsis of the histories of the foregoing cases I am indebted to my first assistant, Dr. Hugh Neil MacKechnie, and my associate, Dr. E. M. Brown. It will be observed that my personal experience dates back to 1889. In 1896, a nephritis in a floating kidney was deliberately treated by decapsulation, but not till the 4th of January, 1899, did I begin to remove sections of the deceased kidneys under treatment, and study them under the microscope. While the reports given above are incomplete, from lack of space, still it will be seen that our treatment was justified by the results. In the vast majority of my cases, the kidneys were movable, and also chronically inflamed. In only two cases was decapsulation carried out for parenchymatous nephritis. The results so far have been excellent, and astonishingly prompt. The symptoms of the cases, regarding urinary changes, digestive disturbance, nervous phenomena, skin signs, circulatory and respiratory changes, were recognized as not of the severest types of nephritis.

I did not operate on cases with urine extremely scant, very marked hypertrophy of the left ventricle of the heart, edema of the glottis and lungs, Cheyne-Stokes breathing, marked general anasarca, etc., etc. The urinary changes cannot be absolutely depended upon to indicate the tissue changes taking place in the kidneys till at least a late stage has arrived. It was noticed that a tender kidney is often relieved after its fellow has been decapsulated.

Pathology. The pathology, microscopically observed and handled on the operating table, and a study of the microscopic condition of the organ in a living patient are of superlative interest and importance. An enlarged kidney may have few or no histologic changes, while one normal in size is often surprisingly diseased. A contracted kidney is usually very much destroyed. The intimate relationship between the capsule and cortex of the kidney by adhesions does not give us an accurate idea of the extent of the inflammation. Neither does the appearance of the fatty capsule. The only scientific procedure to pursue to obtain anything like an accurate knowledge of the *status presens* of a kidney under operation is to remove a V-shaped piece of the cortical and pyramidal tissues, and study it microscopically.

Microscopic Observations. In ten of the nineteen cases, a portion of kidney was examined and studied. There were no pronounced changes in three. The pain and tenderness in these three cases of floating kidney must have been caused by something else than inflammation. In five instances the interstitial form of the disease was demonstrated by the microscope, which in these verified the clinical or provisional diagnosis. A glance at the microphotographs prepared for me by Professor Zeit, and which I now pass around, will reveal to you a picture of chronic interstitial nephritis :—the proliferation and hyperplasia of connective tissue, and areas entirely connective tissue, with obliterated or waxy glomeruli prove this. You will also see islands of partially changed kidney tissue, with atrophic tubules, and tubules with desquamated epithelium; flattened epithelial lining in tubules of diminished calibre, and some swelling in the lining of the epithelial cells. Notice the hyaline casts in the tubules, the thickened capsules of glomeruli, and the concentrated layers of connective tissue with many nuclei, etc., etc.

Operation. (a) Superficial oblique incision. Make the skin incision a finger's breadth below the twelfth rib and parallel to it. Cut down to muscular tissue; then dissect the skin and fat from the muscles downwards to the crest of the ilium. (b) Deep vertical incision. Go through the rest of the structures as if to remove the kidney through the lumbar route, along the outer border of the quadratus lumborum. In cutting the lumbar fascia, keep well backwards. (c) Fat. Upon exposing the fat, do not tear and traumatize it, as is so often done, but carefully cut with the knife its thin fibrous covering. Do not insert the hand to pull at the fat, but seize hold of it with many pressure forceps, and deliver it externally. It will now be found that the kidney is immediately beneath your fingers in the wound. (d) Delivering the kidney. Do not use the hand to deliver the kidney. Firm pressure on

the abdomen and traction made on eight or ten forceps applied to the fat, close to the kidney, will easily bring a movable kidney outside the wound. In some few instances, the renal vessels are too short to allow the kidney to be delivered at all. Indeed, it is not necessary to have the kidney dragged out in order to decapsulate it, but if it comes out easily, I do it. When the Kidney is situated rather highly, and the traction on the forceps does not promptly bring it down, I find a long narrow retractor, with a slight concavity outwards, passed beyond the upper pole, greatly facilitates its delivery.

Splitting and Peeling the Capsule off. Incise the capsule longitudinally over the vertex of the kidney for about two-thirds its length, peel it from the cortex with the handle of the knife or finger until it is entirely separated; then slip one end of the kidney through the slit in the capsule, and then the other, and it will be seen that it forms a collar around the hilum of the kidney. If the kidney is movable, I utilize the capsule to suture it in place, and the organ is left in contact with raw muscular tissue, which is more vascular than the fatty capsule, and is, therefore, a more suitable structure to form vascular adhesions with the denuded organ.

Disposal of the Perirenal Fat. Do not remove or tear it to pieces, but gently displace it to the lower end of the kidney. It is but poorly supplied with blood vessels; therefore, as little of the surface of the kidney as possible is left in contact with it, but when placed below the kidney it furnishes an additional support to it.

Puncturing the Kidney. In most of my cases I have freely punctured the cortex of the kidney in many places. This not only furnishes free drainage for inflammatory products, but also insures a thorough determination of blood to the parts, which hastens resolution and favors repair. It must also be remembered that the fibrous tissue formed for the purpose of repair in the absence of pyogenic organisms has a tendency later on to clear away rather than increase in bulk, or subsequently contract and become cicatricial. Of this we see many instances in surgery.

Drainage. Drainage should always be established for five to eight days after decorticating the kidney. My experience leads me to use plain gauze and a small rubber tube for this purpose. It is astonishing the quantity of blood serum and urine that saturates the dressings for a couple of days. Then remove the tube, and afterwards withdraw the gauze as it becomes loose.

Closing the Wound. Use small-sized catgut to coapt the muscles and silkworm gut for the skin, the drainage tube and gauze emerging from

the outer angle of the wound. After applying the dressing, place a firm pad of gauze or cotton on the abdomen below the ribs, whenever nephrorrhaphy has been necessary.

How is a cure Effected. This has not yet been fully worked out. It is my opinion that the excellent immediate results are due to the relief of kidney tension, and that the permanent benefit accrues in the cases demanding it from the establishment of collateral circulation with the diseased cortex. There are many instances of the formation of vascular adhesions in different parts of the body to support this latter fact.

Experiments. Before experiments on animals can throw any light on this subject, we must first produce nephritis in them. In the production of this, all efforts have been unsuccessful. I notice in the Annals of Surgery, April, 1903, Dr. H. A. Johnson writes on "Results of Decapsulation of the Kidney," being work done on dogs. He operated on fifteen dogs; five died in from three hours to three days after the operation. The animals surviving the operation were killed. "Changes were studied two, four and eight days; two, three and four weeks; two and two and a half months." The chief observation in his article is the eighth, viz.: "In no case was there any considerable anastomosis between the renal and perirenal blood channels." It must be observed that in these experiments the kidneys of the dogs were normal, and did not require additional blood channels for physiologic purposes, and also the organs were returned within the fatty capsule, which is but sparsely supplied with blood vessels.

In conclusion, I have no hesitation in affirming that decapsulation of the kidney in acute, subacute and chronic nephritis, both interstitial and parenchymatous, is a practical and effectual surgical procedure. Its limitations are not yet determined. While it can be pointed out that regeneration of kidney tissue is possible, it is folly to claim this procedure to be a panacea for Bright's disease.

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It is hoped that the members of the profession will remember the meeting of the Canadian Medical Association, in London, on 25th, 26th, 27th and 28th August. On another page will be found a full announcement of the meeting. Every effort is being made to have this meeting one of the most successful in the history of the Association. The arrangements regarding the programme, entertainments and railways are almost complete.

THE WASHING OUT PLAN.—THE GOOD IT FAILS TO DO, THE HARM IT DOES.

By ALEXANDER HARG, M.A. and M.D., Oxon, F.R.C.P., London.
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IN old times, 20 or 30 years ago, when nothing was known about the introduction of uric acid, when excessive uric acid was thought to be due to faulty metabolism, and when it was believed that all the uric acid that was swallowed was promptly converted into urea, there was little left for the physician to do but to wash out the excess of uric acid by copious libations of water, combined or not with some alkali; and this he has proceeded to do, more or less, ever since, in spite of the fact, which has recently become obvious to not a few, that the plan often fails to do very much good, and sometimes indeed does very much harm. To-day, however, we know that the foundation of this pathology is untrustworthy, that all uric acid disease is practically due to swallowing it, and that the administration of large quantities of water does but little to clear it out, and thus fails in the object for which it is given It has also become evident that in the largest class of uric acid diseases, viz; those of the circulation due to excess of uric acid in the blood (collaemia), it not only fails to do the good expected of it, but very often indeed does actually produce infinite harm, even death itself.

And, first, as to its failure to do good.—In my book, "*Uric Acid*", edition 6, page 194, I give notes of an instance in which in a morning hour the excretion of urine was only 53 c. c. per hour, and then a dose of opium taken without fluid ran it up in the next hour to 234 c. c. Here there was obviously plenty of water in the blood, but it was unable to get out till the opium cleared the blood of uric acid, so freeing the renal capillaries and allowing the water to pass. Obviously then, the uric acid in the blood controlled and kept back the water; the water in the blood did not control the uric acid. If a pint of water had been administered that morning before the opium would it have increased the excretion of water? Probably hardly at all, for there was a large amount of uric acid in the blood and it was obviously blocking the renal capillaries and keeping all the water in, and the water was scanty before the opium, not from want of fluid in the body and blood, but from blocking of capillaries by uric acid.

But there is one way in which excess of water may increase the excretion of uric acid, and that is by producing dyspepsia; for dyspepsia diminishes the digestion and absorption of food, and so diminishes the formation of urea and of acid products, and this produces increased

alkalinity of the blood and so increased solution of uric acid, and, for a time, increased excretion of uric acid. Probably, at least, one portion of the dyspepsia, produced by the excess of water, is due to its diluting all the digestive fluids and rendering them less active solvents of the food substances submitted to their action. Thus, we may say, to complete this part of the subject, that the uric acid in the blood controls the excretion of water, and that the addition of water to the blood does not control or increase the excretion of uric acid, but that to a certain extent, by diluting the digestive fluids and producing dyspepsia, the continued administration of excess of water does, to a small extent, increase the excretion of uric acid. It is now, however, quite unnecessary to give excess of water at all, for all uric acid disease is prevented by stopping the introduction of uric acid. A person who forms 10 grains of uric acid a day and swallows other 10 grains in his food, will have 20 grains of uric acid to deal with each day, and may suffer more or less severely from uric acid disease; but, if he will take the trouble to shut out the unnecessary 10 grains which he swallows with his food, he will gradually draw clear from excessive uric acid; he will have to deal each day only with 10 grains of the substance, and he will cease to suffer from the severe diseases which its excess in the blood and tissues produces.

But the practice of washing out with excess of fluids, which is due to an antiquated physiology, is still carried on, and it is therefore necessary to show up the harm which it only too often does. In arthritis, due to uric acid, it produces dyspepsia, dyspepsia increases the solvent powers of the blood for uric acid, and so the uric acid is dissolved out of the joints, and collaemia, anæmia and debility may take the place of the arthritis. The patient is cured of one form of uric acid disease only to suffer, and perhaps, to suffer very severely, indeed, from another form which is, perhaps, worse than the original. That he may get clear of his gout, is true, but this may be replaced by anæmia, high blood pressure, with all its intracranial results, with mental depression and other troubles, and the danger of cerebral hæmorrhage, or, before long, he may find himself suffering also from Bright's disease, dilated heart and dropsy. But the worst effect of this washing-out plan is seen in the far more numerous diseases which uric acid produces, through its effects on the circulation, those diseases which I have called the collaemic group, of which Bright's disease is the worst type. The worst possible thing to happen in all collaemic disease and that which makes the prognosis in Bright's disease almost absolutely hopeless, is heart failure, for Bright's disease may be defined as collaemia producing defective circulation, the defective circulation being doubled, trebled and quadrupled by

subsequent failure of the heart. Collaemia itself means defective combustion, but that defective combustion is far more than doubled if the heart fails as well. Now, when the heart is fighting against capillaries obstructed by uric acid, when it has as much as it can do to keep up the circulation from day to day against these obstructed capillaries, it is obvious that a comparatively small matter may turn the scale against it and lead to its dilatation and complete failure. Now, this is exactly what excess of fluid does—it produces, as we have seen, dyspepsia, and dyspepsia produces defective nutrition, defective nutrition not only throughout the body, but of the most important muscle of all, that of the heart; and then we must not forget that a pint of fluid weighs a pound and a quarter, and that each pint of fluid more in the blood is 1¼ lbs. more for the heart to drive. In this way excess of fluid does infinite harm—it dilates the stomach and causes incurable dyspepsia, dyspepsia causes debility, and the fluid does also increase, to a very large extent, the work that the heart has to do. No wonder the heart fails and dilates; no wonder it ultimately becomes like the bulged outer casing of a bicycle tire, absolutely beyond repair.

Now, in recent years, I have seen quite a number of cases, of which I could give notes did space permit, who have gone through this treatment of washing out and have survived by accident as mere helpless wrecks with hearts which have been stretched beyond endurance and which will never again be fit for good work, lives which are crippled and which must live, if they live at all, on mere sufferance and as invalids. Some of these cases have told me that they were forced to drink pint after pint of water in spite of an absolute distaste and loathing for fluid, (see Uric Acid, Ed. vi., p. 30), for in this case nature says no with all the force at her command. They do not want water as there is already excess of water in the blood and tissue fluids, but the patients are forced to drink and manage to get down several pints a day in spite of nature's protests and in excess of her requirements. Gradually, between dyspepsia on the one hand, and excess of fluid to drive and excessive obstruction of the capillaries on the other, the heart fails, and dilates, and gives up the struggle, and one day the patients take to fainting severely, or become more or less dropsical, and the worst that can possibly be done for these patients has been accomplished.

Perhaps in the great and extensive employment of water, in the present day of treatments for dilatation and failure of the heart, quite a large number of these cases are probably due to the absolutely unphysiological idea that uric acid can be washed out. It were nearer the truth to say that the patient can be washed out, and is not unfrequently

washed out, but the uric acid remains, and, more insane of all, those people who go in for washing out do also introduce each day in the food quite as many grains of uric acid as they could hope to wash out, if the process did act as it is supposed to, by those who have trusted to their imagination and not looked to see what the physiology of the body really does.

If the pericardium is very strong and refuses to give way then the excess of fluid produces very high blood pressure with headache, mental depression, epistaxis, perhaps cerebral hemorrhage, but in any case the treatment is both painful and dangerous and I have shown that it is useless and unnecessary.

The opposite side of the picture is, I think, to be seen in the enormous amount of good which can be accomplished in many cases of collaemia and Bright's disease by cutting off all fluids, by putting the patient on a pint, or even half a pint of fluid in the 24 hours, or even on an absolutely dry diet of bread and fruit, the small amount of fluid in the fresh fruit being all that is taken for days together. The way in which the heart will sometimes recover under these conditions, when not hopelessly damaged, and with the recovery of the heart the way in which the defective combustion which we call Bright's disease will gradually pass away, is an object lesson which many to-day should witness to show them how extremely silly and unphysiological is the opposite plan of treatment, the attempt to wash out the uric acid from the body in excess of fluid, when the uric acid, as a matter of fact, controls absolutely all output of fluid from the body, and the absolutely insane attempt to cure uric acid disease by sweeping it out with one hand, while pouring it in with the other. In this and all cases of uric acid disease there is no necessity to run such terrible risks, for the uric acid excretion can, in most cases, be reduced to at least one half by cutting off introduction, and if this is done it may be unnecessary to do anything at all to increase its excretion. A somewhat low and dry diet of bread and fruit with, or without, a little alkali, will do easily and safely all that is required.

Dr. Graham has been studying an epidemic of dengue which began at Beyrouth in 1901. He found that the houses contained large numbers of culicidae, and that by removing all the mosquitoes from a house the disease did not spread. He then put some persons under a net with insects from dengue patients, and also took them to a village 3,000 feet high and shut them up with persons, producing the disease.

RATIONAL vs. EMPIRICAL THERAPEUTICS.*

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THERAPEUTICS is defined to be the branch of our art that deals with the "application and the modes of operation of the remedies for disease." In the broad acceptation of the term then all remedies, whether medical, surgical or prophylactic, should be included; and it is in its broader significance that I ask you to receive what I have to say to-night. While it is apparent that therapeutics as a distinct subject is taught in our colleges from a medical standpoint alone, it ought not to be overlooked that there is an ever-increasing growth of modes of surgical treatment and it might be well argued, I think, that great benefit would come if as thorough an investigation into "composition, the application and the modes of operation" of surgical measures were instituted as is done in the case of medical remedies. The Burke's Peerage of medicinal therapeutics is our great national register—*The Pharmacopoeia*—and rigorous are the tests and great the deeds before a drug receives the signal honour of a place therein. A wise council sits in judgment over the medicinal applicant and weighty must be its merits and well-tried by time before it may place behind its name the symbols B. P. officinal. It were well, perhaps, if a surgical pharmacopoeia, officially controlled, were in existence to give dignity and stability to some of our surgical procedures.

I think it can be taken for granted that the object you gentlemen have in devoting so many hours and so much energy to work within college and hospital walls is to learn how to overcome disease. In the constellation of your studies each educational star helps to spell out the word therapeutics. This great aim of our art is no more prominent, I take it, in these than it was in the early days of the practice of medicine; but while our Aesculapic and Hippocratic progenitors were probably as earnest in their desire to relieve suffering as we are, they labored in an educational atmosphere of mysticism, and hence their practice was weakened and progress limited. To-day our knowledge has in its certain possession the principles which underlay many of the phenomena observed by them; hence we are in a position to rationally direct many old therapeutic agents and, better than all, to deduce remedial means from known causes of disease. Where science and rationalism hold sway to-day empiricism formerly had its power. It is a dire admission to make but truth compels it, that scientific medicine is a growth of very recent years. It seems inexplicable that an art which is as old as antiquity and

*Read before Students' Association of Manitoba Medical College.

whose existence meant the alleviation of suffering humanity should yet have lain dormant for so many centuries. The Old Testament refers to the physicians, and poor old King Asa appears to have had rather curt handling from them, if we can infer anything from the quaint sarcasm of these words : " in his disease he sought not to the Lord but to the physicians—and Asa slept with the fathers."

Hippocrates, before Christ, and Galen after, did much to hold together the better elements of medicine, but no amount of accurate description of the appearance and symptoms of disease could counterbalance the paralyzing influence of their theories to account for it. Health, according to Hippocratic teaching, was the result of the due combination of the four humors of the body, viz.: blood, phlegm, yellow bile and black bile; disease was the consequence of a disturbance of these. Galen, 200 A.D., popularized the moon as the greatest agent in the causation of disease, and he also encouraged the use of amulets. Yet these men were the leaders of what was called the Rationalistic School of Medicine, which has, at any rate, held together the best traditions of our art and which merits our gratitude, inasmuch as it preserved for our subsequent selection remedies of undoubted value if of such empirical origin. The clinical observation of disease, chemistry, anatomy, physiology, pathology and bacteriology are the lights that, one by one, have illumined the gloom of such therapeutic darkness and are showing us the way from the humours and vapours of empiricism to the surer ground of rational treatment. These lights have not always burned as they do today—no—the great draft of superstition kept them flickering. For centuries anatomy shed its feeble beams in caves and secret places only—physiology burned as a separate flame only when the touch of a Haller and a Harvey came to separate it from the mother-light. Chemistry, older than all and more developed was yet shrouded in superstitious mist and its energies directed into useless channels thereby. The century that has just glided away from us saw the first glimmer of physiology, pathology and bacteriology. Is it any wonder then and can it be fairly charged as a reproach that there still lingers in our therapeutics the influence of an empiricism that has the weight of ages with it? I use the word empiricism in its truest and most honorable sense and not in the degraded one of common acceptance. Hippocrates, Galen, Paulus Aegina were empirics but they were never quacks. They at least had the merit of being convinced that they were right, and in support of this let me quote to you the dedication of a book on surgery to the King of France by the justly celebrated reformer of certain surgical therapeutic horrors such as the pouring of boiling oil on a fresh bleeding surface, or as the

scorching of newly-made wounds by red-hot irons heated on the spot and applied with none too gentle a touch. He writes, "God is my witness and men are not ignorant of it, that I have laboured more than forty years to throw light on the art of surgery and bring it to perfection, and in this labour I have striven so hard to attain my end that the ancients have naught wherein to excel us save the discovery of first principles," (only fancy the theories of Hippocrates and Galen accepted as first principles) he continues "posterity will not be able to surpass us, be it said without malice or offence, save by some additions such as are easily made to things already discovered." These words were written by Ambroise Paré, the great French surgeon, towards the end of the 16th century.

