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Original Articles

THE ECONOMIC ASPECT OF THE TUBERCULOSIS PROBLEM IN CANADA.*

BY A. J. RICHER, M.D., MONTREAL.

When we realize that in Canada 8,000 lives are yearly sacrificed to tuberculosis, and that besides at least 40,000 individuals yearly become infected by its bacillus, we are compelled to consider what effect this wholesale invalidation has upon the finances of the country. This means that 48,000 individuals are permanently invalidated by a preventable disease. A human life at the period of industrial usefulness is worth \$6,000, distributed as follows: To the Federal Government, \$1,000 (which is the universally accepted figure); to the Provincial Government, \$500; to the Municipal Government, \$500; to the community and family, \$4,000. The above calculations have been made from the *rationale* of productiveness, based upon the expectancy of life at the period of industrial usefulness, as follows: At twenty-five years, the average age at which tuberculosis is fatal, the expectancy of industrial usefulness is twenty years, the average earning capacity \$500 per year, five per cent. of which goes to the provincial and five per cent. to the municipal government, making the total of \$500 to each in the course of the

* Read at the Third Annual Meeting of Canadian Association for Prevention of Tuberculosis, Ottawa, April 16th, 1903.

twenty years. These contributions are both direct and indirect, and according to the law of mutuality represent a sum superior to \$500, but this sum total, if it errs, does so on the side of conservatism.

The value of a human life at this industrial period as fixed by courts of law, reaches its maximum between the 25th and 35th year, according to Marshall Leighton, is \$8,000. The average is \$6,000, and according to my computations, should be divided as above indicated. Thus to the Federal Government the deaths from tuberculosis represent an annual loss of \$8,000,000; to the several municipal governments a loss of \$4,000,000, the communities interested making up the remainder of the total, which is \$32,000,000, bringing the total for the country to \$48,000,000 annually. Through invalidation by the disease, of 40,000 individuals, there is an annual loss in productiveness amounting to at least 10 per cent. of their per capita value, representing the sum of \$24,000,000. The grand total yearly loss to the country is, therefore, according to above calculations, \$72,000,000. Yet in the face of all this preventable loss very little is being done. In 1901 an article appeared in *Virchow Archives*, written by Otto Naegali, of Zurich, in which conclusive evidence was brought to light to the effect that 96 per cent. of all living individuals over eighteen years old had tuberculosis, either in its latent or active form. This means that practically every individual over eighteen years of age is tainted. What can we infer from this? Merely that the human body, naturally resistant of the disease, acquires a certain amount of artificial immunity by this widespread dissemination of the germ of tuberculosis, but involving the sacrifice of over 2,000,000 lives annually throughout the world. You are all familiar with the literature of the last twenty years upon the subject of tuberculosis, and you are also familiar with the very excellent methods which were introduced into the City of New York by Dr. Biggs, in 1897, in order to control the disease through the City Board of Health. The system was considered so thorough that no less an authority than Koch made reference to it at the last Tuberculosis Congress, as a measure to be imitated by all cities anxious to get rid of the scourge. Without doubt the death rate in New York has diminished to some extent through the work done by the Board of Health, but one has only to read the report of Dr. Lederle, the Commissioner of Health for the City of New York, to realize how insufficient this method has proved. In his report to Mayor Low, under date of March 26th, 1903, Dr. Lederle speaks as follows: "Tuberculosis remains the greatest cause of deaths in the city, and one which, in my opinion, demands