Early medical empiricism taught that remedies which had been tried in certain diseased conditions and found beneficial should be used again in all such conditions without any further inquiry being necessary into their mode of action. A brilliant therapeutist has been credited with the following description of the origin of this method. When Adam was sick, Eve, for undoubtedly the first physician was a woman, administered to him some preparation made from an herb, plant or shrub. If Adam recovered from his illness the data was dotted down in the old lady's memory and when Adam was sick again and presented the same symptoms she gave the same remedy. The fact that Adam recovered was sufficient proof to her of the efficiency of her treatment. The suggestion that he might have recovered from his illness despite her medicines, or that her drugs had no effect on him either way never entered into her decision of the case. Seeing the symptoms, giving the remedy and getting the relief was the natural method of primitive therapeutical study; thus there grew up in every community a system of empiricism, or treatment based on experience, which as seen to-day could be wholly and radically wrong. Satisfactory as such theory and practice, based on experience without experimental proof, might be to many minds, it was not sufficient for the philosophic mind of man ever looking out for some great law governing the phenomena observed. Hence we find school after school founded, each having its own specific law. There were the Hippocratic, or Dogmatic, School and the School of Galen which we have instanced. The Arabians brought chemistry to such eminence that it was invoked as an explanation of the occurrence of disease and Paracelsus gained a temporary fame as its exponent. There was the school founded on what was called the law of signatures, whose teaching was that a drug should be given that resembled in appearance the organ which was supposed to be diseased. For example in liver disease, there should be given aloes, from its fancied resemblance to this organ Through coincidence aloes did do good, occasionally, by its pur-

gative action, and on such deceptive data as this a great school of the middle ages held sway. In such fashion have arisen, one by one, the Perkin's Tractors in America, which had the power, at any rate, to draw the people's money into coffers of its originators, if it still left them with their disorganized kidneys or other internals. In England Bishop Berkely's Tar-water panacea took the early part of the century by storm, and last but not least the law of *similia similibus curantur*, the very, very own especial production of the brain of Samuel Hahnemann. Let us consider briefly the condition of medicine up to the time of Hahnemann and we can readily see how such a law and practice, which had in it, at any rate, the elements of simplicity in treatment, could gain the ground it did, while at the same time we shall review the forces that were at work laying the foundation for a scientific medicine.

Previous to the first quarter of the century which we have but the other day farewelled, the treatment of disease was based on one or the other of the so-called laws that we have pointed to and which were established on the most irregularly collected data. Empiricism influenced all the schools. Hippocrates and Galen, whose influence had been to check rather than to advance investigation for hundreds of years, were given the first great blows, that augured badly for their continued domination of medical practice, by Paré and Harvey, in the later 16th and early 17th centuries. Paré reformed the treatment but did not attack the dogma of the Fathers of Medicine. As he has expressed it in his own quaint dedication already quoted, "the ancients have naught wherein to excel us save the discovery of first principles." William Harvey demonstrated to mankind the circulation of the blood, at the same time laying the foundations for that experimental science which now has our art powerfully in its control. It can be said with truth that from the time of Hippocrates, four hundred years before Christ, to Galen, two hundred years after Christ, no advance was made in medicine except that as an art it had spread throughout the world. As an instance of the tremendous hold these fathers had over the medical world let me give you the following: "The records of the London College of Physicians affords a striking illustration of this fact (viz. the infallibility of Galen) in so far as England is concerned. In 1559, Dr. Gaynes was cited before the college for impugning the infallibility of Galen. On his acknowledgment of his error and humble recantation signed with his own hand he was received into the college." The 9th to the 15th centuries felt the influence of Arabian teaching and chemistry became a feature and the law of the Paracelsian school. The 17th century felt the influence of our own great Sydenham, who lived to

reform the disgusting modes of treatment then in vogue. Only think that up to this time kings and potentates, as well as swine herds, were treated to some one or other of the following therapeutic delicacies:

"The urine of a lizard."

"The dung of an elephant."

"The liver of a mole."

"The excrement of rats beaten to a powder."

"Blood drawn from the left wing of a white pigeon."

Is it any wonder a Montaigne arose to wither with his biting sarcasm a science that dealt in such simples as these.

Boerhaave, the Leyden physician, dominated the 18th century, and when I quote you his posthumous advice to the world, you will realize how slight was the force of therapeutics in his time. This great man, whose will had caused his learning to permeate the intellectual world of his day, died leaving a handsomely embellished volume in which, he said, would be found all of the real medical knowledge of the world and all of the valuable precepts of medical teaching. When the book was opened it was found that it consisted almost entirely of blank pages. Only one page contained any statement and on it was written "Keep your feet warm, your head cool and your bowels open." Again, gentlemen, compare this amazing statement with Paré's dedication to King Henri II. and we can see what enlightenment was doing. Both of these men had labored industriously to benefit mankind; both saw the evil of sham and directed their keenest weapons of satire against it; both reformed treatment; but Boerhaave dies acknowledging that nothing is known and all has to be discovered, while Paré, two hundred years before him, dies boasting that all is known and there is nothing to be discovered.

About every fifty years, from the sixteenth century on, has seen the advent of some clear-headed brain. In the early sixteenth Ambroise Paré clarified the cruel therapeutics of the battlefield, and Harvey showed what results could be obtained by scientific investigation into the phenomena of our bodies. In the seventeenth Sydenham did for the civilian bedside what Paré had done for the military. The early eighteenth felt Boerhaave's power and saw the experimental methods so beautifully begun by Harvey continued and expanded into other fields by Haller, who has been called the "father of physiology"; and felt the vivifying force of that "man of science and surgeon" John Hunter, with whom, your permission being granted, we shall dwell a little. The stamp of John Hunter upon medical progress is, perhaps, the most indelible of the . ay that are found thereon; for he not only saw what Sydenham and

Boerhaave did, but he boldly outlined a course of action that was calculated to better things. His was the clearness of head and stoutness of heart that could mark his own work and teaching with a motto that in those days of reverence for authority was almost sacrilegious. "Don't think," he tersely tells the students who came to his original and forceful clinics, but "try; be patient; be accurate." What John Hunter meant when he said "don't think" was that too much time had been given for ages to mere theorizing—to thinking on principles that had never been proven to be true. Hippocrates and Galen thought but did not sufficiently "try." Let me give an anecdote of this original man that will disclose at once his straightforwardness and the uncertain state of the therapeutics of his day. The case is tetanus and he says, "I attended another case to-day with Sir N. Thomas; assafœtida and opium were given without effect; these were left off and bark employed in large quantities. Dr. Warren, being called in, advised, among other things, a bath prepared of milk and water. The patient died soon after. I discovered to my amazement the different methods of different physicians; for Sir N. Thomas had read much and knew all the antispasmodics from Hippocrates down. Dr. Warren, having just cured his son of lock-jaw, implicitly followed the same practice in this case, being unable to alter his rules of practice in the smallest degree as occasion might require." Certainly Hunter was not thus straitened in his treatment, as the succeeding anecdote will show. The case is one of a carbuncle, and he says, "As neither bark nor calomel nor opium had been of any use, I said to Dr. David Pitcairn, 'Now do not let us permit this patient to be lost while we are only using such means as experience shows to be of little or no effect; for, David, this is a case belonging more to my province than yours, and I, being an older man, have seen more of them than you have, and can tell you what, perhaps, you did not know, that we have no powers in this case that are known. Now, David is a truly sensible man and not governed by form; he therefore agreed, but wanted to know where we were to begin. 'Why,' I said, 'with the first letter of the alphabet and go through the catalogue of the materia medica, so as we do not stop too long on the letter B (bark) as is generally done.'" From John Hunter we obtain one of the most brilliant bits of surgical therapeutics ever originated, viz., the distal application of the ligature in aneurism. This has been called one of the "best deductions ever made in surgical practice," for in it he "united a whole multitude of facts from anatomy, physiology, clinical experience, post-mortem examinations and experiments on animals." The dissatisfaction, given expression to in the last anecdote of Hunter, of many physicians with the results obtained

from the use of the stock-in-trade remedies of the day, viz., bleeding, bark, calomel and opium, led to an extreme of polypharmacy that raged in the eighteenth and nineteenth centuries. I could show you on the files of one of our city drug stores a prescription having twenty-three different ingredients. I helped to compound it. Truly this is a shot-gun order of old time therapeutics. So that, gentlemen, considered from what standpoint you will, whether from our own ranks or from outsiders, we gather that the beginning of last century, when Hahnemahn established his theory, found our therapeutics in a decidedly shifty state. It had neither the confidence of our leaders nor did it inspire trust outside the ranks, as a knowledge of the literature of the time with its pictures of the shaky healers of the day fully shows. The following from a French epigrammatist hits off the position tersely.

> "Nature and sickness fight—a man the prize;
> If nature wins, he lives; if sickness, dies;
> Blind men (called doctors) come the fray to part
> With random strokes of weapons forged by art,
> If, chance, they hit the foe, the day's their own;
> If nature gets the hurt the patient's gone."

Sir Walter Scott is the authority for the following: At an English village, while travelling, his servant took ill. Of the two doctors in the place, one had but recently arrived and for him he sent post-haste. To his utter astonishment he recognized a Scottish blacksmith who had formerly carried on his trade in a village well known to Scott. "Can it be possible that this is John Lundie," says Sir Walter. "In truth it is, your honor; just a' that's for him."

"Well, let us hear, you were a horse-doctor before, but now it seems you are a man-doctor. How do you get on?"

"On? Just axtrordinaar weel, for your honour maun ken that my practice is vera sure and orthodox, I depend entirely on twa' simples; just laudamy and calamy." "Simples with a vengeance," replied Sir Walter, "but, John, do you never happen to kill any of your patients?" "Kill oh! aye, may be sae, whiles they dee and whiles nae; but its the Will o' Providence, onyhoo, your honor, it will be lang before it makes up for Flodden."

But through all the darkness light was forging which foreshadowed the establisment of a radical therapeutics. Jenner's steady intellect received the germ that, eventually, after passing through stages of experimentation based on the observation of the freedom of the Gloucestershire dairy-people from smallpox, matured into that now world-accepted triumph of prophylactic therapeutics—vaccination.

William Stokes, the great Irish physician, lived to broaden our methods of physical diagnosis; to discriminate the diseases of heart and lungs, and thus to give greater precision to our therapeutic aim. Graves left as the legacy of this life-work the history of that disease of the thyroid gland with which his name, as its discoverer, must forever be connected. Sir Benj. Brodie's careful observation on joints established conclusively their great variety and the distinct existence of white-swelling as a separate disease needing special treatment. Addison discovered the disease of the supra-renal capsule and gave it an exhaustive description. Typhus and typhoid fever were separated from their deadly embrace and not treated as formerly, side by side. Bright did for diseases of the kidneys what Brodie had done for diseases of joints, established the identity of the various phenomena that had been carelessly mixed before under a common head. Sir James Y. Simpson gave to the world that agent which has revolutionized surgical methods and relieved so much suffering—chloroform. Pasteur's patient researches into the processes of fermentation fell into the expansive power of Lord Lister and we have to-day antisepsis and all the blessings attendant on its use.

Koch, in a series of demonstrations, proved to the world the identity of the various types of tuberculosis. Each of these discoveries has swept away some cobweb theory and established a basis for rational treatment, so that we are in a position to-day to attack, in an ever increasing number, the known causes of disease. We do not, it is true, possess in each disease its great specific, but in a considerable number we have got a specific. We give the Bark still in malaria, as our predecessors did, but we do so now knowing why—knowing from actual observation under the microscope that quinine has the power of killing the plasmodium in the blood. Opium we still give, but with ever less and less frequency and greater discrimination. It is not now a specific, but an aid like chloroform, and when used judiciously is a blessing to mankind. Bleeding is now employed to meet certain well-defined indications, and once again we know that it is not a specific but an adjuvant to other measures Calomel, the last of the ancient four-in-hand,—bleeding, bark, calamy and laudamy,—is still largely an empirical agent of great value, it is true, but of somewhat undefined action. As Montaigne has said, "I experimentally know that radishes are windy and senna leaves purging;" so we know that calomel acts.

If you take your therapeutic manual and go over its lists, you will find a fairly lengthy one containing agents whose use is based upon a truly rational foundation; whose use is guided by having a definite object to

attack in a known microbic cause of the disease; which are used because a deductive process shows their place in rational treatment and because standards of experimental necessities have been satisfied. This growing list includes remedies for diphtheria, tetanus, septicaemia, myxoedema, bubonic plague and others which seem to be on the verge of being added, such as typhoid fever and tuberculosis. Unquestionably empiricism has still a firm hold on our therapeutics, for it must be admitted that medicine has much to gain before it can be classed amongst the exact sciences; and it seems to me, we owe to empiricism a debt of gratitude for having preserved for our use many valuable remedies. Quinine has been already mentioned. Iron has been taken from the hands of the empirics and placed on the rational side; for it can be demonstrated absolutely by daily examinations and tests of the blood, that there is an accession of the iron which we administer to the corpuscle depleted, by disease, of that ingredient. Mercury has by empirical use so established itself as a specific for syphilis that this drug alone should gain our thanks forever to any system that discovered it and encouraged its administration. To-day we can say that we have tried all these drugs and now hold fast only those which are true, while we make diligent search for causes, ever causes, to illumine with reason their use.

Thus, one by one have many of the talons of the great octopus, superstition, been raised, and with the sundering of each from its connections, there has sprung up a healthy growth of some branch of science. To-day these are flourishing and medicine has been rejuvenated by an injection of the elixir of modern progress to such point that her tottering bones and paralyzed forces are now erect and active. We treat disease, to-day, not upon some brain-befogged theory evolved in secret places, but upon some experimentally proven principle. We do not inject the antitoxines of tetanus, or diphtheria, because a Roux or a Kitasato tells us to do so, but because, if we take the trouble, we can not only see but do for ourselves the work that demonstrates to our reason the facts established by their investigations. Do you want to see what a toxine can do? Then take a drop of typoid diluted blood and treat it under the microscopic lens with some healthy bacilli of Eberth, taken fresh and well fed from a bouillon culture. In a space of time, varying from a few minutes to hours, those active, wriggling bacilli have received their quietus and, like plague stricken dead, are piled up in lifeless clumps, destroyed, curiously enough, by a sort of retributive justice, in substances of their own orginating. With such a satisfactory showing of results accomplished within the space of half a century, we are justified in looking forward to a much more rapid progress in the future; for our vision, already

widened by the application of physical laws to the human body in the use of such aids as the stethescope of Laennec and the microscope, can confidently hope to see through still darkened tracks of our bodies by the aid of the fluoroscope and skiagraphic tracing. The possibilities of the microscope are not yet restricted, as is evidenced by the growth of the new pathology, the study of the blood in disease, haematology. In the careful observation of the blood in health and disease we have a new avenue through which the vista of enlarged powers of treatment is seen. Leucocytosis, local and general, has received practical application and obscure pus collection in the body, can be diagnosed with considerable certainty. Central pneumonia, a condition frequently undiagnosed on account of absence of the standard physical signs, can be inferred by its aid. With then, gentlemen, the nature of the causes of disease becoming steadily clearer; with truer classifications of disease; with aids to diagnosis constantly being added to our clinical machinery; with truer knowledge of the action of remedies within our bodies, we can claim a not distant time when science will not renounce us and when we will be received with honor amongst the family from all sections of which we receive so much help.

THE MEDICAL WITNESS UNDER EXAMINATION.

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MR. Chairman and members of the Medical Profession, you will allow me to say in the first place that I decline to look upon myself as an entire stranger in a gathering of medical men and women. True it is, I do not have the honour of being a doctor of medicine, nor do I practice medicine (for which I duly offer up thanksgiving every day of my life), but I had the good fortune during my earlier years to study medicine for a short time in the same office as my friend, Dr. Powell; and that has given me an interest in medical subjects and in medical men which I have never lost, and which I trust I never shall lose.

The very interesting paper of Dr. MacKenzie, and the still more interesting discussion which followed, struck me, as I sat on the platform, as furnishing a strong illustration of what Herbert Spencer and the evolutionists call differentiation, and the advance and evolution from the homogeneous to the heterogeneous. Now, when I studied medicine there was no difficulty about diphtheria as there is now. The diagnosis, the treatment, the prognosis were perfectly simple. If the neighbors'

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children had had a sore throat and died and my child had a sore throat then it was diphtheria. If they had not died of sore throat, then it was not diphtheria. The treatment, too, was perfectly simple. Once the case was diagnosed as diphtheria—take a stick about six inches long, with a piece of cotton rag, more or less clean, (they had no antiseptic or aseptic methods in those days) tied around one end of the stick, and make it tight with tread—No. 30 preferred—dip that into a solution of nitrate of silver and swab out the throat. That was the treatment and the only treatment. Prognosis, too, was certain. Repeat that treatment. If the child gets better it probably will not die. If it takes a turn for the worse and dies, then the case is hopeless. (Laughter). There was no cultures in those days. They had beef tea, indeed, but it was used for feeding the patient not the bacteria. They had nothing in the way of incubators and the like that you put into your waistcoat pockets or into the axilla of the patient in order to develop bacteria There was then no difference of opinion as to the diagnosis, treatment, prognosis. Now I see no two medical men seem able to agree, except on this point: "If you get a really costly medicine, such as antitoxine, the more of it you administer the better the result."

Like my friend, Dr. MacKenzie, when I was asked to read a paper before this Association I had some little difficulty in coming to a conclusion as to what kind of paper would probably answer your requirements best. As, however, I had already, at the request of the Medical Faculty of the University of Toronto, prepared a series of lectures for the medical students upon the subject of "Medical Men in Court," I thought it might not be out of place to take part of one of these lectures, change it somewhat and adapt it to the "meaner capacity," as the Shorter Catechism has it, and give you that. That will account for the didactic tone which I propose to use. You will please consider yourselves students who are sitting at the feet of Gamaliel and learning from him.

In the English language, the adjective has three degrees of comparison: the positive, the comparative, and the superlative. The noun substantantive, with the exception of a very few words, has nothing of the kind. One of these exceptions is the useful and expressive word "liar." There are three kinds of liars. There is the liar, the d—d liar and the expert witness. Now that gibe, that proverb, derived most of its vogue from the medical witness. And there is a modicum of truth concealed in it, although, when one considers what it means, and what it implies, and considers what a medical witness as a rule is, it will be found to be grossly extravagant and grossly unjust.

There are two kinds of witnesses: the common witness, who speaks as a matter of fact; and the expert witness, who speaks as to a matter of opinion; and when we remember that an expert witness is only such when he is speaking as to a matter of opinion, and that in the case of opinions there always have been and always will be differences, it is not at all wonderful that expert witnesses do not agree in their testimony.

Concerning opinions, there is constant disputing; and it is not doctors alone who are constantly disputing. Take the clergy: the *odium theologicum* is worse than the *odium medicum* and the *odium forensicum*, and both of these, God knows, are bad enough. The clergy of one church believe that the theology of another church is based upon error, and they know that the opinions of the clergy of that other church are wrong. Members of my church know that they are right and the other fellows are all wrong. Orthodoxy is my doxy, heterodoxy is your doxy. Lawyers don't agree, even when they are put on the Bench; and occasionally a lawyer is put on the Bench. It is not always the case, but still those who are lawyers are put there. I have in my mind more than one case of pure law, not matters of fact at all, but matters of opinion, where one court has given a verdict for the plaintiff. This has been reversed by the next court, that again reversed; and then in the Supreme Court this last was again reversed. The only reason perhaps this was not reversed again was because there was no other court to go to. Politicians do not agree in their opinions. Over there in the adjoining park, in the Legislative Assembly, this afternoon they will be discussing a matter of opinion, and if you will give me a list of the people who are going to vote, if you tell me their names, I will tell you the majority on one side or the other. Opinions must necessarily differ, and therefore it is that the expert witness, who is called upon to swear, not to a matter of fact at all, but to a matter of opinion, almost as a matter of course differs from another expert witness.

Now, you will say that I am travelling very wide from my subject, but that is really not so, as I hope to be able to show you in a few minutes. What is the object of a court? What is the witness in the box for? What are courts of justice kept up for? They are kept up for determining facts in the first place, and then applying the law to these facts so found? The judge applies the law, the facts are found by a jury, or by a judge sitting instead of a jury; and I shall, for convenience, use the word "jury" instead of a judge sitting for a jury. The facts so to be found by the jury are not to be found by them from their own knowledge. In the jury box, as everywhere else, one is entitled to use common knowledge, that is, what everybody is supposed to know.

Everybody is supposed to know that we have night and day, there are seven days in the week, that water is wet and fire will burn, and that when medical men get together at dinner they have a good time. I won't say anything further on the latter matter, lest it might lead to painful misapprehensions. A juryman, or a judge, has no right to found a verdict upon his own knowledge of facts. He determines the facts upon the evidence given in the witness box by a number of witnesses; and, therefore, it is that the witness is probably the most important man in the court of justice after all, although you will find difficulty in convincing the unhappy litigant of that.

What is the object of cross-examination? It is to determine two things. The object ultimately is the truth, and that is determined in two ways: finding out, first of all, how near the witness is trying to tell the truth; and, secondly, how far he is worthy of belief even if he is trying to tell the truth. Now, both of these two matters must be considered. A man may be perfectly truthful, telling what he believes to be the exact truth, and by reason of his want of capacity, or by reason of some idiosyncrasy, which can only be determined by careful investigation, he is not succeeding in telling the truth.

Again, the value of the evidence of a witness depends upon a number of things. In the first place, it depends upon the opportunity which the witness has had to investigate the matters, concerning which he is giving evidence. This is the case with the common witness as well as the expert witness. I have heard medical men swear (I have never heard medical men say it outside of the witness box) that a man who has examined a patient once will have as good an idea of the extent of his injuries, and the probabilities of his making a complete recovery, as the man who has been with him from the time the injury took place, who has waited upon him, prescribed for him over and over again, who has joyed over him when he showed signs of recovery, and whose heart has gone down as his patient's health has gone down. However that may be, the means of observation which a witness has is the first thing of importance.

The second thing is his capacity to observe, his capacity to form an opinion, his capacity to understand what he sees. That is a matter largely of education and of experience.

Again, the value of the testimony depends upon a man's memory. How accurate is a person? How retentive is his memory? Does he remember what he thinks he remembers? Is it the fact that he is telling the truth concerning something that has taken place in the past?

Another thing is his capacity to say what he means. You may think that is an extraordinary statement. It is not. Any man who has

been much in a court of justice will agree with me in this. Not one man in twenty appreciates the value of an accurate use of the English language. Not one man in twenty can express exactly what he means, so that there cannot be any mistake about what he does mean. The capacity to express one's thoughts, the ability to put in words and in decent English what it is desired to convey, is another thing upon which the value of a witness' testimony depends.

Another thing is his' onesty. Medical witnesses are generally honest. The medical man who will allow himself to be approached and who will give evidence contrary to fact, or contrary to his real opinion, for the purpose of enabling the plaintiff to get a larger verdict out of a railway company, is as much a thief, is as much a criminal, and should be behind the bars just as truly as a man who opens a bank with dynamite.

Now, the object of cross-examination is to determine how far the man's testimony is to be relied upon, how far what he is stating is the actual fact.

I remember once defending a man and woman for murder. A very graphic description was given by a young girl, about 13 or 14 years of age, of a whole series of circumstances, which she detailed so well and vividly that one could see that they would lead to an irresistable conclusion, that the man and woman in the dock were guilty of murder. I cross-examined at some length and with some care. Her story wavered. Each time we approached the story from a different point of view it changed. One little circumstance was modified, and little contradictions began to appear. By a little careful leading, or perhaps by a good deal of careful leading, she began contradicting her story in important points. Before the cross-examination was through she had contradicted the whole story, and that, not by inadvertence, but of intention. She had yielded to the suggestion of the stronger mind. She had been living for three months in the home of a well-known enemy of the prisoners. The judge discharged the prisoners and would not allow the matter to go to the jury. I was asked by a clergymen ten minutes after the acquittal, "How could you get that girl to lie the way she did? Did you think it was honest, or right, to ask her those questions?" I answered, "Yes, eternally so." He said, "You knew she was telling what was not true?" "Yes, but I wanted that jury to see that that girl had a mind of such a character as to yield to the suggestion of a stronger mind. That she would allow to be instilled into her brain thoughts which had never been there, and thoughts which ought not to be there, thus showing that she was easily influenced." Then taking the fact that she had been in the house of a

well-known enemy of the accused for two or three months, the danger of allowing such evidence to procure a conviction was obvious.

I say cross-examination is one of the most valuable weapons for arriving at the truth, and I speak of it because there is, at the present time, a feeling in some quarters against cross-examination. Take some of those very papers that are now crying out against cross-examination, and let anybody charge them with libel, let that person be put into the witness box in order to give evidence against them, and they will be the very first to say, "It is the duty of a council to test in every possible way how far the witness is trying to tell the truth, and how far the witness is succeeding in telling the truth." Of course this will lead to inquiry into matters apparently irrelevant, but all proper cross-examination is directed to the sifting of opportunity, capacity, honesty.

Now, a witness has two duties. I suppose that probably will be news to you. I do not think you will find this in any of the books on medical jurisprudence. I don't think you will find it in any book of any kind; but I am not a man of theory. I am a man of practice. My profession calls upon me and I am employed to get verdicts, if I can That is my life work and I propose to get verdicts by every honorable means, and I don't care one rap for theory. Your books tell you the witness has got only one duty, that is, to stand up there and tell the truth. That is grossly wrong. I have heard witnesses tell the truth in the witness box and nobody believed them. A witness has more than one duty. In addition to actually telling the truth, a witness owes it to himself, and to his position, to tell the truth in such a way that the jury and spectators will believe him. Your text books will tell you, "Go into the witness box and answer the questions truly, and then leave the witness box secure in the approval of your own conscience." I say, however, that not only should a witness tell the truth, but he should tell the truth in such a way that people will believe him, and that, after all, is the main object of a witness—to say something which will be believed and have an effect on the verdict.

Now, that leads me a little further. A witness box is no place for frivolity. The witness box is no place for jesting or trifling. The man who has taken an oath to tell the truth is under a serious obligation, and that obligation he ought to have in his mind before he goes into the witness box. These are commonplaces, perhaps, to you, but none the less they are exceedingly important. If a man is going to be a witness, it is his duty to prepare himself by finding out all the facts concerning which he is likely to be asked. An expert witness, who is going to be asked about his opinion, ought to prepare himself

with authorities backing up his opinion. He ought to be in a position to justify his opinion to the very utmost, because, if the cross-examining lawyer is worth his salt, that opinion may be severely tested. Physical preparation is not out of place. An important medical witness, being cross-examined by a lawyer who understands his business, has a physical strain put upon him which is not light. The lawyer feels it but it is his business, he is at it every day, but the witness has an unaccustomed physical strain; and, therefore, one going into the witness box ought to see to it that he is as far as possible physically fit.

One's personal appearance is not unimportant. The man who is decently and properly dressed will receive more consideration at the hands of the judge and at the hands of the jury than the fop, or the sloven. The medical profession never stood higher in the estimation of the people than when they had their distinctive garb of the furred robe, the cap and, with this, the gold headed cane. The Judges are wise in their day and generation when they insist on lawyers wearing the gown and being properly clothed in Court.

The rule of old Polonius still stands good:—

> Costly thy habit as thy purse can buy,
> But not expressed in fancy; rich, not gaudy:
> For the apparel oft proclaims the man.

These are preparations, things you consider before you go into the witness box, matters which will or may bear upon the value of your testimony. They won't help you to tell the truth, but none of them will hurt you in the slightest degree. All will assist you in that important matter, *i.e.*, making the truth tell.

Then, in the witness box, I have been in the habit of laying down for solicitors,rules which will look almost absurd to you when I mention them; but rules which in themselves have a wide usefulness and ought to be borne in mind by every witness. One third of the time of trial Courts is taken up with perfectly useless blather; not only useless in itself, but doing harm in beclouding the proper evidence, in belittling the other parts of the case which ought to receive attention. Now, while judges sometimes, and lawyers oftener, are responsible for that, to a great extent witnesses are also responsible for that in no few cases.

First, don't answer a question until you understand it. Now, that seems silly. Go into a court room and listen to the trial. You will find witnesses persist in answering something they are not asked, and in not answering what they are asked. If in the witness box you do not understand the question, or if the question is complicated, you have a

right to have the question put in such a shape as that you do understand it, and to have it put in such a shape as that you can answer it without deviating from the strict line of truth. If the lawyer declines (and there are men who will decline) you have a right to appeal to the judge, and it is the judge's duty to see to it that the question is put in such a way as is understandable, and that it may be fairly answered.

In the second place, when you do thoroughly understand the question, answer it as briefly and concisely as you can, consistently with the truth. If a question can be answered "Yes," or "No," answer it "Yes," or "No." If it cannot be answered "Yes," or "No," refuse to answer it "Yes," or "No." It is a well known trick in my profession to insist, with a great air of indignation, upon a direct answer to a direct question. Of course, that is simply "talkee-talkee" for the jury. Sometimes the witness yields to the insistence of the counsel and answers "Yes," or "No," when he feels and knows no such answer should be given. This is wrong. If a question cannot be answered "Yes," or "No," you have a right to appeal to the judge, and almost invariably the judge will put things right. Do not, however, be hypercritical. The counsel for the side upon which you have been summoned as a witness will give you ample opportunity to explain your answer, and frequently the judge will say, "Answer the question. You will have an opportunity to explain.' Insist on this opportunity.

Thirdly, and a more important rule than either of the others is when you get through answering a question, shut up. Men will talk and talk and talk, and the more they talk the better the cross-examining counsel likes it, because it is absolutely certain that if a man keeps his mouth wide open long enough, he is going to put his foot in it. In my experience I have seen more cases lost (I mean by incidental matters) by witnesses going on talking after they had finished their answer to the question than by anything else. If the lawyer understands his business you may be sure he will ask questions enough. If you answer all the questions he will put to you, you will be doing all the law calls upon you to do and enough to pay for all the remuneration you get.

I have been asked, what should you do supposing a question is put in such a way as that any answer to it would be misleading? Say so. You have rights as well as the cross-examining counsel, and your rights are bound to be respected. Say, "I cannot answer that question in a way that will convey the proper impression." Have the question put in such a way that you can answer it.

These three simple rules seem probably almost like baby talk, but if they were observed at least one third of the time taken up in our

courts would be saved, and at least one-half of the humiliation and mental pain which witnesses experience, both before and especially after they leave the witness box, would be prevented.

Don't despise the cross-examining counsel. Poor chap! he may not know the difference between a heart and a liver if he were to see them. He may know nothing of medicine generally, but if he is worth his salt, and if he is doing honest work for the fee that is paid to him—I withdraw that—promised him, he will know as much about the subject for the time being as you do. Don't despise him. He is in a different line of business, but if he is a first-class man he will, for the time being, know his subject; and if he is anything like a first-class man he will at least make the jury believe he knows more than you do about it.

Don't get into jangles. Don't cross swords in the way of wit with the counsel. That is our play, what we are after. Give me the witness that will jest with me, particularly an expert witness, and in nine cases out of ten he will give me what I want. If the cross-examining counsel laughs, he has either got you on the hip, or you have hit him hard. If he laughs at you, then as a rule, you have got him; but if he laughs with you, you might as well leave the witness box.

I have seen cases lost by witnesses being too smart. I have in my mind now a case (I think there is at least one gentleman in this hall who will remember it) where a medical witness, called for the defence used the word "imagination" in reference to the diagnosis of one of the medical witnesses called for the other side. Plaintiff's counsel knew that was all he wanted. Of course at once he was glowingly indignant at the idea of a member of a liberal and learned profession talking about another member of that profession using his imagination. It was perfectly useless for that medical man to say that he was using the word "imagination" in Tyndall's sense "the scientific use of the imagination." The jury did not know Tyndall and did not want to. All they knew was that one medical man ventured to say another medical man was imagining things, and promptly gave a verdict for the plaintiff.

Another medical man of the highest standing had the effect of his evidence absolutely destroyed when he admitted to me in the witness box that he was an advocate. It was perfectly useless for the gentleman to say that when he used the word "advocate" he meant an advocate for the truth. The jury knew well what an advocate was; that he was a lawyer employed and paid to speak upon one side.

Don't go and talk outside of the question and "don't get gay."

Now, Mr. Chairman and gentlemen, I have talked already longer than I intended. I have been trying to say to you something practical,

and these are not "Counsels of perfection." I know medical witnesses who under cross-examination, (while I dare say they never heard of any such rules as I have been speaking of) have followed exactly the spirit of these rules as though they had them in mind. Any medical man who respects himself, and is willing to do what is right, need have no fear of his position in the witness-box under cross-examination if, first, he understands his business; secondly, he takes pains to prepare himself, and, thirdly, he is willing to tell the truth.

Gentlemen, I thank you very heartily for your kindness and the honour you have conferred upon me. If anything I have said will in the slightest degree assist you in the future, I am more than repaid.

(The above address is from the stenographer's notes, and has not been revised by Mr. Riddell.)

APPENDICITIS FROM THE STANDPOINT OF THE COUNTRY DOCTOR.*

BY JOHN W. S. McCULLOUGH, M.D., Alliston, Ont.

Appendicitis is a very common and frequently fatal affection. It is the cause of the majority of cases of peritontis in the male and of the most of those in the female, excepting those cases which arise in connection with some affection of the genito urinary organs.

There are a few facts relating to the appendix which tend to make apparent why this organ is so liable to inflammatory affections. First of all it is understood to be a degenerate organ without any known function, consequently it has poor nutrition. Added to this it has a scanty blood supply. There is but one small artery from the ilio-colic branch of the superior mesenteric. Its mesentery often does not reach nearly to the distal end of the organ. It is a blind pouch with small calibre and such slender canals are known to be liable to stricture. Its walls have no circular musculary fibres, and consequently it is unable to readily empty itself of the fecal matter and various foreign bodies with which in its dependent position, it is liable to become distended. It has a relatively large amount of lymphoid tissue in its walls. Its powers of absorption are large and the contents soon become dry and harden. Its contents from their various nature are the habitat of various bacteria. It frequently lies upon the Psoas muscle and is therefore liable to irritation from the constant movement of this muscle.

Inflammation of the appendix may begin in its muscosa. The lining membrane may afford an entrance to bacteria through an erosion produced by hardened fecal matter or a foreign body. Pressure of its

*Read at the Ontario Medical Association, 16th June, 1903.

contents may cause stasis of the feeble circulation, and, by lowering nutrition of the mucosa, allow of the invasion of the colon bacillus, while kinking, or distortion of the mesentery, or a thrombosis of the blood vessel, may cut off the circulation. These two factors, lowered nutrition, from whatever cause, and the entrance of bacteria are the foundations of the pathology of appendicitis. Resulting from these conditions we may have either the mildest of attacks, productive simply of colic or a local inflammation of a portion of the mucosa, with eventual formation of a tiny stricture of its lumen; or swelling and hyperplasia of the whole organ, ulceration, perforation, gangrene of a portion or all of the appendix, the formation of a circumscribed abscess, pus formation in the subperitoneal tissue, or general septic peritonitis. The progress may be very slow and the disease may succumb to nature's efforts at a cure, or it may be so rapid that a few hours may decide the fate of the patient.

If the attack is a mild one and the patient happily recovers, a condition may be, and frequently is, left which more than ever leaves him susceptible to future attacks. The strictured condition often seen after more or less mild attacks allows of the contents of the appendix to the distal side of the stricture becoming very hard and acting as a foreign body.

Serious inflammation may have bound the organ to other portions of the intestines or to other organs, to its own mesentery or to itself. Some of these conditions may account for the constipation, the pain and the digestive disturbance seen in chronic cases.

Symptoms.—The most important symptoms are sudden acute pain in the abdomen, nausea and vomiting, with coincident or subsequent rigidity of the abdominal muscles of the right side and tenderness in right iliac region. The pain is colicky, is spoken of by the laity as "cramps," and is due to reflex irritation carried through the branches of the superior mesenteric plexus. The nausea and vomiting are due to irritation of the sympathetic nerves. The rigidity is due to the fact that the muscles are striving to protect the tender organ underneath, while the tenderness itself shows that peritonitis has commenced.

While these are the earliest and most characteristic symptoms there is usually fever and increase in pulse-rate. Some authorities instruct us to pay little attention to the pulse and temperature, yet they undoubtedly, when they are carefully considered, afford some assistance. If the affection is due to the colon bacillus, which perhaps the larger number of these cases are, the temperature and pulse may be but little elevated. If due to a streptococcus or mixed infection, the temperature may reach 102°. F. or more, with a correspondingly rapid pulse. With the condi-

tion of perforation or gangrene of the appendix, the pulse and temperature may be normal or subnormal. If the case is making unfavourable progress, the tenderness may increase may be elicited by pressure on the left side. There may be more or less distension of the abdomen and dulness over the right iliac fossa. Delirium, persistent vomiting, signs of shock and chills are unfavourable symptoms. The condition of the bowels may e unchanged or there may be constipation or diarrhœa. The patient's face may show anxiety. The appetite is usually gone. Hiccough is a most unfavourable symptom.

Diagnosis.—A correct diagnosis, and especially an early one, is most important. Fortunately in most of cases when seen early it is not particularly difficult, but it is much more difficult and often well-nigh impossible to say at a later period just what condition will be found inside the abdomen. I have known cases operated on within 15 hours after the onset of first symptom and a circumscribed abscess found, and I have known others in which the attending surgeon refused operation—not believing it necessary, as the patient appeared to be improving—to subsequently have a large collection of pus in the abdominal cavity. Occasionally pain and tenderness may be confined to the left side. These cases are ones in which there is either a long appendix pointing towards the left side, or else there are adhesions, confining a branch of a nerve, through which the pain is reflexly carried. One of the earliest chronic cases I saw had no pain except in the region of the lower border of the ribs on the left side. The appendix was hard, bent on itself like one's flexed little finger, and with its tip adherent to the cæcum. Following its removal there has been no pain for the last seven years. The cardinal symptoms of sudden pain, beginning in the region of the umbilicus, with nausea, vomiting and rigidity of the muscles, followed by tenderness over McBurney's point, are the ones to be relied on in making a diagnosis.

We will require to differentiate between Appendicitis and :—

1. Tubo-ovarian disease.
2. Affections of the Gall-Bladder and Ducts.
3. Affections of the Kidney.
4. Affections of other portions of the intestines.

1. *Tubo-ovarian Diseases.*—In this disease which is more common on the left than on the right side, the pain is not usually so sudden in its onset nor so colicky. There is not the rigidity of the abdominal wall which is found in appendicitis. A history of genito-urinary disease if it can be obtained will aid in clearing up the diagnosis. Most helpful of all will be an examination under anæsthesia.

In ectopic gestation the sudden collapse following rupture of the sac might be confounded with perforation in appendicitis. The puerperal age and the symptoms in pregnancy, if such can be obtained, will be of value in separating the affections.

2. *Affections of the Gall Bladder and Ducts.*—In hepatic colic the pain is found in the upper part of the abdomen and radiates towards the right shoulder. There may be tenderness over the gall-bladder, vomiting is more persistent than in appendicitis. The temperature is irregular, high at times and low at others. There is often jaundice.

In case of collapse from rupture of the gall-bladder an error might be made Usually, however, there is some history which will clear up the case. But in other cases nothing but explanatory incision will diagnose the condition.

3. Renal colic may be confused with appendicitis I recollect seeing a patient in consultation, who had an unmistakeable attack of renal colic and along with it appendicitis, for which he was operated on in a few days.

4. Illustrative of the difficulty in separating this from other intestinal affections permit me to give a few notes of a rather unique case a short time ago. The patient was a hearty baby girl, sixteen and one-half months old. She had some pain and vomiting at 10 p.m., Sunday, for which her mother gave a dose of castor oil. As a result she slept all night, and at 1 pm., Monday the bowels moved freely. She had a return of pain and vomiting. I saw her at 3 p.m. and found her in a state of shock, for which I gave her a saline enema, mustard bath and gr. 1/60 strych. sulph. hypodermatically. She was relieved in a couple of hours. On return of pain a second enema was given. There was a slight discharge of blood from the bowel. The pain and vomiting recurred with greater severity. There developed tenderness and rigidity on the right side of the abdomen, with perhaps a slight distention. A colleague in consultation with me that evening agreed as to the likelihood of appendicitis, but suggested that considering the severe shock and the passage of blood there might be a volvulus. There being an increase of the symptoms I did a celiotomy next morning, 36 hours after onset of first symptoms, and removed a highly-inflamed appendix, almost black for an inch round the tip, and found in addition a volvulus of about six inches of the ileum just above its junction with the large bowel. There was a knuckle of the ileum pushed in the angle formed by the calcum and its mesentery and adherent there. About four inches of the ileum was dark and angry looking. Hot gauze compresses were assiduously applied, and after half an hour the circulation was restored

and the abdominal wound closed without drainage. The little patient has made a prompt recovery. In this case I cannot say which was the primary condition, nor whether one had anything to do with the production of the other.

Treatment.—In the light of our knowledge of the pathological conditions found in appendicitis the treatment in all but the mildest cases should be surgical. At the outset the patient should be given an enema and a mild laxative of castor oil, or repeated small doses of calomel. For the relief of pain, chloroform water or spirits of chloroform may be given as required. Every case must be treated on its own merits, but any case that does not show improvement or which gets progressively worse during the first twenty-four hours should be operated upon. Mild cases undoubtedly get well without much treatment of any kind, but with due deference to those who pin their faith to the opium or morphine treatment, I doubt if it ever effects anything in appendicitis except to ease the pain and fool everyone about the case who is not on the alert as to its masking qualities. But opium has its place, and having decided upon operation and while making preparations to open the abdomen, a dose of morphine combined with atropine and strychnine will do good service in quieting the nerves of the patient and will leave him in better condition for operation than if he is allowed to suffer without it. The dose should not be large and its purpose understood.

It is not so easy to operate in the country as in the city, but not withstanding the absence of well-equipped operating rooms, the best surgical appliances and good nurses, good results are obtained in the surgical treatment of this affection by the country doctor, and for two reasons. He can operate at the earliest possible moment when he has the best prospect of success; and the absence of noise and dust, incident to a city, with the benefit derived from pure air, perhaps, go far to make up for what he may lack in surgical skill and surroundings.

The operation in uncomplicated cases of appendicitis is a comparatively easy one, with ordinary equipment and scrupulous attention to aseptic conditions these cases do well. If the country doctor is constantly on the alert in appendicitis cases, few of them should become complicated. If they go for days or weeks without improvement, a condition may be eventually found which will tax the skill of the most experienced.

In cases which have gone to the formation of a local circumscribed abscess, the pus should be washed out or gently swabbed out. If the appendix or what remains of it can be readily recognized it may be

removed, but the greatest care must be taken not to disturb the limiting wall of the abscess. In these abscess cases we should be reasonably satisfied that more than one pus collection does not exist. Cases of general septic peritonitis should be judged on their merits, and we should operate or not just as we deem best in the interest of our patients. For the sake of our reputation perhaps a large number of these cases had best be left alone.

Finally, in all cases where the country doctor decides to operate he will but conduce to the patient's comfort and safety, and his own success and peace of mind by having a good trained nurse. Perhaps no other adjunct except his skill as a diagnostician and an operator will make so much for success as this factor.

The mild cases should be operated on in the interval. In chronic cases all are agreed as to operation. Fulminant cases require to be operated on without an hour's delay.