more attention from the municipal authorities in the interest of the public health. The number of persons suffering from tuberculosis is variously estimated at 30,000 to 40,000, and many of these are undoubtedly infecting their associates, thus adding to the extent of the disease. I believe the time has come when the City of New York should extend its facilities for the treatment of tuberculosis, either by sanatoria or otherwise." The above is undoubtedly a confession of inefficiency, and Dr. Lederle now realizes what we have always advocated, viz., that combined action is necessary if we wish to cope successfully with this scourge. The above will naturally lead us to consider how we in Canada are attempting to deal with the problem. We know that the different provincial and municipal boards of health are practically incapable of dealing with the problem alone. With the exception of a few anti-spitting by-laws adopted in some cities, the municipal governments have done nothing in the matter. The Provincial Governments have in Ontario and Nova Scotia already considered the subject seriously and made appropriations to deal with it. The Federal Government has, I believe, granted to the Canadian Association for the Prevention of Tuberculosis the sum of \$1,000 to help to carry on this work, and it attempts further to remedy the evil by importing immigrants. In 1901, 49,149 immigrants were brought into this country at a cost of \$444,730. In 1902, 67,379 immigrants were brought in at a cost of \$495,842. We have only to compare the two situations, that of invalidation and mortality caused by tuberculosis and the importation of immigrants, to come to the inevitable conclusion that just about the equal number of immigrants are brought in that will fill the gap caused by the bacillus of tuberculosis. If this did not cost the country anything it might not be so regrettable, but this gap is filled at a yearly expense of nearly half a million dollars, without improving our position a single iota. Is this not an object lesson?

Let us cast a glance upon the veterinary aspect of the question. Bovine tuberculosis, according to the last available statistics, exists to the extent of only $2\frac{1}{2}$ per cent. in the cattle of the country, causing practically no loss, for the simple reason that the meat from these animals, even when the internal organs are very visibly infected, is still fit for consumption. Yet we find that the Federal Government in 1900 spent \$19,992 for the prevention of the spread of tuberculosis in cattle, while in 1901, \$26,054 was spent for the same object. If the cattle are a valuable asset to the people of this country, and an object of concern to the Department of Agriculture, then are not the inhabitants, who really contribute to the value of the agricultural

products of this country, entitled to a share of paternal solicitude at the hands of the Federal Government ?

If a national calamity involving the loss of large sums of money threatened us, it would, as a rule, be an easy matter to awaken the Federal authorities to their duty in such a matter. Let us suppose, for instance, that the entire wheat crop of the North-West, which last year was estimated at about \$25,000,000, were to be partially or totally destroyed by hailstorms, we would be amazed at the readiness with which the Federal Government would grant financial aid in order to prevent a repetition of such a loss. It is for you to decide whether \$72,000,000 in human value is not as well worthy of consideration as \$25,000,000, in grain value. A little reflection upon the foregoing facts will bring one to the inevitable conclusion that if we are to cope successfully with this scourge it is necessary that it should be attacked upon all its sides. In order to do this it becomes evident that the different public bodies should be made to act jointly; These are the Federal Government, the different Provincial Governments, the Municipal Governments, the press, society at large; particularly public spirited citizens and philanthropists. Without this combined action it is absolutely useless to hope for a remedy. It is undoubtedly the duty of the federal authorities to foster this movement. We have a notable example in the action taken by the Reichstag, in Germany, co-operating with the Central Committee of the National Association there. There is no doubt about it that the best methods organized to combat tuberculosis exist in that country, and solely, I believe, owing to the fact that the Central Government has co-operated with the Central Committee for the prevention of tuberculosis. It is the duty of this association, not only to call the attention of the several authorities concerned to their responsibilities in the matter, but actually to urge upon the Federal Government the necessity of speedy action, which can only be effective by co-operating with leagues or associations specially organized to carry on this work.

THE hypnotics which act by depressing blood-pressure are more certain sleep-producers than those whose effect depends on other causes. Chloral is the most prominent of the type, and is more certain and powerful than any of its derivatives. Its dangers, dosage, and limitations are to be remembered.—*Medical Council.*

THE ADMINISTRATION OF HYOSCINE HYDROBROMATE BEFORE ETHER ANESTHESIA.*

BY E. A. ROBERTSON, M.D., MONTREAL.

Speaking at a meeting of the Society of Anesthetists of London, the celebrated surgeon, Edmund Owen, said that if he should be so unfortunate as to meet with an accident and require an anesthetic, he would ask for chloroform, because he considered ether "beastly stuff."

Now, no doubt, many of you are of the same opinion, and though ether is doubtless a safer anesthetic than chloroform, yet on account of its disagreeable smell and the unpleasant symptoms during and after its administration, many persons object to take it, and many medical men dislike to give it. With the Clover inhaler it is true the giving of ether is made more easy, but even with that excellent contrivance (which I have used during the last five and a half years), the untoward effects of ether are but too often seen.