CONTAGIOUS DISEASES IN THEIR ECONOMIC RELATIONSHIPS.*

By P. H. BRYCE, M.A., M.D.,
Secretary to the Provincial Board of Health, and Registrar General for the Province of Ontario.

MR. Chairman and gentlemen of the Ontario Medical Association :— It is a somewhat remarkable fact, in the voluminous literature of political economy on the functions of governments in their relations to questions of national defence, international trade, internal development and the care of the rights of the individual, that I have found in none, even of the most comprehensive works on the subject, a single chapter dealing specifically with the subject about which I propose to make a few brief remarks.

It is quite true that sanitariums and prominent members of the medical profession have frequently illustrated by the effect upon trade and the losses which a country or a community may sustain, have shown the costliness of epidemics, and by estimating the value to the state of the labor of a man to have measured the productive losses to any country through deaths of wage-earners from preventable disease. But I find nowhere any clear and well balanced study of the problem of "what are the clear and indefeasible rights of, say the individual or his family, when attacked with a serious communicable disease, of the neighbor or other fellow citizen who may be exposed to danger of con-

*Read at the Ontario Medical Association, 19th June.

tracting the disease, and of the community or state, in which an epidemic occurs, in connection with such a disease."

It is manifest, however, that it is a sociological question of the highest possible interest, whether considered from the vital, commercial, or philanthropic standpoint, and that it must admit, like other similar problems, of some adequate solution, and the discovery of some underlying principles or axioms upon which intelligent continuity of action, whether of the state or the individual, may be based.

If we may be permitted to surmise why writers on economics, from Plato's time to almost the present, have omitted to treat of this question, I am inclined to think we shall find that the lack, until the last quarter of a century, even in the medical profession, of any accurate knowledge of the origin of exciting cause of communicable diseases, together with the not yet wholly eradicated idea that we are marks of divine displeasure, have prevented writers from dealing with the question in any broad or philosophic manner.

From earliest historical times, the god as Moloch, demanded the costliest sacrifice, and even the first-born child was not to be kept back from him; and when Malthus, the philosopher, wrote in 1803, "Diseases, instead of being the inevitable affliction of Providence, are indications that we have offended against some of the laws of nature," it must have caused a shock, like some of his other theories, to those who had hitherto been accustomed to measure the attitude of the Almighty to his creatures by the degree of their individual or general prosperity.

We may, in order to have some modern starting point, use the dictum of Jeremy Benthan, the good old eighteenth century utilitarian philosopher that "the greatest good to the greatest number," or as put by Dr. Martineau, "from each for himself to each for all," as a good practical guide to action to-day as when it was written, since it is based upon the principle laid down by the Master of all ages that "Whatsoever ye would that men do unto you, do ye so even to them."

We must then briefly enquire in what way society may deal, under our existing knowledge and ethical ideas, with the serious communicable diseases. We may start from either end, either from the standpoint of the individual or that of society or the state, since any principles which are scientifically correct will be applicable equally to both.

The Individual.

Eliminating the punitive idea from the situation, we must view the individual who contracts a contageous disease as the subject of the operation of some nature law, discovered or hidden, and while there may,

from the ethetical standpoint, be personal responsibility on his part through ignorance, rash exposure, lessening of the defence through overwork or dissipation, all modern humanitarian sentiment will look upon such a one, to use a common expression, as "the victim of circumstances."

Especially must we say this of the helpless child, the commonest victim of these maladies, even though parents may have been culpable or negligent. Towards such a one our attitude must not be that of the ancient who cried, "Room for the leper," but exactly opposite, viz., that of one with the active sympathy of human brotherhood, which fortunately, modern science enables us to practice without the exercise of any great personal heroism. For such a one then we are expected to act with a view to his highest welfare, by giving to him every opportunity, through housing, medical care and nursing, to proceed to a safe and speedy cure.

The Family of the Individual.

As with the growth of society up from the individual in barbarism, the problem now becomes more complex. The lives of other members of the family must, if possible, be protected, and from the humanitarian standpoint, it is quite clear that not alone the sick child but his brother, sister, play-mate, and school-mate, must be, if possible, considered, while from the economic standpoint the father, etc., as a wage-earner, enter into the problem.

The Commission and State.

Enlarge the problem so that its true proportions may be seen, as that where virulent smallpox invades a city as it did in Cleveland, Ohio, in 1902, or Galt, Ontario, a little later; or suppose cholera, as invading Western Europe via the Mediterranean, or the plague America, via Vancouver, and it is quite apparent that the commercial and economic phase assumes a prominence over-topping all academic questions of individual or family rights. The matter to be dealt with under these circumstances has passed, as when war is declared, beyond the subtle refinements of diplomacy and becomes a battle of giants—the patriotism of Theseus against a devouring minotaur.

What then are the scientific, and therefore, in my judgment, necessarily the ethical and practical demands of the situation when a child is attacked? Assume the case to be in a farm-house and it is quite apparent that with the restriction of the patient at home, the keeping of children from school and those nursing the child from the public, and the public from the house, that the public safety is amply guarded. The

difficulty, however, continues to exist. That the farm-house is an hospital, that all will depend upon the size of the house, the complete isolation therein of the nurse and the maintenance of such isolation for a period of six weeks. What the practical results of such a procedure are in dealing, say with scarlet fever, may be judged from the fact that it is comparatively seldom that one case occurs in a family of children without others taking it, and what a general house infection results is within the experience of most of us. But assuming the avoidance of such results is possible, there is still another feature of the situation we must consider. Quarantine of the several school children and loss of time have been inevitable, and if there are older persons in the house their quarantine in the benefit of the public has or ought to have been insisted upon; while the final outlay in the shape of a complete disinfection, which to be thorough is costly, is of course inevitable.

Should, however, a similar outbreak occur in a house in town, it may be said that the same methods may be carried out equally well. Does our experience confirm this?

Only last week a cottage in the city was placarded for scarlet fever, and a day or two later the patient, a girl, was dead. The mother of the house, while crape was on the door, had her infant on the street in its carriage; a necessary thing for the poor child indeed, but with the result that the neighbor's children approached and even kissed the child. A day or two later the infant had scarlet fever. It is apparent that the case in the country and that in the town are, from the public standpoint, quite different.

Clearly the problem as it affects the neighbors and the public in the city is not solved in the given circumstances.

I have thus broadly stated the case in order that we may give the proper value to the various factors entering into the problem. We see in the instance given the first case dead, the mother of the child who was sister of the patient, in the difficult position of wishing to protect both, and, as the result has shown, protecting neither.

I have during the past twenty years endeavoured not only to investigate conditions and judge of the broad results of the operation of outbreaks of disease from the scientific standpoint, but also the bearing of particular features of public health acts in so far as they have affected the vital and material interests of our communities. Any one who has followed the legislation of the past century, in countries such as England must have often thought of the amazing change from laws of Draconian severity, whereby even as late as 1839 there were thirty-nine offences for which death was the penalty, to those of the present day. The old

statute of 1774 provided that if a ship' captain entered the port of Quebec, coming from a port where contagious disease prevailed, without first anchoring off shore and notifying the authorities, he was liable to be hanged forthwith; while to-day the person who even knowingly exposes a neighbor's child to a fatal disease is often excused and practically never punished.

It is quite clear, therefore, that our laws demand a *via media*, some common ground whereby the highest good to the largest number may result.

It is now nineteen years since the Public Health Act of Ontario was modelled largely on the English Public Health Act, consolidated in 1875, and the more I have seen the practical operations of its provisions, the more I have wondered at the practical wisdom in, and the exactness of its clauses for dealing with contagious diseases, in so far as exact knowledge regarding the several diseases had advanced at that time. I shall refer to only two or three of them.

The state says to the physician whenever you know that you have in your practice a dangerous communicable disease you and the householder must both notify the state, that is, a municipal officer. Why does the state require this? Because experience has shown that the individual householder may not know or appreciate the dangerous element his household may become in the community, or he may be too much concerned about the immediate inconvenience he may be put to, to be capable of judging of the situation impartially as regards the public. Further, in so far as he exercises an influence on the family physician, he makes it difficult for the latter to act independently of this view of the matter.

The Act next says, the municipality having been informed, necessarily must interest itself in the case, and under liability to damages for neglect must take steps as the Act provides for the protection of the public.

For instance, section 93 of the Public Health Act states that the health authorities, on being notified of a case of a dangerous communicable disease, shall at once make effective provision in the manner which to them seems best for the public safety by removing such person to a separate house or otherwise isolating him, if it can be done without danger to his health, and by providing nurses and other assistance and necessaries for him at his own cost and charge, or the cost of his parents or other person or persons liable for his support if able to pay the same, otherwise at the cost and charge of the municipality.

The spirit and intention of this clause are so clearly and admirably expressed, that now at the end of twenty years I think there is none of us who could suggest a word which would improve it.

It clearly contains the idea that if a disease is contagious, it will infect non-immunized persons, if they are exposed to it, and in 1885, during the great smallpox epidemic, Sir Oliver Mowat gave even greater definiteness to the clause in the smallpox regulations, which require that not only must a patient sick of smallpox be removed to an isolated building or hospital tent, but that all exposed persons be placed in a separate house and be vaccinated, and kept under observation until the incubation is over.

These clauses have their necessary corollary in section 106 of the Act, which provides that the municipality, if it has not already provided, must provide an hospital to which such cases may be removed, and in which persons will be treated by their own physicians and at their own expense.

I have given the substance of these several clauses, because in a remarkable way they serve to bring out the bearing of the Public Health Act, as it deals first with the liberty of the individual, and second, with the way in which it associates the liberty of one person with the interests of another.

All modern writers, in dealing with the "functions of Government," take as one of their starting points, this so-called "principle of national liberty, *laissez-faire* or minimum interference." The philosopher, Adam Smith, says, "Every man is left free to follow out his own way," with the remarkable caveat, "as long as he does not violate the laws of justice." It is, therefore, evident that with regard to the matter under consideration we have, if possible, to determine what the laws of justice are; and, having thus decided, we must then apply to the case the practical rule as regards government action, viz.: "That through the whole range of government functions, the line of demarkation between the necessary and the optional, is equally variable and uncertain."

If then the interests of the several persons already referred to are to receive equal justice and consideration; and if we have shown how intimate the relations of one to another are, it is apparent that the application of the last rule is comparatively easy. Thus it may be, and indeed is, necessary to apply to an outbreak of virulent scarlatina, a positive line of action by regulations, which might be unnecessary with an outbreak of measles. Hence it is apparent, that, as Prof. Nicholson of Edinburgh remarks in his sociology, "The functions of government are so varied and complex, as to elude any simple classification."

The older writers of the utilitarian school of philosophy taught with much plausibility that self-interest, properly interpreted, was equally the public interest; but it is plain that self-interest is a variable

conception, as from the very nature of things it must be, depending upon the ethical plane upon which the thought of any individual mind finds itself. That this coincides with the correctness of the scientific principles underlying any course of action, whether dealing with wages, production, defence of the state, or the protection of the individual, must, I think, be admitted.

Benjamin Kidd, in his work on "Social Evolution," states, what all will agree with, that among the nations that have acquired an ever increasing ascendancy, have been those which have possessed the best ethical systems; that is to say, ethical systems which, having secured the subordination of the present interests of the individual to the larger interests of an infinitely longer-lived social organism, have been allowed the fullest possible development of the powers and the faculties of all the individuals concerned.

It hence will be apparent to this Association, if the interpretation which has been placed upon the various elements entering our subject is correct, that the intelligent self-interest of every member of the community demands in the interests of the individual, of the family, of the community and of the state, a line of action which comports with the liberty of the citizen, as understood by Adam Smith, since it means justice to all, and of necessity, as Kidd says, the larger interests of the social organism of the state. It hence must result in the greatest happiness of the greatest number, thus fulfilling Brentley's axiom, and inasmuch as it fulfils the spirit of the Divine Teacher, who thought not of himself, it must fulfil all the requirements of a law of pure science, which in its application to practical affairs, is as unalterably true, as the law of gravitation to the deepest and most obstruse problems of pure physics.

It becomes a matter after all of social evolution along the lines of science, which has been thus expressed by Pope.

> Self love but serves the virtuous mind to wake
> As the small pebble stirs the peaceful lake;
> The centre moved, a circle straight succeeds;
> Another still and still another spreads;
> Friend, parent, neighbor, first it will embrace,
> His country next, and next the human race.

Protargol, in the strength of 17. to 2 % solution, is a valuable treatment for gonorrhœa. Three drams of the solution is injected from one to three times daily. When used as above directed, it is not irritating, and has a very beneficial effect on the discharge.

DISEASES OF THE EYE, EAR, NOSE AND THROAT.

Conducted by PERRY G. GOLDSMITH, M.D., Belleville, Fellow of the British Laryngological, Rhinological and Otological Society.

ALARMING HÆMORRHAGE FOLLOWING EXCISION OF TONSILS AND ADENOIDS.

Bulson, in the *Fort Wayne Medical Journal* (April, 1903), cites an interesting case of secondary hæmorrhage following this operation. The patient, a boy, six years of age, presented no unusual features either during the operation or immediately following. He was kept under constant observation for two hours after being operated upon. He was then sent home, but eight hours subsequently a report from the patient's home said he was very restless, breathing badly and had vomited a great quantity of blood. It appeared that the hæmorrhage came from the naso-pharynx. Adrenalin solution was freely used and saline transfusion was administered. This appeared to excite more hæmorrhage later on, probably by raising the blood pressure, and, perhaps, would not have occurred had the naso-pharynx been plugged. The patient eventually recovered, but the case seems to impress upon our minds the possible seriousness of the operation, and the necessity of complete rest and constant supervision for a day or two, at least, following the operation.

NASAL TREATMENT FOR THE CURE OF DISEASES OF THE EAR.

Alex. W. Stirling has a very carefully written article on this interesting matter in the April issue of *The Laryngoscope*. He brings forward a thesis, which is neither new nor original, since McBride (Edinburg) and Sir Felix Semon (London) several years ago took the same grounds. His motto is as follows: *Intra nasal treatment is ineffectual for the relief of deafness, unless such treatment is also advisable for the sake of the nose itself.* In the term nose it is also meant to include, incorrectly the reviewer thinks, the naso-pharynx. The form of deafness to which particular attention is drawn is that known as sclerosis of the middle ear. Operative measures on the nose or naso-pharynx in this form of deafness simply brings rhinology into disrepute, and may have a markedly deleterious effect on the patient's condition. In cases of aural catarrh, Stirling says nasal treatment should be limited to the removal of conditions which may be interfering with the recovery of the mucous membrane lying between the nose and the tympanum. This is a very different thing from a pernicious attack upon every irregularity which one may be able to discover within the nose.

PROVINCE OF QUEBEC NEWS.

Conducted by MALCOLM MACKAY, B.A., M.D., Montreal.

The Montreal League for the Prevention of Tuberculosis is carrying on its work in no half-hearted manner. In conjunction with the Board of Health it has sent out a circular letter to all the medical men in the city, asking for their co-operation in this matter by notification of the tuberculous patients under their care, and, thus informed, the Board of Health will see that every case is regularly visited by an inspector, whose duty it will be to instruct both the patient and his entourage regarding the disposal of the sputum, and the simple methods of cleanliness and disinfection, as well as to distribute leaflets bearing upon the subject. The League will undertake to procure nursing, special dietary foods, disinfectants, sanitary cuspidors, etc., for the indigent cases. Again a deputation, headed by Dr. T. G. Roddick, M. P., waited upon His Worship, the Mayor, and presented him with the following petition:

1. The Montreal League for the Prevention of Tuberculosis beg to submit for the consideration of yourself and of the aldermen of the city of Montreal, the advisability of enacting a by-law prohibiting spitting upon the sidewalks and floors of street cars and other public conveyances, and of halls and other public places.

2. We beg respectfully to call your attention to the position which other cities in Canada stand in with regard to this matter.

(*a*) Toronto has no by-law, but is applying to the Legislature for power to make one on the subject. (*b*) Ottawa has a by-law in force. (*c*) Winnipeg has no by-law at present, but the Mayor is now bringing it before the City Council. (*d*) Hamilton has no by-law, but signs are up in the streets asking the citizens not to spit on the sidewalks.

3. We respectfully suggest that the by-law be in the following form or to the following effect:—

By-law to prohibit spitting upon sidewalks, the floors of street cars, and other public conveyances, halls and other public places.

1. No person shall spit upon any sidewalk or upon the floor of any street car or other public conveyance, while upon or traversing any of the streets, lanes, or squares of the city of Montreal, or upon the floors of any theatre, opera house, music hall or hall used for public meetings,

railway or steamboat station, or waiting-room, or other public hall, building, room or place, or upon any platform surrounding, in front of, or in the immediate vicinity of, any such place.

2. Whosoever infringes the provisions of this by-law is liable to a penalty of not less than $1 00 nor more than $50, with costs of prosecution, or to imprisonment at the discretion of the court.

Dr. Mikulicz, of Breslau, the eminent German surgeon, spent a few days in Montreal on his way home from the American Congress at Washington. He visited the various hospitals of the city and operated on a case of ambilical hernia at the Montreal General Hospital. The prominent physicians and surgeons of the city had an opportunity of meeting Prof. Mikulicz at a dinner given by his host, Dr. Shepherd, at the close of his visit.

The following cases were shown at the Montreal Medico-Chirurgical Society, during the past month:—Dr. Archibald presented a living case, illustrating the treatment of a Pott's fracture by a recently adopted method. The case, which was admitted to the Royal Victoria Hospital on February 25th, showed the classical symptoms and signs of the fracture, and a skingraph confirmed the diagnosis. The limb was put up as follows: A strip of adhesive plaster was placed on the outer side of the leg from the knee to the ankle, and continued in a similar manner up the inner side of the leg as far as the knee, forming a stirrup; gauze was placed over the malleoli, and the stirrup itself was drawn in close beneath the sole of the foot and a weight of ten or twelve pounds applied for extension. A second strip was carried from the ball of the toes to the knee, to preserve the foot in a perpendicular position to the leg. A third strip encircled the ankle just above the joint, and extended outwards to the edge of the bed, where it was connected with a weight working over a pulley. This procedure fixed the joint securely in all directions in which harmful motion could take place, and left it in full view in such a way that local applications, early massage, and passive movements, could be readily employed, with consequent early restoration of function. Experiments in Germany have shown that two to two and a half weeks of convalesence have been saved to working men when this plan has been adopted. Dr. Archibald also showed a little girl who had been operated upon for sarcoma of the lower jaw. The patient was 12 years of age, and gave the history of a fall on the chin some five years before. One year later a small swelling appeared upon the inner side of the alveolar process of the lower jaw, and this gradually increased in size until a year later it was the size of a walnut and had to be removed by scraping the bone. Last April the patient was admitted to the Royal Victoria Hospital for

a recurrence of the tumor in the whole of the anterior portion of the lower jaw. A diagnosis of sarcoma having been made, the lower jaw was removed from the first molar on the left side to the first molar on the right, the ends being joined by a double loop of silver wire. The mucous membrane was joined over the wire, which formed the new chin, and, as a result, no trouble was experienced with falling back of the tongue—in fact the child could swallow food six hours after the operation.

Dr. Keenan exhibited microscopic slides demonstrating the sarcomatous nature of the growth and then presented a living case of multilocular cystic tumor of the lower jaw in a boy of thirteen. The differential diagnosis between this and the former case was thoroughly discussed by Drs. Adami and Hutchison.

Dr. Dickson showed a boy who had been operated upon for ruptured spleen. He gave a history of a fall, followed by great pain in the left side. On admission to the Royal Victoria Hospital, he was seen to be very pale and stuperose, T. 101, P. 136, R. 36, complaining of great pain and tenderness in left side. Hot applications to the painful area were applied without benefit and next day the condition was much the same, but the pain in the splenic region was more intense and the abdomen showed some rigidity. A diagnosis of probable rupture of the spleen was made and operation advised. On opening the abdomen in the mid line, between two and three quarts of clotted blood were seen lying among the coils of small intestine and were at once removed. The spleen could not be seen but was felt to be hard and firm. The abdomen was cleaned up and closed and the boy made a good recovery, leaving the hospital twenty-one days after operation.

Dr. Fry brought in a patient for examination who had complete transposition of viscera. She had appeared at Dr. Martin's clinic at the Royal Victoria Hospital several years before, and then had vanished, but turned up again this spring complaining of cough. On inspection of the chest, the apex beat was seen in the 5th space on the right side about 3½ ins. from the mid sternal line. It was palpable in the same interspace, while a rough systolic thrill could be felt at the base. Dulness was of normal size but of course upon the right side of the sternum. A rough systolic thrill could be heard at the base over the pulmonary valve. The liver, spleen and stomach could be easily demonstrated to be transposed in a similar way. The patient appeared to be in good health and with the exception of being rather under the middle height was on casual examination quite normal.

Dr. J. A. Hutchison reported a case of sarcoma of the fibula followed by paraplegia. The patient was a woman who came to the Montreal General Hospital in January complaining of painful swelling of the right leg. Examination showed that the woman was greatly emaciated and that the right leg was enormously swollen and oedematous, dilated veins coursed over the surface of the tumour, and the fibula could not be palpated, although the tibia appeared to be quite normal. The glands at the groin were markedly enlarged and the superficial glands all over the body were palpable. A diagnosis of sarcoma of the fibula was made, and the limb amputated at the mid thigh. A few days after operation paraplegia came on with a band of hyperaesthesia about the waist, bladder, and rectal incontinence supervened and transverse myelitis, due to metastasis, was diagnosed. The patient unfortunately left the hospital and the subsequent history could not be ascertained.

At the last meeting of the Board of Governors of McGill University, a number of appointments to the teaching staff of the University were made, including the following in the Faculty of Medicine:

Dr. J. G. McCarthy, appointed Assistant Professor of Anatomy at McGill.

Dr. J. T. Halsey, appointed Assistant Professor of Pharmacology and Therapeutics.

Dr. S. Ridley Mackenzie, appointed Lecturer in Clinical Surgery at McGill.

Dr. John McCrae, appointed Lecturer in Pathology.

Dr. D. A. Shirres, appointed Lecturer in Neuro-Pathology.

Dr. D. D. McTaggart, appointed Lecturer in Medico-Legal Pathology.

Dr. R. A. Kerry, appointed Lecturer in Pharmacology and Therapeutics.

Dr. Lorenz told the story that when he started out with high hopes of becoming a surgeon, he was greatly disappointed by the appearance of eczema of the hands, which rendered it impossible for him to render them aseptic, and tolerate the constant use of the requisite solutions. His colleague, Professor Albert, suggested to him to try dry surgery. The outcome of this suggestion was that Dr. Lorenz devoted his attention to the correction of deformities by bloodless methods.

MARITIME TOPICS AND NEWS.

Conducted by W. D. Forrest, M.D., C.M., B.Sc., L.R.C.P., Lond., M. R. C. S. Eng., Halifax.

NOVA SCOTIA MEDICAL SOCIETY.

The 35th annual meeting of the above society was held on 1st and 2nd July, in Antigonish. There was a fair attendance, and an excellent programme. Dr. Marcy, of Boston, gave the address in Surgery; and Dr. Campbell, of Montreal, the address in Medicine. A committee was appointed to look after the interests of the medical profession in all matters of legislation affecting it; and to bring before the notice of the government, deficiencies in the statutes regarding the registration of births and deaths, the payment of expert witnesses, etc. Dr. Marcy, of Boston, gave a sum of money, for the best paper on the history of medicine in Nova Scotia, prior to the formation of the Nova Scotia Medical Society. Dr. W. A. Campbell showed that the society was in its 50th year, and not its 35th, as claimed by the officers. There was a full discussion on tubercular anthritis, which elicited the main features of the pathology and treatment. On the evening of the second day, there was a very enjoyable smoking concert, in the large hall of St. Francis Xavier College. The other papers read during the meeting were:—"Method of blood examination for the general practitioner," by Dr. F. E. Lawlor, of Nova Scotia Hospital, Dartmouth; "Insomnia," by Dr. H. H. McKay, New Glasgow; "Notes on some skin diseases," by Dr. J. Ross, Halifax; "A case of general peritonitis, with recovery," by Dr. R. A. H. McKuen, Glen Bay; "Toxic hæmoglobinuria," by Dr. J. L. Churchill, Isaac's Harbour; "Personal hygiene," by Dr. Clay, Pugwash; "Caesarian section," by Dr. Hayes, Parrsboro; "Acute inversion of the uterus," by Dr. C. P Bissett; "Strangulated hernia," by Dr. D. Murray; "Nasal tumors," by Dr. G. Cox; "Mastoiditis," by Dr. W. G. Putman; and "Venesection," by Dr. M. Chasholm, Halifax.

HALIFAX MEDICAL COLLEGE.

The 35th annual report of the Halifax Medical College has just come to hand. It is neatly got up and among other improvements may be mentioned six full page photographs, including the pathological laboratory, the Victoria General Hospital—operating rooms and wards of the same. The number of undergraduates attending classes during the past season was 78, an increase over the previous one of some fifteen students. The college building is situated quite close to Dalhousie, the Victoria General Hospital and City Alms House. The Protestant and

Roman Catholic Infants' Homes are within easy reach. At these latter institutions clinical instruction is given in all the more common diseases of childhood. The pathological laboratory of the college has been enlarged and is now up-to-date. An Act respecting the study of anatomy was recently passed by the Nova Scotia Legislature appointing an inspector of anatomy. By this Act it is possible now to get an ample supply of material for the dissecting room. The library has also been greatly added to during the recent session. By the Cogswell bequest the interest of a certain sum is yearly applied to this purpose. This enables the college to purchase all the more recent books of reference. There is also a library at the Victoria General Hospital which can be consulted at any time by students. Five vacancies occur each spring on the resident staff of the hospital. These vacancies are filled as a result of competitive examinations. The graduates of this college are elegible for such positions. Some changes of minor importance have been made on the teaching staff. The present session begins on September 1st.

PERSONALS.

The month of June saw the marriage of the following Maritime Province medical men :—

June 2nd, Dr. E. V. Hogan to Miss Margaret Carney, of Halifax.

Dr. Joseph J. Doyle, of Halifax, was married to Miss Edith Brennan, at Salem, Mass.

Dr. Jane Heartz to Andrew J. Bell, Esq., of Halifax.

Dr. Arthur Doul to Miss Mary Burgess, of Milford, N.H.

Dr. S. M. Weeks, of Newport, Hants County, celebrated his 50th year in the practice of medicine on April 11th. Dr. Weeks is still hale and hearty and in active practice. The doctor was presented with an address, accompanied by a silver tea servi , by some of his many friends in the profession.

Dr. L. M. Murray, Provincial Bacteriologist for Nova Scotia, has returned from a visit to Montreal, Baltimore, New York and other cities. While away Dr. Murray devoted special attention to bacteriology and pathology.

Dr. John Black, of Halifax, who for the past two years has been visiting London and the great medical centres of Europe, intends returning this fall.

Dr. Pearman, of Halifax, has been visiting London and Vienna. The doctor will return shortly.

Dr. Nelson Pratt of Stewiacke, N.S., has, owing to ill-health, been compelled to take an extended rest. The doctor's many friends hope that he will soon be restored to perfect health.

MANITOBA MEDICAL NEWS.

Conducted by R. H. Richards, M.D., C.M., Winnipeg.

The members of the Southern Manitoba Medical Association were the guests of the Winnipeg Medical Association in this city on June 25th. Dinner was served at a suburban hotel, after which there was a joint meeting to discuss tuberculosis, and the establishment of a provincial sanitarium. The following physicians read papers:—Drs. Husband of Wawanesa, Hardy of Morden, Chown, Montgomery and Webster of Winnipeg.

The appeal of the Winnipeg General Hospital to the Dominion Government for funds to aid the building of an addition to the present structure met with a decided refusal, the Ottawa officials stating that it was altogether the duty of the Province to care for its own sick and indigent, and that the federal government was expending enough money and effort to get people into the Province, which should be grateful accordingly. The hospital board may therefore well pray that in future the immigration department will shower its blessings of Doukhobors and Galicians lightly, as this element makes up two thirds of our charity patients. As at present there is only the provincial grant of $25,000 available, the board have made an appeal to the city council for $25,000, promising that if it be granted they will personally finance the balance of $50,000 for the erection of the $100,000 addition which is a crying need.

At the regular monthly meeting of the Winnipeg Medical Association, Dr. A. J. Douglass showed two cases of ichthyosis hystrix in children, 3 and 5 years old respectively. It had been present in male members of the family for several generations. Thyoid gland extract had been administered for some months with slight improvement.

Dr. James McKenty gave the history of a peculiar case of sleepiness. The patient is now a big strong man. In 1891, when 12 years old, of average size and well nourished, drowsiness began. He had never had any serious sickness previously. His trouble began by his being constantly sleepy. He would go to sleep in school or church, at his meals, anywhere and anytime, would go to sleep in the chair in doctor's office while his father was relating the case. The father thought the boy would sleep continuously if permitted. Prior to the onset of the trouble the boy was a good student, learned quickly, and was bright and

intelligent. In 1893, on pressing the question, the patient admitted the habit of masturbation, which he had begun some months before the sleepiness commenced. At present, the patient still masturbates and is still drowsy, but less so for the past two years. Has had a varicocele for 6 or 7 years. The general health is good.

Considerable discussion followed without eliciting a similar case. Dr. Good, the president, opposed the idea that the condition might be the result of masturbation.

Various forms of treatment, including thyroid gland extract, had been tried, but without results.

Dr. J. A. Macarthur told of two cases of general melanosis, or melano-sarcoma, that had been under his care with rapidly fatal termination.

Dr. E. S. Moorhead read a carefully prepared paper, taking as his subject "The Influence of Heredity on the Junior Practitioner." The gist of the speaker's remarks was that the public have in ages past become so used to associate gray hairs with wisdom in medicine that their modern descendants, the present public, do not eagerly embrace professionally the recent product of the schools, although, owing to such splendid teaching facilities and the age at which most men graduate, the very opposite state of affairs to that which was assumed to be true in the past, must prevail now."

The discussion was limited to the remarks of Dr. Good, the chairman, who said that he did not agree with the speaker. Firstly, because he did not think it was so; and secondly, he did not think the reasons given explained it anyway. He went on to say that he was no longer young, and, though not yet grey-haired, he was kept in a state of incipient apoplexy on observing the phenomenal success of some of the junior practitioners. He thought the public were as naturally afraid of the freshly graduated as was the boy off whose head William Tell shot his first apple, afraid of his operator.

The by-law to raise $100,000 for the erection of a Civic Isolation Hospital in Winnipeg for infectious diseases, other than smallpox, was defeated.

This is a most regrettable result, as the proposed scheme would not only have relieved the crowded state of the other hospitals, but would have removed what has proved to be a serious menace to ordinary medical and surgical cases. The proximity of the scarlet fever and diphtheria pavilions to the largest hospital is a source of danger. At the same time the daily press contains a report of diphtheria in scarlet fever pavilion, and vice versa, at general hospital. The hospital board,

in explanation, states that in the present crowded state of the hospital such an occurrence is well nigh inevitable.

At the last meeting of the Alumni of Manitoba Medical College, Dr. W. L. Watt read a paper on the Treatment of Abortions and Miscarriage. In referring to his experience of some 400 cases the doctor said :—"Interference in any abortion depends, not so much on the hæmorrhage, pains, etc., as on the general condition of the patient. It is sometimes hard to say whether an abortion is inevitable or not, but it is always easy to determine when a patient's condition is in anyway dangerous from loss of blood, etc. Stress must be laid upon the diagnosis between complete and incomplete abortion. An abortion is incomplete if the hæmorrhage continues, and if, on vaginal examination, the internal os is found to be patulous. In all such cases, the large flushing curette should be used, and the uterus thoroughly cleaned out, even after the removal of the ovum with the forceps, as it is astonishing the amount of decidual matter that still remains. In cases where immediate artificial abortion is required and chloroform is contra-indicated, a simple and very effective method is to push a pledget of cotton, soaked in a 4% solution of cocaine, through the internal os. After 5 minutes, rapid dilatation may be painlessly performed and the uterine conterts curetted out. In infected abortions, after much experimenting, it has been found that the best results are obtained by leaving an iodoform gauze packing in the uterus for 36 hours, and then follow with a thorough flushing with hot creolin solution.

Dr. Bjornson showed a case of multiple sclerosis, and gave the following account of it :—

J. T., aged 6 years, apparently healthy at birth and throve quite normally. First illness occurred at 6 weeks, attended with fever, no medicines used; was probably influenza, as the other people were suffering with it. Illness lasted 7 to 14 days. He cut teeth at 7 months, was weaned at 4 months, had slight summer complaint during the first summer, but nothing was noticed till he began to walk. It then appeared to them that he walked "queerly," but can not describe it exactly. What brought it to their attention was that he did not walk like other children. May have thrown feet outwards or lifted them higher. The walk was hesitating and he stumbled frequently. Between 2 and 3 years had an illness which was diagnosed as "German measles," with some lung complications.

In May last, he had what the mother supposed was influenza. Ill a few days. Following this his mother noticed that his hands often trembled. Shortly before last Christmas they noticed nystagmus on the

other eye, and the unsteadiness about the head and change of voice. During the first week in February the present trouble began in earnest. They noticed a general weakness and he seemed to them to be "queer." He grew gradually weaker, so that he could scarcely hold a knife and fork, and could not execute movements to which he was accustomed, such as hitting a nail. He also walked with difficulty at times, steadied himself by the furniture in the room. Since this, his condition has remained the same, with periods of slight improvement. Sometimes he has been able to walk unaided, as he does now; at other times he has walked only by his mother's help, or by leaning on articles of furniture. His intelligence and memory is good, and he is able to count, but his parents have not tried to teach him to read, because they have believed that his eyes were affected. Of late his temper has been very markedly passionate and he has been wilful and unmanageable, so that one is now quite unable to make any sort of an examination. His sleep has been good, but the mother has noticed restlessness and tremors and excited heart action in his sleep. Appetite good.

Typical cases are very easy to recognize, the atypical very difficult. But there is a certain combination of symptoms which, when present and taken together, make the diagnosis quite easy. The cardinal symptoms present here, on which we rely mostly, are :

1 The nystagmus. 2. The weakness and trembling of the extremities and the ataxia. 3. The difficulty in walking. 4. The intention tremor. When the patient is quiet no tremor is present, but the instant any motion is attempted it becomes marked. 5. The speech affection. This is not a typical scanning, syllabic, or slurring speech; but it is an affection of the speech and, although it is not scanning, it is peculiarly monotonous, with a marked emphasis given to the words which may almost be called staccato, and when taken in conjunction with the other symptoms may very well take the place of the typical speech affection. 6. The affection of the special senses, sight and hearing. Since early childhood he has heard badly, a common occurrence in disseminated sclerosis. The sight, too, has been affected, according to the story of the mother. This may be due to optic atrophy, or to inability to focus both eyes. In a child we have no way of determining if he sees double. 7. I am not sure about the extensor response. So far there have been no bladder symptoms, but, as a rule, they belong only to the later stages, and are sometimes absent altogether as is the case with other sphincters.

MEDICAL SOCIETIES AND GATHERINGS.

CANADIAN MEDICAL ASSOCIATION.

Provisional Programme and Papers.—1. President's Address, W. H. Morehouse, London; 2. Address in Medicine, Jas. Stewart, Montreal; 3. Address in Surgery, Alex. Hugh Ferguson, Chicago; 4. Address in Gynecology, Matthew D. Mann, Buffalo; 5. The Treatment of the Inebriate, A. M. Roseburgh, Toronto; 6. Paper (Title to be announced), Perry G. Goldsmith, Belleville; 7. Total ablation by bisecting the Uterus, T. Shaw Webster, Toronto; 8. Inguinal Hernia of an Undeveloped Uterus and Appendages with presentation of specimen, R. Ferguson, London; 9. Paper (Title to be announced), A. Lapthorne Smith, Montreal; 10. Report of two cases of Hour-Glass Contraction of the Stomach, Henry Howitt, Guelph; 11. Cardiac Affections in Influenza, E. G. Wood, Nashville; 12. Amyotrophic Lateral Sclerosis, A. McPhedran, Toronto; 13. Orthopedic Surgery at the present time, C. W. Wilson, Montreal; 14. Internal Medication for direct Remedial effect, Geo. M. Aylesworth, Collingwood; 15. The Role of Eye—Strain in Civilization and Medicine, Geo. M. Gould, Philadelphia; 16. The Inter-relations of Diabetes and other constitutional states, Geo. F. Butler, Alma, Mich.; 17. Gunshot wound of the upper arm, with non-union of humerus and destruction of musculo-spiral nerve—operation 6 months, later, Recovery, Hadley Williams, London; 18. Discussion on the treatment of Typhoid Fever—W. P. Cavan, Toronto, J. Herald, Kingston, W. B. Thistle, Toronto, H. A. McCallum, London; 19. Discussion on the Diagnosis and treatment of Tubercular Peritonitis, A. B. Atherton, Fredericton, N.B., A. Groves, Fergus, Herbert A. Bruce, Toronto, and L. Coyteux Prevost, Ottawa; 20. The Technique of Gastro-Entorostomy, Theodore A. McGraw, Detroit; 21. The relation between the general practitioner and the specialist in regard to Intra-nasal work, J. Price Brown, Toronto; 22. Personal experiences with Alexander's Operation, H. Meek, London; 23. Auto-infection, E. Hornibrook, Cherokee, Iowa; 24. The Country Doctor, J. S. Sprague, Stirling; 25. A lantern lecture on Open Air Life in the treatment of Pulmonary Tuberculosis, J. H. Elliott, Gravenhurst; 26. The size of the pupil as an aid to diagnosis, J. T. Duncan, Toronto; 27. Thrombosis of the Femeral vein following Aseptic Laparotomy, E. R. Secord, Brantford; 28. Gastro-Enterostomy with report of cases, Ingersoll Olmstead, Hamilton; 29. Radical Cure of

Hernia, A. Groves. Fergus; 30. The Decline and Fall of Atropine, G. Stirling Ryerson, Toronto; 31. The Medical Treatment of Diseases of the Nose and Throat, John Hunter, Toronto; 32. An Interesting Case, G. Herbert Burnham, Toronto; 33. Concealed Accidental Hæmorrhage, Adam H. Wright, Toronto; 34. The Surgical Treatment of Bunions by Tubby's operation, James Newell, Watford, Ont.

Railway Transportation.—Intending delegates to the 36th annual meeting of the Canadian Medical Association which will be held at London, Ont., on the 25th to the 28th of August, should take careful note of the following instructions as regards transportation rates. As a good many wrote to the General Secretary last year for forms to fill in, it might be well to state that no such forms are required. All a delegate has to do is to purchase a single first-class ticket to London, at the same time asking the agent at starting point for a *Standard Convention Certificate.* These certificates, when signed by the General Secretary, will entitle holders thereof to return fare free, providing there are 300 or more at the meeting holding *Standard Convention Certificates.* These arrangements apply as well to the wives and daughters of physicians.

Maritime Provinces.—Delegates travelling to London on the Standard Certificate plan via the Intercolonial Railway to Montreal will be given return fare free from Montreal east, provided that there are ten or more delegates in attendance at the meeting holding said certificates.

Manitoba and the Territories.—From Manitoba and the Canadian Northwest one-way tickets to be purchased to London, and Standard Certificate being secured at the time of purchase, these certificates when presented at London, duly signed by the General Secretary, will entitle the holder thereof to be returned free, if 300 or more paying railroad fare are in attendance. If less than 300 and more than 50 the same arrangements as for Ontario and Quebec, viz., one-third fare return will be in vogue. Tickets purchased West of Port Arthur, purchased in time to reach London for the Convention, will be accepted for return up to and including September 15th. Delegates taking the Superior and Huron Lake routes one way will, on presentation of certificate, be charged $4.25 extra. If Lake route is used both ways the charge will be $8.50 extra.

British Columbia.—The Canadian Pacific Railway officials at Winnipeg have not been able to make arrangements for British Columbia up to the present time. Announcement of these will be made in the daily papers of Vancouver and Victoria, if secured, some time during the first week in August.

Entertainment.—The Entertainment Committee at London proposes to entertain the visiting delegates somewhat as follows:—

On Wednesday afternoon a reception will be held at the Kennels for the visiting ladies, by the ladies of London. On the same afternoon at about 4 p.m., the members of the Association will be entertained at Springbank, London's pleasure resort. Leaving Springbank at about 5.30 p.m., the delegates will be taken to the London Asylum Grounds where they will be entertained by the Provincial Government for the balance of the evening. On Thursday, through the kindness of Messrs. Parke, Davis & Company, the Entertainment Committee have provided for an excursion to the celebrated laboratories of this extensive pharmaceutical house at Walkerville and Detroit. Arrangements have been made for a special vestibuled train to leave London at 8 a.m. sharp, Thursday. Walkerville will be reached at about 10.30 a.m., and the visit will be made to the Walkerville laboratories. The delegates will then be taken for a trip up the river, luncheon to be served on board. They will be landed at Messrs. Parke, Davis & Co's. own dock at the Detroit laboratory for the inspection of their scientific building at about 2.30 p.m. At the conclusion of this inspection other arrangements will be made for the entertainment of the members until 6.30 p.m., when a banquet will be tendered to the members of the Canadian Medical Association at the Russell House, Detroit, by Messrs. Parke, Davis & Co. Between 9.30 p.m. and 10.30 p.m., the physicians will be taken to the Brush St. depot, Detroit, and returned to London by a special train

Hotel Accommodation, etc.—During the coming meeting of the Canadian Medical Association in London, the several large hotels will be able to accommodate most of the visiting members, and in addition to this the Reception Committee having charge of receiving the visiting delegates will have lists of good boarding-houses, where those wishing them may have rooms. The Reception Committee at London hopes that no one will stay away, fearing the lack of accommodation, as the London medical men will do their utmost to make their stay agreeable. Dr. J. S. Niven, 423 Colborne St., who is chairman of the Reception Committee will be pleased to secure rooms for anyone writing for them in advance. Any one desiring any further information should address either the Local Secretary, Dr. Hadley Williams, Park Avenue, London, or the General Secretary, Dr. George Elliott, 129 John St., Toronto.

COUNCIL OF THE PHYSICIANS AND SURGEONS OF ONTARIO
38TH ANNUAL MEETING.

The first business was the election of officers, which resulted as follows:—

Dr. J. A. Robertson, Stratford, President; Hon. Dr. Sullivan, Kingston, Vice-President; Dr. H. Wilberforce Aikins, Toronto, Treasurer; Dr. R. A. Pyne, Toronto, Registrar; Christopher Robinson, K.C., Solicitor; Alex. Downey, Stenographer for college; Dr. J. C. Patton, Toronto, Auditor; Charles Rose, Prosecutor.