Believing that most of the dangers which arise from ether anesthesia and most of the disagreeable effects after it are caused by the power which ether has of increasing the activity of the mucous glands in the air passages, I selected a drug, hyoscine hydrobromate, which has a contrary action, and at the same time possesses very mild, if any, toxic properties: and gave it half an hour before the administration of the anesthetic.

The results have been so encouraging that I thought it right to bring to your notice what I believe to be an important advance in the production of anesthesia. Hyoscine hydrobromate is the hydrobromate of one of the alkaloids obtained from the plant *hyoscyamus niger*. It has the same chemical formula as atropine, but differs from it in molecular structure and widely in its physiological action.

In man it causes, according to Wood: (1) Dryness of the mouth; (2) flushing of the face; (3) drowsiness deepening into sleep; (4) diminished frequency of respiration; (5) diminished frequency of pulse; (6) as a rule dilatation of the pupil. It has little power over the secretion of sweat. It has a very feeble effect on the circulation, if any.

It is a powerful depressor, motor, but has no action on sen-

* Read at Thirty-fifth Annual Meeting of Canadian Medical Association, Montreal, September, 1902.

sation. According to Wood it is a safe hypnotic, as no fatal case of poisoning has ever been reported. However, in several cases alarming symptoms have been caused by comparatively small doses.

One quarter of a grain has been taken with no worse effect than a prolonged sleep. The dose is given as from 1-150 to 1-80 of a grain.

I gave 1-100 of a grain hypodermically half an hour before beginning the ether. I have found that it acts as follows: The patient half an hour after the injection is calm and drowsy. The pulse is slow and full. The respirations are quiet and regular, the mouth dry, and, as a rule, the pupils slightly dilated, though reacting to light.

The ether is taken quietly and without struggling, and the stage of surgical anesthesia is quickly reached.

There is little or no secretion of fluid from the mouth or respiratory tract. There is no muscular rigidity and no cyanosis. The face is generally red. In five or six minutes the patient is lying as if calmly asleep. Anesthesia is then maintained with a very small expenditure of ether, and during the operation there is no vomiting or obstruction to respiration from secretion of fluid in the air passages.

The patient regains consciousness rapidly, but during the first twelve hours after the operation is quiet and has frequent periods of sleep. The vomiting which so often follows the administration of ether alone in a large proportion of cases does not occur; nausea is much lessened. The mouth is for some time dry and thirst is complained of.

As yet I have not seen any dangerous symptoms following its use. In describing ether anesthesia, writers, especially those who prefer chloroform, lay great stress on certain symptoms which arise, which constitute a danger to the patient or, at any rate, detract from the usefulness of ether as an anesthetic.

The statement is almost universally made that it takes longer to produce surgical anesthesia with ether than with chloroform, and that greater excitement is produced in the first stage. This has not been my experience, and, indeed, I do not believe it to be a fact. With the Clover inhaler and hyoscine I believe the average patient will be anesthetized more quickly and as quietly as with chloroform.

The profuse secretion of mucus in the air passages caused by ether is another matter and creates a real danger. It obstructs respiration and causes cyanosis. I wish to lay stress upon this, for it is not the ether that causes cyanosis, because ether contains enough oxygen for the aeration of the blood, but it is the

physical obstruction of large amounts of mucus in the respiratory tract which prevents the oxygen from being absorbed. The swallowing and coughing which ensues often compels the anesthetist to stop the ether until the act of vomiting clears away the obstruction. We are all familiar with the alarming picture which is presented when a short-necked full-blooded patient lies with purple face and distended veins, rigid muscles, and labored respiration, while all around are waiting for the vomiting which relieves the lungs of their load of mucus and admits the much required oxygen.

This condition is highly dangerous, especially in old subjects with weakened blood vessels and kidneys; perhaps somewhat the worse for wear. The collection of fluid in the lungs, impregnated with irritating ether no doubt is the cause of those cases of bronchitis and pneumonia, which have been reported as the result of ether anesthesia.

Again, ether is credited with producing more vomiting after the operation than chloroform. This, I believe, to be another mistake, with hyoscine the reverse is the truth. The vomiting caused by ether may be partly central, but I think it is mainly caused by the irritating action of fluid impregnated with ether, which acts after the anesthetic has been stopped and when reflex action returns.