The doctors present were Dr. John L. Bray, Chatham; Dr. John Mearns, Woodstock; Dr. James MacArthur, London; Dr. J. A. Robertson, Stratford; Dr. L. Brock, Guelph; Dr. James Henry, Orangeville; Dr. P. Stuart, Milton; Dr. S. H. Glasgow, Welland; Dr. R. J. Gibson, Sault Ste. Marie; Dr. E. E. King, Toronto; Dr. A. A. Macdonald, Toronto; Dr. A. H. Sangster, Port Perry; Dr. S. C. Hillier, Bowmanville; Dr. T. H. Thornton, Consecon; Dr. Wm. Spankie, Wolfe Island; Dr. J. Lane, Mallorytown; Dr. M. O. Klotz, Ottawa; and Dr. William Britton, representing Toronto University; Dr. V. H. Moore, Brockville, Queen's College, Kingston; Dr. James Thorburn, Toronto, Toronto School of Medicine; Dr. A. J. Johnston, Toronto, Trinity College; Hon. Dr. Sullivan, Kingston, Royal College of Physicians and Surgeons, Kingston; Dr. J. A. Temple, Toronto, Trinity Medical College; Dr. H. S. Griffin, Hamilton, Victoria College; Dr. W. H. Moorehouse, Western University, London. Drs. Cl. T. Campbell, London; G. Henderson, Strathroy; L. Luton, St. Thomas; E. A. P. Hardy and Edward Adams, Toronto, represented the homeopathic branch.

The following standing committees were chosen:—

Registration—Drs. Campbell, Lane, Stuart, Klotz, Johnson, Thornton and Gibson.

Rules and Regulations—Drs. Lane, Mearns, Spankie, Adams and Hillier.

Finance—Drs. Henderson, King, Griffin, MacArthur and Brock.

Printing—Drs. Macdonald, King, Stuart, Hardy and Thorburn.

Education—Drs Moorehouse, Macdonald, Moore, Henry, Spankie. Britton, Luton, Bray and Temple.

Property—Drs. Thorburn, Thornton, Britton, Glasgow and Campbell.

Complaints—Drs. Griffin, Glasgow, Brock, Johnston and Sangster.

The following were elected members of the Discipline Committee:—

Dr. J. L. Bray, Chatham; Dr. V H. Moore, Brockville; Dr. C. T. Campbell, London, and Dr. A. A. Macdonald, Toronto.

The case of Dr. J. Moore Connerty of Smith's Falls excited a lively discussion at the morning's session. Dr. Connerty some time ago was charged with a serious offence, although he declared that he had committed no offence whatever. An application was made to have the practitioner's name stricken from the rolls, and the Discipline Committee of the Council made an investigation, with the result that the evidence of the woman who made the complaint against Dr. Connerty was proved to be unworthy of credence. The committee reported that the charges against the practitioner had not been proven. The report of the Committee was adopted.

Dr. V. H. Moore reported that in Ottawa he had presented Sir Frederick Borden with the engrossed letter containing the congratulations of the council to Sir Frederick on his elevation.

A committee was appointed to prepare a minimum and maximum tariff, and a report will be received and considered at the next meeting. The registration fee was again fixed at $2.

The matter of non-professional education was discussed, and the question was referred to a committee consisting of Drs. Macdonald, Spankie and Britton.

The special Committee on Legislation brought in a voluminous report in the afternoon, suggesting amendments to the Medical Act, which would benefit both the public and the profession. "The practice of medicine should be more clearly defined. Many judicial opinions have been given based upon the idea that medical practice in every case necessarily involves the administration of drugs, whereas it is recognized by all physicians that cases of disease are constantly occurring where hygiene, mechanical processes, mental suggestion, etc., either singly or combined, are the most important elements in therapeutics. A man who undertakes to cure a sick person by any method whatever, whether with or without drugs, is undertaking to practice medicine. And if he does so for hire, gain or the hope of reward he comes under the provisions of the Medical Act, and the language of the act should be clear.

"The main object of the law is to secure for the public qualified practitioners. No man should be allowed to treat sick people unless there is some evidence that he knows what he is doing; that he understands the condition, both in health and disease, of the body he is treating. Knowing this, the method of treating the disease is one for him to decide by his own judgment and settle with his own conscience. Methods of treatment are seldom fit subjects for legislative restrictions. The educational qualifications of would-be practitioners always are.

"Counter prescribing by druggists, who undertake to advise their customers as to what proprietary articles or medical prescriptions are

best suited for their ailments, is not only unfair to druggists' customers, but it is unfair to the physician, who often finds his prescription duplicated to some of the druggist's customers, but it is unfair to the customers as well, for whom the druggist not only diagnoses but prescribes. Regarding patent medicines containing not only large quantities of alcohol, but sometimes poisonous doses of drugs, the public would be benefited if every bottle or package was labelled with the formula, or, at all events, with the names of the constituent substances."

The report then stated that, while it would be advisable if these amendments were made, the committee did not think it would be proper or expedient for the Medical Council to urge the passage of legislation, which action might lead unthinking people to say it was done from selfish motives. At the same time there could be no objection to the Medical Council, as the representatives of the profession, calling the attention of the Legislature to these evils; therefore the committee recommended that the Executive Committee of the council lay before the leading members of the Legislature the views above indicated.

The Executive Committee reported that the proper interpretation of section one of the regulations for 1902-3 respecting matriculation is:—"That by regulation number two of said section the requirement for matriculation has been declared to be a certificate of passing the senior matriculation examination as therein set forth, and that in addition thereto and by regulation No 1 of the said regulations it is provided that any person who presents a certificate of having passed what is known as the junior matriculation examination in arts, including chemistry and physics, taking honors in any one subject thereof, may be registered as a matriculated student in the register of the said college. And that section one of the said regulations of 1902-3 be not regarded as coming into force, and be not in force during the year 1903."

The application of a Bachelor of Science of Wisconsin University for standing in Ontario as a matriculant was granted.

Medical students who served in the war in South Africa were given time allowance for the period they were absent. The requests of the following for registration were granted:—Samuel G. Higgins, D. M. King, D. F. McKinley, Frank McTavish, George C. Ferrier, Fred. J. Morrow, James L. Biggar.

The applications of the following were not granted:—Dr. A. A. Walker, Dr. R. O. Van Epp, Miss Laura McLaren, W. E. McLean, I. Gerard Shaughnessy, J. A. Gallagher, E. M. Middleton, Hugh A. Cameron, C. M. Wagar, R. K. Lenfesty and Donald Munroe.

The following requests were withheld for consideration or compliance with conditions:—H. E. Service, Taylor Chamberlain, George E. McKenzie, Harold Craig, E. A. Ferguson.

The committee decided not to accept the Military College entrance examination as a medical matriculation.

LICENTIATES OF THE COLLEGE OF PHYICIANS AND SURGEONS, ONTARIO.

The following have passed the final examination:—

A. H. Anderson, S. W. Arthur, D. M. Allison, G. H. L. Armstrong G. M. Atkin, A. E. Archer, A. Brown, J M. Baldwin, C. T. Ballantyne, J. B. Buel, E. Brandon, J. C. Connell, C. Carswell, J. Campbell, Annie Davis, A. Fisher, G. W. Fletcher, C. W. Freeman, R. F. Foster, J. S. Graham, J. E. Godfrey, W. Alex. Graham, E. A. Gray, W. J. Harris, H. R. Hutton, E. T. Hoidge, R. W. Irving, E. P. James, C. A. Jones, L. W. Jones, O. Klotz, H. Labrosse, J. H. Laidlaw, F. E. Mellow, W. A. Meighen, W. S. Murphy, G. E. L. MacKinnon, C. H. Montgomery, N. T. MacLaurin, A. Moir, A R. Mitchell, A. D. McEachern, G. McNeill, Elizabeth McMaster, H. N. McCordick, D. McBane, H. McGougan, W. A. McCauley, T. O. McLaren, C. G. McGreer, C. H. McDougall, H. O'Neill, W. J. Patterson, J. E. R. Parry, R. M. Reid, J. W. Russell, R. W. Rutherford, D. A. Sinclair, E. G. Smith, C. M. Stratton, A. G. Smith, L. L. Stauffer, D. Smith, H. J. Sullivan, A. S. Thompson, G. A. Winters, G. S. Wray, T. W. Walker, E. M. Walker, J. M. Waters, A. B. Wright, W. T. Wallace, C. A. A. Warren.

COLLEGE OF PHYSICIANS AND SURGEONS, QUEBEC.

The following are qualified to practice medicine in the Province of Quebec:—

Jos. A. Isabella, Desire Houde, Hector Viau, Abl. Geo. Macauley, Norman Strong, Edgar Smith, Jos. Geo. Larue, Jos. F. Belleau, J. B. R. Page, Thomas Herbert, A. Hector Desloges, E. P. Grenier, H. F. Duchaine, J. Edouard Masson, Jos. P. Dobbin, Jos. E. Cloutier, J. E. Cloutier, Olivier Demers, E. Herbert Martel, J. Hormisdas Larose, Wilfrid Tetreault, Honore Meunier, Joseph Guertin, Z. Jos. Ouimet, Georges Cote, Wm. Ouimet, Wm. Ernest Nelson, P. Edouard Riopelle, Louis P. Dorval, Fred. Charles Douglas, L. Melville Dechene, Jos. Garon, Herbert M. Little, Ed. A. Mitchell, S. W. Laroche, Jos. H. Lapointe, Jos. P. Laporte, John P. Brennan, Hector Aubrey, Horatio Walker, Jos. N. Landry, Albert Larose, Wilfrid Monette, Louis F. Beauchamp.

OPENING OF NEW UNIVERSITY MEDICAL BUILDINGS, TORONTO.

The new university buildings for physiology, pathology, medicine and surgery are now being prepared for occupation next month by the various departments concerned, and the formal opening will take place on October 1. The inaugural proceedings promise to be of very great interest, and a number of distinguished teachers in physiology, pathology, medicine and surgery have already accepted the invitation to be present and deliver special addresses. Amongst these may be mentioned Prof. C. S. Sherrington, F.R.S., of the University of Liverpool, a physiologist of the first rank; Professor Wm. Osler, of Johns Hopkins University; Professor Welch, also of Johns Hopkins University, the leading American pathologist; Professor Keen, of Philadelphia; Professor C. S. Minot, of Harvard University, and Professor Bowditch, also of Harvard, the veteran American physiologist. Professor Sherrington is coming from Liverpool specially for the occasion. It is expected that all the leading universities of the United States will be represented by delegates.

The occasion is, from another aspect, to be a notable one, for it is to formally inaugurate the united or amalgamated medical faculties, and henceforth, with the exception of the Medical College for Women, there is to be but one medical teaching institution, and that only as the medical faculty of the University of Toronto. It is exactly fifty years ago that the first medical faculty of the University of Toronto was abolished by act of Parliament. The new situation is certain to make Toronto one of the few great centres of medical education on this continent.

UNIVERSITY FEDERATION.

On 10th July the Ontario Cabinet received a deputation consisting of Rev. T. C. Street Macklem, Vice-Chancellor, and Mr. J. A. Worrell K.C., representing Trinity University; President Loudon and Chancellor Burwash of Victoria University, and Mr. B. E. Walker, representing the University of Toronto, which laid before the Government a scheme for the federation of the two universities. The meeting was private, but at the close Premier Ross gave out the following statement on the subject. He said the deputation presented a confidential document, which outlined a plan of federation reasonable and fair to all parties concerned, and which he hoped would be acceptable to all.

The members of the deputation, whilst expressing confidence in the early union of the two universities, stated that the document submitted

to the Government was to be considered confidential until it had once more been laid before all concerned.

From the Premier's declaration that the scheme proposed is fair and reasonable, it is safe to infer that it recommends itself to the Government, so that if the governing body of each university approve, federation will follow immediately. Rev. T. C. Street-Macklam expressed the hope that the medical schools would open as a united body this next session and that the same might be the case with the universities.

In the scheme of confederation with the University of Toronto, as formally adopted by the corporation of Trinity University, Trinity holds in abeyance its university powers, but gives over Trinity Medical School to Toronto University, and all university fees for degrees, matriculation, etc.

In return, Trinity secures free access for all its students to Toronto University lectures, and has the university lectures on all pass subjects duplicated or repeated at Trinity. For higher mathematics and science Trinity men will have to go to the Toronto University lecture rooms.

The plan of federation submitted to the corporation of Trinity was prepared by a committee composed of the trustees of the University of Toronto and the federation commissioners of Trinity. It therefore, represents the views of the University of Toronto, and its adoption by Trinity renders confederation an accomplished fact. (Since writing the above, all arrangements have been completed.)

GOVERNORS, COLLEGE PHYSICIANS AND SURGEONS, QUEBEC.

The semi-annual meeting of the governors of the College of Physicians and Surgeons of the Province of Quebec, opened 7th July, in Laval University. Dr. E. P. Lachapelle presided, the other principal officials present being Dr. Craik, vice-president; Dr. Jobin, Quebec, treasurer; Dr. Marsolais, registrar; Dr. J. A. McDonald, Montreal secretary; Dr. Charles Marshall, Huntingdon; Dr. George H. Boon, Montreal; S. Lafleur, Montreal; Dr. F. W. Campbell, Montreal; Dr. Seymour, Dr. Brophy, Dr. Cattellier, Quebec. Before the meeting adjourned it was decided to hold the next meeting in Quebec, at the latter part of September.

ADDRESS TO Dr. W. B. GEIKIE.

We, the Corporation of Trinity Medical College, in accepting the resignation of Dr. Walter B. Geikie, D. C. L., F. R. C. S E., L. R. C. P., Lond., Dean of the Faculty, and Professor of the Principles and Practice of Medicine, desire to place on record our sense of the debt of gratitude owing to our late associate, for his two and thirty years of earnest and self-sacrificing labour on behalf of the college. At all times, in season and out of season, by night and by day, year after year, the cause of Trinity Medical College has ever been foremost in his thoughts and the one object around which his affections centered.

With every energy and faculty he possessed, Dr. Geikie laboured to promote what he considered the best interests of the college which was so dear to his heart, and owing in a large degree to these unwearied efforts, Trinity Medical College has attained her present proud position.

It is with feelings of regret that the corporation parts with him who is the father in medicine of most of its members, who has presided over its meetings, and piloted its ship through so many breakers, and we one and all desire that Dr. Geikie may be spared for many years to enjoy the satisfaction of well-earned repose.

Engrossed and signed by all the members of the corporation.

J. A. Temple, F. L. Grasett, W. T. Stuart, Charles Sheard, G. Sterling Ryerson, Luke Teskey, John L. Davison, G. A. Bingham, N. A. Powell, and D. J. Gibb Wishart.

Dated June 14th, 1903.

TRINITY UNIVERSITY COLLEGE.

To the Graduates and Under-Graduates in Medicine of Trinity University and to all Students of Trinity Medical College.

Gentlemen:—It is important that you should have a clear understanding of what steps have been taken by the authorities of the College and University towards the Federation of Trinity University with the University of Toronto, and the amalgamation of the two Medical Faculties, and how such arrangements will effect those at present registered as students of Trinity Medical College.

With this object in view we have much pleasure in submitting to you the following statement, by which you will see that your interests have been carefully and zealously conserved, and that provision has been made for the completion of your medical course under the most favourable auspices.

As announced at the medical convocation last May, arrangements were concluded whereby the Faculty of Trinity Medical College became the Medical Faculty of Trinity University. One important feature of the changes proposed in this connection was the erection of new buildings adjoining the present Trinity Medical College. While the details of this proposal were being worked out it was strongly urged upon the authorities of the Medical College and of the University that the interests of all medical students in Toronto, both present and future, would be better served by co-operation with the Medical Faculty of the Provincial University than by the perpetuation of two rival institutions in Medicine. It was pointed out further that the erection of the proposed building would necessarily mean the indefinite postponement of such co-operation to the disadvantage of medical education generally and the weakening of both institutions. Accordingly the plans which had been commenced were postponed pending the full discussion of this important question, the result being an almost unanimous decision in favour of co-operation and the acceptance of the draft appended hereto for an Amalgamated Faculty in Medicine in which provision is made for every member of both faculties with the exception of the former Dean of Trinity Medical College, who resigned his position during the course of these negotiations. We desire to take this opportunity of expressing our warm appreciation of the long, faithful and valuable services of Dr. Geikie, who has been such a power for good in our Medical College during the past thirty-three years. In this expression of appreciation we are sure every student of the college will join most heartily.

By reference to the sub-joined list of the proposed Amalgamated Faculty you will at once see what excellent provision has been made for advancing the best interests of medical education in Toronto. It is generally acknowledged that such a Faculty, possessing as it does ability, strength and efficiency in medical teaching, will render signal service to the entire medical profession of the Province, and we confidently anticipate that under the new conditions now created Toronto will more than ever occupy a proud and leading position among the educational centres of this Dominion and Continent.

When not only the strength and efficiency of the new Amalgamated Faculty is considered, but also the excellent and ample provision for all branches of medical teaching in the now completed new medical buildings of the University of Toronto, and we reflect that before our new buildings could have been erected and equipped (in view more especially of the delay necessarily incident to the unsettled conditions of the labour market) most of the present students of Trinity Medical College

would have been far advanced in their course, we feel confident that they will frankly recognize that their best interests have been served by the arrangements outlined in this letter.

As bearing more particularly upon the status of matriculants and the rights of non-matriculated students of Trinity Medical College, we beg to draw attention to the following provisions.

"The non-matriculated students of Trinity Medical College shall be allowed two years from the date of Federation for matriculating in Trinity University, under the regulations in force in that University at the time of Federation."

These who have already matriculated, as well as those matriculating within the time specified above, will have the option of either proceeding to the degree of M. D., C. M., of Trinity University, on the conditions under which they entered, or proceeding to an M. D. degree in the following year if desired, from the Provincial University. In both instances students will attend and receive lectures from the Amalgamated Faculty.

All graduates in medicine of Trinity University will be enrolled in the Provincial University, and their names will appear in the various calendars with their degrees designated.

As defining more clearly the status of Graduates and Under-Graduates under Federation, we quote the following extract from the Articles of Agreement.

"All Graduates and Under-Graduates of Trinity University excepting those in Theology, are, from and after the date of Federation, to have and enjoy the same degrees, honours and status in the University of Toronto as they previously held in Trinity University, and shall be entitled, subject to the provisions of the University Act of 1901, to all the rights and privileges pertaining to such degrees and status so long as such Federation continues."

The Fellowship of Trinity Medical College, (as the Medical Faculty of Trinity University) will be granted to such students as are now enrolled in Trinity Medical College upon their complying with the requirements and passing the examinations necessary to entitle them to receive such fellowship.

The Corporations of Trinity Medical College and Trinity University wish their Graduates and Under-Graduates to be clear upon the point that their interests, both now and for all time, have been most carefully safeguarded and they will enjoy the same rights and privileges in the Provincial University, of which Institution each one of them will under Federation form an integral part, that they do now enjoy and have heretofore enjoyed as students and Graduates of Trinity University.

It is highly desirable that the students who have been in attendance at Trinity Medical College should register their names with Dr. Primrose, the Secretary of the Medical Faculty, Biological Department, Queen's Park, Toronto, at as early a date as possible, as seats in the Lecture Theatres are assigned according to priorty of the date of registration.

No fee will be required from students in the Third and Fourth Years. Students of the Second Year will require to make a locker deposit of $2.00 and those of the First Year, the registration fee of $5.00 in addition to the locker deposit.

Signed on behalf of Trinity University :—

T. C. S. MACKLEM. Vice-Chancellor.

Signed on behalf of Trinity Medical College :—

J. A. TEMPLE, Dean.
CHAS. SHEARD, Treasurer.
D. J. GIBB WISHART, Secretary.

Toronto, 27th July, 1903.

PROFESSORS, LECTURERS AND DEMONSTRATORS.

Anatomy.

Professor and Director of the Anatomical Department: A. Primrose, M. D., C. M., Edin.

Associate-Professor : H. Wilberforce Aikins, B.A., M.B., Tor.

Demonstrator : C. B. Shuttlewcrth, M.D., C.M., Trin., F.R.C.S., Eng.

Assistant-Demonstrators: W. J. McCollum, M.B., Tor.; W. J. C. Malloch, B. A., M. B., Tor.; T. B. Richardson, M. D., C. M., Trin.; F. R. C. S., Edin.; George Elliott, M. D., C. M., Trin.; C. P. Lusk, M. D., C. M., Trin.; S. W. Westman, M. B., Tor.; E. S. Ryerson, M. D., C. M., Trin.; E. R. Hooper, B. A., M. B., Tor.; W. J. Wilson, M.B., Tor,; A. C. Hendrick, M. A., M.B., Tor.; A. J. MacKenzie, B. A., L L. S., M. B., Tor.; D. McGillivray, M. B., Tor.

Surgery.

Professors of Surgery and Clinical Surgery : I. H. Cameron, M.B., Tor., F.R.C.S., Eng.; F. LeM. Grasett, M.B., C.M., F.R.C.S. Edin; G. A. Peters, M. B., F. R. C. S., Eng.; L. Teskey, M. D., C. M., Trin.

Associate-Professor of Clinical Surgery and Clinical Anatomy : G. A. Bingham, M.D., C.M., Trin., M.B., Tor.

Associate-Professors of Clinical Surgery : A. Primrose, M. B., C. M., Edin.; N. A. Powell, M.D., C.M., Trin., M.D., Bellevue, N.Y.; W. Oldright, M.A., M.D., Tor.; H. A. Bruce, M. B., Tor., F.R.C.S.; F. N. G. Starr, M.B., Tor.

Associate-Professor of Clinical Surgery, in charge of Orthopædics: C. L. Starr, M.B., Tor.

Demonstrators of Clinical Surgery: W. McKeown, B.A., M.B., Tor.; C. A. Temple, M.D., C.M., Trin.; A. H. Garratt, M. D., C. M., Trin.; C. B. Shuttleworth, M. D., C. M., Trin., F. R. C. S., Eng.; T. B. Richardson, M. D., C.M., Trin., F.R.C.S. Edin.; J. F. Uren, M.D., C.M., Trin.

Pathology.

Professor of Pathology and Bacteriology, and Curator of the Museum and Laboratories: J. J. MacKenzie, B.A., M.B., Tor.

Professor of Clinical Pathology: H. B. Anderson, M.D., C.M., Trin.

Associate-Professor of Pathology and Bacteriology: J. A. Amyot, M.B., Tor.

Laboratory-Assistant in Bacteriology: T. D. Archibald, M.B., Tor.

Demonstrators: G. Silverthorn, M.B., Tor.; C. J. Wagner, M.B., Tor.

Assistant-Demonstrators: W. H. Pepler, M.D., C.M., Trin.; H. C. Parsons, B.A., M.D., C.M., Trin.; M. M. Crawford, M.B., Tor.; F. A. Clarkson, M.B., Tor.

Medicine.

Professor of Medicine and Clinical Medicine: A. McPhedran, M.B., Tor.

Associate-Professors of Medicine: J. T. Fotheringham, B.A., Tor., M.D., C.M., Trin.; R. D. Rudolf, M.D., C.M., Edin., M.R.C.P., Lond.

Professor of Clinical Medicine: J. L. Davison, B.A., Tor., M.D., C.M., Trin.

Associate Professors of Clinical Medicine: A. M. Baines, M.D., C.M., Trin; W. P. Caven, M.B., Tor.; W. B. Thistle, M.B., Tor.; J. T. Fotheringham, B.A., Tor., M.D., C.M., Trin.; A. R. Gordon, M.B., Tor.; R. J. Dwyer, M.B., Tor., M.R.C.P., Lond.; H. B. Anderson, M.D., C.M., Trin.

Associates in Clinical Medicine; G. Boyd, B.A., M.B., Tor.; R. D. Rudolf, M.D., C.M., Edin., M.R.C.P., Lond.; G. Chambers, B.A., M.B., Tor.; F. Fenton, M.D., C.M., Trin.; H. C. Parsons, B.A., M.D., C.M., Trin.; W. Goldie, M.B., Tor.

Preventive Medicine.

Professor of Preventive Medicine, Didactic and Clinical: C. Sheard, M.D., C.M., Trin.

Materia Medica and Therapeutics.

Professor of Materia Medica, Pharmacology and Therapeutics: J. M. MacCallum, B.A., M.B., Tor.

Obstetrics and Gynæcology.

Professor of Operative Obstetrics and Gynæcology: J. A. Temple, M.D., C.M., McGill.

Professor of Obstetrics: A. H. Wright, B.A., M.B., Tor.

Professor of Gynæcology: J. F. W. Ross, M.B., Tor.

Associate-Professor of Obstetrics and Pediatrics: H. T. Machell, M.B., Tor.

Associate-Professor of Pediatrics: A. M. Baines, M.D., C.M., Trin.

Associates in Obstetrics: K. C. McIlwraith, M.B., Tor.; F. Fenton, M.D., C.M., Trin.

Ophthalmology and Otology.

Professors: R. A. Reeve, B.A., M.B., LL.D., Tor; G. S. Ryerson, M.D., C.M., Trin; G. H. Burnham, M.D., Tor., F.R.C.S., Edin.

Associates: C. Trow, M.D., C.M., Trin; J. M. MacCallum, B.A., M.B., Tor.

Laryngology and Rhinology.

Professor: G. R. McDonagh, M.B., Tor.

Associate-Professor: Dr. J. Gibb Wishart, B.A., Tor., M.D, C.M., McGill.

Associate: G. Boyd, B.A., M.B., Tor.

Hygiene.

Professor: W. Oldright, M.A., M.B., Tor.

Toxicology.

Professor: W. H. Ellis, M.A., M.B., Tor.

Medical Jurisprudence.

Professor: N. A. Powell, M.D., C.M., Trin., M.D., Bellevue, N.Y.

Mental Diseases.

Extra-Mural Professors: N. H. Beemer, M.B., Tor.; J. C. Mitchell, M.D., C.M., Trin.

Chemistry.

Associate-Professor: W. T. Stuart, M.D., C.M Trin., M.B., Tor.

Biology and Physics.

(As in Calendar.)

THE CANADA LANCET

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EDITORIAL.

THE FEDERATION OF TRINITY AND TORONTO UNIVERSITIES.

Many will hail with delight the announcement that these universities have at last decided to unite their forces. Some years ago Victoria University joined with the University of Toronto. There are few indeed who would now be bold enough to wish that union dissolved. In the interests of higher education, it was a boon to the public. When Trinity University has joined with the University of Toronto, the results to the best interests of education will be increased manifold.

But what medical men are most deeply interested in, is the amalgamation of the two medical schools. For many years, Toronto School of Medicine and Trinity Medical College did most of the work of educating the medical students of Ontario.

A great change came in 1887, when the Toronto School of Medicine gave up her charter, and the Medical Faculty of the University of Toronto was restored. And now comes another great step onwards, in that Trinity Medical College also comes under the broad branches of the Provincial University's emblematic tree. *Velut arbor crescat concordia.*

There are many who can look back—and with pride, too—to the days when the letters "T. M. C." and "T. S. M." adorned the escutcheons of the two schools. Those were days of noble teachers for the opportunities they had. But, while we can admire the record of the past, and honor those who did so much to make it what it was, let us look forward into the future with a large hope, for it has yet to tell its tale.

There are some who think that two medical colleges in competition with each other would achieve most for medical education in this Province. We think otherwise. The efforts and money expended in the maintenance of two colleges, will do far more, and far better work, if they are poured into one college. The competition created by the two colleges will be far more than offset by the stimulus of the larger college and the healthy rivalry of its various chairs.

Toronto will, after the union, take its true place as a centre of medical education. The money that has gone, in the past, to maintain

two colleges, will then go to maintain one college. This will bring the day nearer to hand when the purely scientific chairs shall be endowed, and their encumbents paid such a salary as will entirely free them from the cares of practice. It is when that day comes that the new era for medical education, in Ontario, will have dawned, with all its lustre. Medical education in Toronto will then travel, not *longo intervallo*, but *equo pede* with the medical departments of Harvard, the University of Pennsylvania, and Johns Hopkins. *Sperate, et vosmet rebus servate secundis.*

THE ONTARIO MEDICAL COUNCIL.

The annual meeting this year was a rather quiet one. There were, however, some matter of present and future importance up for consideration.

One of these was the case of Dr. J. M. Connerty. In this case we think the Council acted wisely in disregarding doubtful evidence, and also in sustaining the report of its own committee. We congratulate Dr. Connerty in being able to vindicate himself so fully in the matter of the accusation against him

Another matter of some importance is that of the standard of fees. It seems quite clear that there cannot be a common standard for all parts of the Province. There are local conditions that will require to be considered. There are difficulties to be met, but no doubt they can be overcome, and a scale of fees drawn up that could be made applicable to the various parts of the Province. It is a subject well worth the attention of the Council.

Irregular forms of practice came in for some consideration. There are refractionists, osteopaths, electricians, x-rayists, manicurists, Christian scientists, *et al.* It is perfectly apparent that something ought to be done with all these. It is all very well to declaim about the liberty of the subject, and his right to be treated in any way he choose; but there is a limit to the right granted to persons to do, or to pretend to do, what they have no knowledge to enable them to do in the interests of those who may consult them. It is absolutely wrong for the state to permit anyone to buy an x-ray apparatus and commence the treatment of disease, until such person has taken a course of medical study, and become qualified as a medical practitioner. The same is true of the rubbing, and the flexion and extension of stiff joints, as we encounter in osteopathy. So many cases of joint disease depend upon constitutional conditions, or on the presence of tuberculosis, that none but the compe-

tent practitioner should be allowed to take charge of such cases. But what shall be said of the refractionist! Without the slightest knowledge of the anatomy or physiology of the age, or the local or general diseases that may affect the sight, he secures a test set and goes to work to prescribe glasses. Then again we have the Christian scientist who teaches that there is no such thing as disease, that it is all a delusion of mortal mind. Infection has no existence outside of one's thought. This is Berkeleyism gone mad. There need be no interference with those who care to hold such absurd views, but there should be the most effectual interference with them in any attempt to treat others on such a system. This is really not interfering with liberty, but protecting the subject against imposture. This is one of the most sacred duties of the state.

The Council had up the matter of the medical curriculum. This question was referred to a committee, to report at the meeting a year hence. It is well to move slowly just now. Medical education is passing through important changes. It is not well to be altering the standard often; and it is better to take time now, and reach findings that are more likely to be lasting than if too hurriedly disposed of. One thing however, is apparent to all. The fifth year, as it is now inforced, is not yielding satisfactory results. It would be much better to make it a regular year of academic study of a practical character than to leave it as it is.

THE RETIREMENT OF DR. W. B. GEIKIE.

Inter homines sapiens, inter sapientes medicus—among men a wise man, among the wise men the doctor—are words that are peculiarly appropriate to Dr. W. B. Geikie, who has occupied so prominent a position in the medical affairs of the country, and particularly of the Province of Ontario, for nearly fifty years. Of those who took a prominent part in the establishment of medical colleges in this country, none stood higher, nor figured more largely before the public eye, than did Dr. Geikie. Of the old guard, he is the last to lay down the reins of office, and seek the quiet of well earned repose from arduous public duties. Drs. Rolph, Hodder, Aikins, Barrett, Bethune, and some others have joined the great majority; Drs. Richardson and Uzziel Ogden resigned their chairs a short time ago, and now comes the adieu to medical teaching of Dr. Geikie.

Fifty years ago, when the Province was thinly settled and poor, and when Toronto was small and unimportant, it required great courage

and unbounded faith to undertake the heavy task of founding colleges for the higher education of the young men of the country. Among the brave men of that period, who turned their faces with hope to the future, was the subject of these remarks. As years went by, Dr. Geikie's work grew in importance, and his share in medical education increased, until it might truly be said in the words of Virgil, *magna pars fuit.* In those early days of medical education it must have been a great pleasure to have felt the pulse waves of hope quicken and inspire thought and action; now it must be a far greater pleasure to look back over those years in the quiet contemplation of how much has been accomplished and how well it has been done.

There have been not a few who have differed from Dr. Geikie; but this is ever true of men of strength of character. His character is of the positive type. He was always true to his convictions—believing that the greatest loyalty is loyalty to one's self. Had he not been forceful and resourceful, what he accomplished for higher medical education would have remained unwritten history, and a long and important chapter would have no place in the records of this country. Dr. Geikie was hopeful, courageous, honorable and scholarly; and he freely gave these gifts for the benefit of others, making his influence widely felt and long enduring. His life's work as a good citizen, an able practitioner, a wise teacher, and his thousands of pupils scattered over the world are his monument; and the words said of Sir Christopher Wren can also be said of Dr. Geikie, *si monumentum requiris, circumspice.*

Dr. Geikie and Trinity Medical College are inseparable words. He began teaching in Victoria College in 1856. In 1871, along with others, he reorganized Trinity Medical College, which had been discontinued for some years. In 1878 he became the Dean of the Medical Faculty, a position which he held continuously until his resignation, a few weeks ago. During the many years of his teaching career, he held, at various times, the chairs of Anatomy, Materia Medica and Therapeutics, Obstetrics and the Practice of Medicine.

Dr. Geikie belongs to a well-known family. His brother was Rev. Dr. Cunningham Geikie, the famous Biblical scholar; and Archibald and James Geikie, the eminent geologists, are his cousins. In addition to his Canadian degrees, he holds the L.R.C.P. of London, and the F.R.C.S. of Edinburgh.

Although Dr. Geikie is turning his face towards the west, we hope that the sun is still high in the second half of its course. We sincerely wish for him many years of health and happiness. *Detur aliquando otium quiesque.*

Dr. A. J. JOHNSON'S APPOINTMENT.

At the recent session of the Ontario Legislature, a bill was passed creating the office of a chief coroner for Toronto. This we approve of, as Toronto has now a large population, and is the scene of many such accidents and deaths as fall to the lot of a coroner to investigate. Dr. Johnson has had much experience as a coroner, and will be able to discharge the duties of the office with satisfaction to the public. We congratulate Dr. Johnson and wish him every success.

PERSONAL AND NEWS ITEMS.

Dr. W. A. Meighen has located in Perth.

Dr. W. E. Dean is leaving Tillsonburg to locate in Millbrook.

Dr. Brereton, of Barrie, and Miss Davis were married July 14.

Dr. and Mrs. McLachlan, of Carman, Man., are on a trip to Europe.

Dr. J. Leslie, of Toronto, has returned from a pleasant trip to England.

Dr. J. E. Brown, of Forest, has sold his practice to Dr. Hauffman, of. Aylmer.

Dr. King, of Staples, has removed to Windsor and will start practice there.

Dr. T. F. Campbell, of Galt, and Miss McDougall, of Trafalgar, were married 24th June.

Dr. W. A. Graham has been appointed house surgeon to Toronto Western Hospital.

Dr. S. E. Fleming and Miss Dunkin, both of Sault St. Marie, were recently married.

Dr. Smith, of Star, has sold his practice and residence to Dr. Archer, a new arrival.

Professor James Stewart is ill and confined to his bed in the Royal Victoria Hospital, Montreal.

Dr. McColl, of Wallacetown, has been appointed house surgeon to the Sarnia General Hospital.

Dr. E. G. Cooper, of Calabogie, was married on June 30th, to Miss Mary McIntyre, of Balderson.

Dr. Wm. Edward Metcalfe, of Portage la Prairie, Man., was married 17th June, to Miss Adams.

Dr. F. G. Glendenning, of Malvern, and Miss Lillico, of Agincourt, were married 24th June.

Dr. D. R. Dunlop, of Shallow Lake, and Miss Cook, of Fordwich, were married 3rd July.

Dr. Murray, son of the late Judge Murray, died in Montreal recently, in his 65th year.

Dr. Ed. Gallie has been appointed to the position of house surgeon, Hospital for Sick Children, Toronto.

Dr. A. R. B. Williamson, of Kingston, and Miss Norma Tandy, of Havelock, were married 29th June.

Dr. R. L. Langstaff, of Richmond Hill, was married July 15, to Miss. Carroll, of Freemont, Nebraska.

Dr. J. L. Carter, of Winnipeg, has gone to Boissevain, and has secured the office lately occupied by Dr. Cutten.

Dr. McRury, of Portage la Prairie, has disposed of his practice to Dr. Clarke, late of the Winnipeg hospital staff.

Dr. Hunter Cowperthwaite since graduating has been appointed house surgeon in the Montreal General Hospital.

Dr. Edward Taggart, has received the appointment of assistant house surgeon at St. Luke's Hospital, Ottawa.

Dr. R. G. Moore has been appointed house surgeon of the Norwegian Lutheran Deaconess Home and Hospital in Brooklyn.

Dr. W. J. Neilson, M.P.P. for North Winnipeg, died July 16th. He was a very prominent physician in Winnipeg and the west.

Dr. G. H. Bowlby and Mrs. Bowlby, of Berlin, have gone for a trip abroad. On his return he will locate in Toronto.

Dr. William Robinson, of Oakville, and formerly of Chelsea, Michigan, has gone to New York for post graduate study.

Dr. R. W. Rutherford, C. A. Warren, and G. E. Wilson, have been appointed house surgeons to Grace Hospital, Toronto.

Dr. John B. Leeson, of Brandon, Man., was united in marriage to Miss Hunter, late superintendent of the Brandon Hospital.

Dr. E C. Chandler, son of Professor Chandler of McGill University, was recently married at "The Maples," Caledonia, to Miss Moses.

Dr. C. D. Wartman, of Napanee, died on 1st July, in his 60th year. He was of U.E.L. stock. He practiced in Napanee for twenty years.

Dr. Francis Dixon, brother of Prof. Dixon, of Dalhousie University has been appointed to the chair of anatomy, Trinity College, Dublin.

Dr. H. McCordic has decided to locate in Forest. Dr. McCordic was a member of the staff of the Sarnia General Hospital.

Dr. R. S. Macalpin, Petrolia, having completed a post graduate course in New York, will resume practice on the 1st August.

Dr. V. E. Latimer, late of Holland, Man., has moved to Brandon, and will practice there as eye, ear, nose and throat specialist.

Dr. Sparks, of Stratford, met with a painful accident recently, by his horse taking fright and throwing the doctor from his buggy.

Dr. A. G. Young was married on Wednesday, June 24th, to Miss N. F. Sutherland, of Almonte. They will reside in Merrickville.

Dr. E. M. Meadows, of Oberon, North Dakota, and formerly of Thamesford, was united in marriage to Miss Woodhall, 16th June.

Dr. Frank McTavish, of Ridgetown, and recently returned from South Africa and England was married on July 15 to Miss Brown.

The marriage of Dr. Robert Law, city medical officer, Ottawa, and Miss Elizabeth Burns, of Grenville, took place at Grenville on 24th June.

Dr. James Harvey Paul and Miss Susie Decew MacDiarmid were married at Lindsay, at the residence of Mr. G. A. MacDiarmid, a cousin of the bride, on Tuesday, 23rd June.

The marriage of Miss Audrey Blair, daughter of Hon. A. G. Blair, minister of railways, to Dr. G. S. MacCarthy, was quietly celebrated at the residence of the bride's father, Ottawa.

Dr. McBrien died recently at the residence of his son in East St. Louis, Mo. For a great many years the doctor was a highly respected resident of Oshawa where he practiced his profession successfully.

Dr. MacLaurin, on retiring from the position of house surgeon of the Home for Incurables, was presented with a dressing-suit case and a gold-headed stick by the officers of the institution. Mrs. Bowman, the matron, read the address accompanying the gifts, and Miss Allison, the head nurse, made the presentation.

The following doctors have been appointed to the house staff of St. Michael's Hospital for the ensuing year:—Dr. F. J. Doherty of last year's staff, Dr. H. J. Sullivan and Dr. Baldwin. Drs. C. H. McKenna and Marlow have been appointed assistant surgeons and Drs. E. B. Shuttleworth and M. M. Crawford added to the outdoor staff.

The annual meeting of the Maritime Medical Association was held at St. John on the 22nd and 23rd July. There was a large number from the Maritime Provinces, besides a number of medical men from other

parts of Canada and from the United States. Among these were Drs Morris, H. Richardson and E. W. Cushing, Boston; Drs. D. E. Armstrong, C. W. Wilson, F. A. Lockhart and D. J. Evans, Montreal.

Dr. F. X. Valade, Ottawa, was honored recently by the medical board of the General hospital, Water street, when he was presented with a handsome diamond necktie pin. The occasion was his retirement after almost 25 years of service, from the active staff of the institution to accept a place on the staff of consulting physicians The presentation was made in most happy terms by the president of the board, Sir James Grant.

BOOK REVIEWS.

GYNÆCOLOGY.

A Text-Book for Students and a Guide for Practitioners. By William R. Pryor, M.D., Professor of Gynæcology in the New York Polyclinic Medical School; Attending Gynæcologist New York Polyclinic Hospital; Consulting Gynæcologist St. Vincent's Hospital, New York City Hospital, and St. Elizabeth's Hospital; Membre Fondateur Congress International de Gynæcologie et d'Obstetrique; Fellow of The American Gynæcological Society; Fellow New York Academy of Medicine. D. Appleton and Company, Publishers, 436 Fifth Avenue, New York. Toronto: G. N. Morang & Co. Cloth, $3.50.

The volume before us is a handsome one of 380 pages. The author has carefully avoided the less useful methods of medical and surgical treatment of the diseases peculiar to women. He gives, with clearness, the most accepted methods. All discussion on the more scientific topics, such as bacteriology, find no place in the book.

By these means the book is kept within comparatively small size, and yet everything is found in it that is likely to be met with, even by the specialist. He devotes considerable space to the treatment of disease and the performance of operations by the vaginal route, yet he admits that many cases arise where the abdominal route is alone suitable. He, therefore, gives both methods fully.

The literary style is good. The author has an easy and graceful mode of expression, and thereby greatly enhances the usefulness of his book. The illustrations are very artistic and are mostly original. It has not been our fortune to examine any book that will better repay study than this one from the pen of Dr. Pryor. We congratulate both author and publisher upon the results of their efforts to give the medical profession a really good book.

DISEASES OF THE SKIN, THEIR DESCRIPTION, PATHOLOGY, DIAGNOSIS, AND TREATMENT WITH SPECIAL REFERENCE TO THE SKIN ERUPTIONS OF CHILDREN AND AN ANALYSIS OF FIFTEEN THOUSAND CASES OF SKIN DISEASE.

By H. Radcliffe-Crocker, M.D., (Lond.), F.R.C.P., Physician for diseases of the skin in University College Hospital; Honorary member of the American Dermatological Society; Membre Correspondant Étranger de la Société Francaise de Dermatologie; Correspondierendes Mitglied der Wiener Dermatologischen Gesselschaft; Socio Onorario della Società Italiana di Dermatologia e Sifilografia; Last Physician to the East London Hospital for Children; Examiner in Medicine, Apothecaries' Hall, London. Third edition, revised, rewritten and enlarged. With 4 plates, 2 of which contain 12 colored figures, and 112 other illustrations. Octavo. 1466 pages. Cloth $5.00; Sheep, $6.00, net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. Toronto: Messrs Chandler & Massey.

Crocker on the Skin is a book built entirely upon superior merit It has been acknowledged by the American medical press as "the best text-book in the English language." The new third edition maintains this high standard of excellence. Coming at a time when recent progress in dermatology makes an authoritative work upon the subject a positive necessity, its announcement therefore is considered of special importance by the publishers, and it is believed the same view will be taken by the profession. It is a safe, accurate, eminently practical and strictly modern treatise, well and clearly written by a man of large experience and most excellent judgment. Though completely scientific, it is written in such a happy manner that the tyro may follow the writer almost as readily as the expert on diseases of the skin. It will be seen, therefore, that it appeals to general practitioners as well as specialists; while to the student it will serve as a valuable guide when he enters upon the more arduous task of practice.

The etiology, symptomatology, pathology and minute anatomy, constitutional conditions, diagnosis and treatment of each disease mentioned is fully entered upon, the therapeutics, dietetics, and general regimen coming in also for their due share of attention, great strength in the accuracy of statement and method and clearness of definition and differentiation being shown. The newer remedies and bacteriological researches, in their bearing upon dermatology, are carefully noted.

The book proves Dr. Crocker to be closely in touch with the work and teaching of modern dermatology; and he has sifted from the vast accumulations of recent literature, the facts and opinions which have a definite value and are worthy of permanent record. The illustrations, too, showing as they do the morbid conditions of the different structures affected in diseases of the skin, are a not unimportant feature.

Many valuable additions to the text are noted in the new third edition of this standard work. The whole book has been systematically gone over and numerous changes made where recent progress in dermatology and a more exact knowledge of the subject has dictated. The result is a work every page of which bears the impress of thoroughness and large personal experience.

MATERIA MEDICA FOR NURSES.

By John E. Groff, Ph. G.; Apothecary in Rhode Island Hospital, Professor of Materia Medica, Botany and Pharmacognosy in the Rhode Island College of Pharmacy. Second edition, revised and re-written. Philadelphia: P. Blackiston's Son & Co. Toronto: Messrs. Chandler and Massey. Price $1.25, net.

We have taken considerable pains to examine this little book, and can speak in very high terms of its value for nurses. It is not padded out with useless details, nor encumbered with the descriptions of drugs and preparations with which nurses could not be reasonably expected to become acquainted. We can recommend this book to those who have the selection of text books for nurses We feel sure that any class of nurses who master this book will have a perfectly competent knowledge of all that is necessary for them to know on this branch of their education. It is strongly bound and of neat size.

ANALYSIS OF THE SEXUAL IMPULSE—LOVE AND PAIN—THE SEXUAL IMPULSE IN WOMEN.

Third volume in series.

STUDIES IN THE PSYCHOLOGY OF SEX.

By Havelock Ellis, L. S. A., (England); Fellow of the Medico-legal Society of New York and Anthropological Society of Berlin; Honorary fellow of the Chicago Academy of Medicine, etc.; general editor of the Contemporary Science series since 1899. Extra cloth, $2.00 net, delivered. Sold only to physicians, lawyers, clergymen, advanced teachers, and scientists. Philadelphia, Pa. F. A. Davis Company, publishers, 1914-16 Cherry Street.

Havelock Ellis has long been known as an ardent student of the problems that lie at the foundation of sexual psychopathic states. In weak hands, it is often a hackneyed and uninteresting subject, but in Mr. Ellis' hands it becomes a very useful branch of medical study. Those who are familiar with such works as those of Krafft-Ebing and the Italian School of Alienists will be prepared to admit that the sexual functions play an important role in the evolution of certain forms of insanity and perversions. In this regard the writings of Mr. Ellis have done much good. The present volume is a valuable addition to what he has already accomplished in this field of study.

SURGICAL ASEPSIS.

Especially adapted to operations in the home of the patient.

By Henry B. Palmer, M.D., Consulting Surgeon to the Central Maine General Hospital. Ninety Illustrations. Pages VI-231. Size, large 12 mo. Extra cloth. Price $1.25 net, delivered. Philadelphia, F. A. Davis Company, Publishers, 1914-16 Cherry Street.

Here we have a first class little book on an important subject. Many books have been written upon antiseptics, asepsis and disinfectants. One would have thought that there was no need for another. This notion is dispelled by a perusal of Dr. Palmer's book. It is an excellent one for the doctor to read who does any surgery or obstetric practice and an indispensable companion for the trained nurse, or the nurse in charge of any operating room, or a surgical ward. It is one of those books that can be turned to with confidence, as it is full of "pointers."

THE EXPECTANT MOTHER.

A treatise on the care of the expectant mother during pregnancy and childbirth and the care of the child from birth to puberty.

By W. Lewis Howe, M.D. Pages VIII-63. Size small 12 mo. Extra cloth. Price 50 cents net, delivered. Philadelphia, F. A. Davis Company, Publishers, 1914-16 Cherry Street.

This is a very neat little book; but what is of far more importance, it is a trustworthy guide on the subjects discussed in its pages. The advice giving to the class of readers for whom it is intended is very appropriate and in well selected language. Although the book is an unpretentious one, judged by its size, yet we venture the opinion that many practitioners would find it very convenient for ready reference on the questions that belong to maternity. Doctors would do well to recommend it to their patients.

PRACTICAL APPLICATION OF RÖNTGEN RAYS IN THERAPEUTICS AND DIAGNOSIS.

By William Allan Pusey, A. M., M. D., Professor of Dermatology in the University of Illinois; and Eugene W. Caldwell, B. S., Director of the Edward N. Gibbs X-Ray Memorial Laboratory of the University and Bellevue Hospital Medical College, New York. Handsome octavo volume of 591 pages, with 180 illustrations, nearly all clinical. W. B. Saunders & Co., 1903. Cloth, $4.50 net; Sheep or Half Morocco, $5.50 net. Toronto: J. A. Carveth & Co.

It has been the aim of the authors of this work to elucidate fully the practical aspects of the subject. It is evident that all the authentic literature which has developed since Röntgen's wonderful discovery has been carefully digested, this being supplemented by the extensive

experience of the authors. The value of the X-rays in diagnosis has been discussed in a thoroughly practical manner, and their limitations in this field indicated. Particular attention has been devoted to the use of the X-rays in therapeutics. Nearly all the illustrations in this section represent actual clinical subjects, and show with unusual fidelity the condition before the use of the X-rays, at various stages of their application, and finally, the therapeutic results obtained. Full details are also given as to the use and management of the apparatus necessary for X-ray work. All the methods with which the best results have been achieved have been carefully described in a comprehensive way. There are chapters on X-ray Tubes, Induction Coils and Controlling Apparatus, Static Machines, Fluoroscopy, Radiography, Photographic Materials Used in Radiography, etc. This section is also fully illustrated with instructive photographs and drawings of the apparatus, including four beautiful full paged colored plates of X-ray tubes. In fact, the work will be found of invaluable assistance, not only to the general practitioner, but also to the dermatologist, presenting, as it does, the very latest advances in X-ray therapeutics and diagnosis.

MODERN MATERIA MEDICA AND THERAPEUTICS.

Third Edition, Greatly Enlarged, Rewritten and Reset.

By A. A. Stevens, A. M., M. D., Lecturer on Physical Diagnosis in the University of Pennsylvania; Physician to the Episcopal and St. Agnes Hospitals, Philadelphia. Handsome octavo of 663 pages. W. B. Saunders & Company, 1903. Cloth, $3.50 net. Canadian Agents: J. A. Carveth & Co., Toronto.

Since the appearance of the last edition of this book such rapid advances have been made in materia medica, therapeutics, and the allied sciences, that the author has wisely rewritten the entire work. He has altered the general plan of the book considerably, and instead of considering the drugs in alphabetical order, as in the previous editions, he has classified them according to their pharmacologic action. This arrangement, notwithstanding the present unsettled state of pharmacology, possesses certain advantages in that it aids the student to correlate established facts, and to apply them more readily to the treatment of disease.

The part devoted to Therapeutics has evidently undergone a thorough revision; and we note that all the newer remedies which have been shown by competent observers to possess real merit and to be worthy of a more extended trial at the hands of the profession, have been considered. Indeed, the work is in every particular thorough and accurate, and its title, Modern Materia Medica and Therapeutics, is fully justified. We heartily commend the work to students and practitioners.

LEA'S SERIES OF POCKET TEXT-BOOKS.
BACTERIOLOGY.

A Manual for Students and Practitioners.

By Fred. C. Zapffe, M. D., Professor of Pathology and Bacteriology in the Illinois Medical College; Professor of Histology in the Department of Medicine and in the School of Dentistry of the University of Illinois, Chicago. Series Edited by Bern. B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York; Visiting Surgeon, Bellevue Hospital, New York. Illustrated with one hundred and forty-six engravings and seven colored plates. Lea Brothers & Co., New York and Philadelphia. Price,

This volume belongs to a well known and useful series of manuals. Each volume of the series is a monograph written by a specialist on the subject covered by the volume. The present volume takes up the interesting subject of bacteriology. This subject occupies a large place at the present moment in medical science. No medical practitioner can be said to be abreast of the times, who does not keep himself conversant with the latest views on bacteriology. The volume under review contains all that is really of importance upon the subject of bacteriology. The classification of bacteria is given fully. The relationship of micro-organisms to disease receives due attention. The methods of examination and culture-making are clearly stated. Disinfection is taken up and careful instruction laid down. The illustrations are very good, and the press-work excellent. It affords us much pleasure to recommend this work on bacteriology by Dr. Zapffe.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, &c., &c.; assisted by H. R. M. Landis, M.D., Assistant Physician to the Out-Patient Department of the Jefferson Medical College Hospital. Vol. II., June, 1903, Surgery of the Abdomen and Hernia—Gynecology—Diseases of the Blood and Ductless Glands—Hemorrhagic Diseases—Metabolic Diseases—Ophthalmology. Lea Brothers & Co., Philadelphia and New York. Price $2.50.

Every physician—at least every progressive physician—on this continent is familiar with "Progressive Medicine". These quarterly volumes are models of the book-making art. The binding, type, paper, and illustrations are all that the most exacting could desire. A book might, however, possess all these qualities and not be of much value, if the matter contained within its covers was defective either by being carelessly written, or injudiciously selected. Neither of these faults can be charged to "Progressive Medicine." The various volumes are well written and contain the latest and best upon the subjects discussed in

each volume. The sections of the present volume are contributed by Drs. John G. Clark, William B. Coley, Edward Jackson, and Alfred Stengel. Their names may be safely taken as a guarantee of the merit of the various portions of the volume. "Progressive Medicine" is valuable, both as a work of reference and as presenting a historical survey of the progress of medical science. The complete series should find a place in every doctor's library.

URIC ACID IN THE CAUSATION OF DISEASE.

A contribution to the pathology of high blood pressure, headache, epilepsy, nervousness, mental disease, asthma, hay fever, paroxysmal haemoglobimuria, anæmia, Bright's disease, diabetes, gout, rheumatism, bronchitis, and other disorders, by Alexander Haig, M. A., M. D., Oxon., F. R. C. P., Physician to the Metropolitan Hospital, and the Hospital for Children and Women; late Casuality Physician to St. Bartholomew's Hospital. Sixth edition, with seventy-five illustrations. London: J. & A. Churchill, 7, Great Marlborough Street, 1903. Price, 14s.

Dr. Haig's book has steadily grown in size; and it is equally true that it has as steadily grown in importance and the place it holds in the estimation of the medical profession. There are a number of perennial classics, such as Hilton's "Rest and Pain," C. J. B. William's "Principles of Medicine," John Hunter's "Treatise on Anatomy and Surgery," G. W. Balfour's "Senile Heart," Harvey's "Ciculation of the Blood." Among these we place Haig's "Uric Acid."

Many have been the attempts to explain the phenomena of gout and rheumatism, but none seemed to us satisfactory until we studied the views of Dr. Haig. The more the positions taken in "Uric Acid" are examined, the more they appear to clear up the ground and to meet the difficulties encountered in coming to a decision on the etiology and pathology of gout and rheumatism, and a long list of diseases and derangements of health, in which high arterial tension plays so important a rôle.

The first edition—a small book—appeared ten years ago. The sixth edition is now in the hands of the profession, and contains 950 pages. Such a growth in size, and rapid demand for new editions, could not occur were there not real merit in the work and investigations of the author. We cannot recall any one book that has given us as much pleasure and profit to peruse as has the successive editions of Dr. Haig's "Uric Acid." The best of it all is that it is so original and is such a tonic and stimulant to one's thought. The many phenomena met with, as the uric acid happens to be stored in the liver, or circulating in the blood, are explained in a most lucid and erudite manner. The circu-

lation of the blood, as it is altered by the presence of uric acid in it, is a subject of the utmost interest and importance. As a study of physiological processes, perverted by a certain poison in the blood, we know of no book equal to Dr. Haig's work. Whether one agrees entirely with the teachings of Dr. Haig, or not, the book ought to be in the hands of every practitioner. It opens up extensive questions, and clears the way for useful lines of thought. A study of the book opens up new view points and throws a new and bright light over the whole field of practical medicine.

The publishers have done their part well. The paper, type, and binding could not have been improved upon. We congratulate both author and publishers for giving the profession a work that is doing so much to clear up the pathology of a wide range of conditions.

SURGICAL ANATOMY AND OPERATIVE SURGERY.

For students and practitioners, by John J. McGrath, M.D., Professor of Surgical Anatomy and Operative Surgery at the New York Post-graduate Medical School, Visiting Surgeon to the Harlem Hospital, and Assistant Visiting Surgeon to the Columbus Hospital, New York. Illustrated with 227 illustrations, including colors and half-tones. Pages xiv-559. Royal octavo, extra cloth, $4.00 net; sheep or half Russia $5.00 net delivered. Philadelphia: F. A. Davis Company, Publishers, 1914-16 Cherry street.

This work is the outgrowth of Dr. McGrath's course in operative surgery at the Post-graduate Medical College of New York city.

Recognizing the importance of a thorough knowledge of surgical anatomy, as essential to the study of operative measures, the author gives it due attention in this volume. He treats of the anatomy of each region before describing the operations that are done upon it. This makes the work especially valuable to the general practitioner, who is sometimes of necessity called upon to operate, as well as to the young surgeon just beginning his career. The diagrams, of which there are many, aid greatly in an intelligent reading of the text. The work is one which we can heartily recommend to practitioners, and will certainly prove a useful addition to any medical library. The volume is of convenient size, strongly bound and the print is of the best.

ANATOMY.

A manual for students and practitioners, by W. H. Rockwell, Jr., M.D. Series edited by Bern B. Gallaudet, M.D. Illustrated. Philadelphia and New York; Lea Bros. & Co. Price $2.25.

This volume is really an epitome of Gray's Anatomy and is especially designed for the use of students, who are preparing for examination. It will also be found useful for physicians, who wish to make a hurried

review of the more important points of anatomy. It is much fuller and more complete than most books of its type that we have seen. The latest edition of Gray has been followed closely, both in regard to order and description.

The engravings, of which there are some seventy, are taken from Gray and other anatomists. The author has certainly succeeded in placing before the profession a manual that is at once handy and reliable.

The work forms a valuable addition to the series of which it forms a part.

The binding, print, etc., are of the best.

TEXT BOOK ON SURGERY.

For Students and Practitioners, by George Emerson Brewer, A. M., M. D., Lecturer on Clinical Surgery at the College of Physicians and Surgeons, Columbia University, New York; Attending Surgeon to the City Hospital; Junior Surgeon to the Roosevelt Hospital; Consulting Surgeon to the Perth Amboy Hospital; Fellow of the American Surgical Association, etc,, etc. Illustrated with 280 engravings in the text and 7 plates in colors and monochrome. Lea Brothers & Co., New York and Philadelphia, 1903. Price, cloth, $4; leather, $5, net.

Dr. Brewer has given us a small octavo volume of 700 pages. Surgical literature is rich in good books, and it is therefore no easy task to find a place for a new work. This, however, will be largely determined by the merits of the new comer for professional favors. The author claims that he desired to produce a book of medium size, such as could come in between the many small manuals and the larger treatises. In this respect he has succeeded perfectly. The book is one of the medium sized class.

We do not belong to those who measure the value, or usefulness, of a book by its size. There is such a thing as a big little book. We remember having read Lord Macaulay's review of Professor Nare's "Memorials of Lord Burleigh," in which he said that they contained 2,000 quarto pages, 1,500 inches cubic measure, and weighed 16 lbs., and contained nothing after all. This criticism is true of some of our very large medical books. Then again there is the just criticism that some of the smaller manuals are mere dry, useless compilations; and that the materials entering into their make-up would have been better left in their original repositories. Dr. Brewer has successfully avoided the making of a poor big book, and a useless small book. He has given us a valuable medium sized volume.

The various subjects of surgery are touched upon, and the advice given is sound and trustworthy. Dr. Brewer's work is one of the very best of its class.

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A Text Book of Chemistry for Students of Medicine, Pharmacy and Dentistry.

By Edward Curtis Hill, M. S., M. D. Medical Analyst and Microscopist; Professor of Chemistry and Metallurgy in the Colorado College of Dental Surgery; Professor of Chemistry and Toxicology in the Denver and Gross College of Medicine, University of Denver. With 78 illustrations including 9 full page half tone colored plates. Pages XII-523. Crown Octavo. Extra cloth, $3.00 net delivered. Philadelphia, F. A. Davis Company publishers, 1914-16 Cherry Street.

This work comes to fill a real place and to meet a long felt want. The whole range of medical chemistry is treated of under the following headings:—Medical Physics, Chemic Philosophy, Inorganic Chemistry, the Carbon Compounds, Analysis, Incompatibility, Sanitary Chemistry, Toxicology, Physiologic and Pathologic Chemistry, Clinic Chemistry, and an Appendix on some general and useful topics. There is scarcely a subject in the whole range of chemistry, as it pertains to the physician or druggist, that is not treated of in the present volume. Chemistry is often regarded as an uninteresting subject. This is due, in many instances, to the manner in which is handled by the writers upon it. This charge cannot be made against Dr. Hill's work. It is certainly a very valuable addition to the physician's library.

ORGANIC NERVOUS DISEASES.

By M. Allen Starr, M.D., Ph.D., LL.D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons, the Medical Department of Columbia University, in the City of New York; Consulting Neurologist to the Presbyterian, St. Vincent's Hospitals, St. Mary's Free Hospital for Children, and to the New York Eye and Ear Infirmary, etc., etc. Illustrated with 275 engravings in the text and 26 plates in colors and monochrome. Lea Brothers & Co., New York and Philadelphia. 1903. Price, cloth, $6; leather, $7.

The present volume is a large one, containing 750 octavo pages. It is got up in a very attractive form. The paper and binding are good and the press work and illustrations perfect.

Dr. Starr is a well-known writer on nervous diseases, and his "Familiar Forms of Nervous Diseases," his "Brain Surgery," his "Atlas of Nerve Cells," and his many journal articles have made his name familiar to most doctors. In the present volume he confines his attention solely to organic nervous diseases. Throughout the book the utmost attention is given to diagnosis. If diagnosis is not everything, it is absolutely essential in the study of nervous diseases. Many regard the study of organic nervous diseases as both difficult and uninteresting. This is due to the fact that a proper foundation has not been laid by acquiring a thorough working knowledge of the anatomy and physiology of the nervous system. Without this there is little use proceeding with the study of its special diseases.

Dr. Starr's book will prove a decided help to those who desire to read up the subject of organic nervous diseases. The author gives, both by description and illustration, a sufficient amount of information on the anatomy of the parts affected to render the further study of these diseases interesting and clear. We regard this work by Dr. Starr as a most valuable addition to the literature on neurology. It may well claim a place with the works of Mott, Gowers, Oppenheim, Edinger, Mills, Barker, Hirt, Ross, Bramwell, Obersteiner, Bourneville, Gilles De La Tourette, Strümpell, etc.

All the organic diseases of the brain, spinal cord and nerves find a place in the book. The author's style is clear and impressive. We can highly commend the book, and trust it may meet with what it merits, a large sale.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Twenty-Sixth Annual Report, 1902, Trenton, N.Y.: The J. L. Murphy Publishing Co., Printers.

This issue of the year's work of the New Jersey State Board of Health contains considerable useful information on sanitary science, and the prevention of disease. Those interested in such subjects will do well to consult it.

TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION.

At its 26th Annual Meeting, held in Boston, Mass., September 18th, 19th, and 20th, 1902, by Frank Hugh Montgomery, M.D., Secretary. Chicago, P. F. Pettibone & Co.

The transactions for the year 1902 are of much interest. Scattered throughout the volume are a number of excellent illustrations. The papers are of a high order of merit. These "transactions" will prove of much value to those taking an interest in dermatology.

TRANSACTIONS OF THE AMERICAN CLIMATOLOGICAL ASSOCIATION, FOR THE YEAR, 1902.

Vol. XVIII. Philadelphia, Printed for the association.

The present volume contains much information on the subject of climates, and their influence on the various forms of disease. The volume is full of attractive illustrations. The secretary and treasurer of the Association is Guy Hinsdale, M.D., Philadelphia. We can recommend these "transactions" to any one desiring information on the climates of America.