It is, then, to the action which hyoscine possesses, of keeping the air passages free from fluid that I attribute the ease with which ether is taken, and the freedom from sickness afterwards, in the cases in which the drug has been given by me.

The details of my cases are as follows: Twenty-three operations; all females, Clover inhaler; Squibbs' ether; previous to the operation, a thorough cleaning out of the gastro-intestinal tract. Fourteen major operations; seven plastic; two examinations of the bladder. Average amount of ether per hour used, a fraction over $2\frac{3}{4}$ ounces. Smallest amount of ether per hour used was two ounces in an examination of the bladder which lasted twenty-eight minutes. The largest quantity was nine and one-half ounces in a major operation which lasted three hours and thirty-three minutes. Average time to produce surgical anesthesia was six and a half minutes. The longest time required was ten minutes; the shortest, three minutes. In twenty cases there was no initial excitement. In three cases there was some slight excitement which quickly subsided. In nine cases the pupils were dilated. In fourteen cases the pupils remained unaltered. In no case did the pulse rate at any time exceed 116 to the minute. In one case it was as slow as 64. The average was about 86.

The respirator is never were more frequent than 44 per minute. Average about 30. In no case was there cyanosis or vomiting during the administration of the anesthetic. In one case there was muscular rigidity and tremor when the patient was recovering. Vomiting afterwards was absent in sixteen cases, was present slightly in five and was pretty severe in two. In comparing the results of these cases with over five hundred previous administrations with the Clover inhaler, not to speak of the cone, I believe that I have reason to say that hyoscine hydrobromate has power to lessen or prevent many of the disagreeable and dangerous effects of ether.

However, in conclusion, I wish to state that my experiments have been too few as yet to come to an absolute conclusion on the subject, but I think are sufficient to warrant its trial by experienced anesthetists, and I hope those who are present who are in the habit of giving ether will often use the drug and report the results.

HEMIPLEGIA COMPLICATING PREGNANCY.—REPORT OF A CASE.

By LEWIS H. MARKS, M.D., POUGHKEEPSIE, N.Y.

I cite the history of this case to again bring out the possibilities of certain complications of the pregnant state.

On November 29th, 1902, I was engaged to attend Mrs. P. age 42, during her approaching confinement, and in accordance with my usual custom, called to ascertain something of her past history and her present condition. She was the mother of nine children, five of whom are living, and had never experienced any difficulty in her previous confinements. Her weight was approximately two hundred. The abdominal walls were very much relaxed and pendulous. To add to her already ample proportions was an umbilical hernia of moderate size, which was kept in abeyance by an abdominal support.

About two weeks previous to my call patient had an apoplectic stroke, which affected the entire left side. While at breakfast she suddenly became aware of an inability to use the fingers of her left hand. Her tactile sense was impaired, and speech was defective for two days. The numbness of the left side remained for two months after labor. On inquiry I found that her father had had three strokes. At my first visit patient in-

formed me she was over time fully three weeks, and seemed much concerned over her future. Urinalysis revealed no lesion of kidneys or bladder. December 9th, or ten days after my first visit, I was summoned about 11.30 p.m., as her pains were becoming very severe and regular. Examination externally and per vagina revealed the child in L.O.A. position. Os was moderately dilated. Progress was very slow, and the pains seemingly produced nothing more than a globular or pear-shaped protrusion of the abdominal walls.

At 6 a.m., on further examination, I found the os fully dilated, but almost absolute immobility of the child.

No obstruction was noted from tumor, pelvic contraction, or neglected bladder or bowels. The child's head was not considered to be a causal agent of the delay. I at once decided that instrumental delivery would be necessary, as the pains were lessening in force, and the mother becoming much exhausted. A large male child, weighing twelve and one-half pounds, was delivered under chloroform. Three days after the mother had a temperature of 100.3, which reached 102.4 on the fifth day. On the sixth day she had irregular chills, and complained of pains in the region of the bladder, and also in the external genitals, with difficulty in urinating. On examination, I found the right labia and adjacent parts very much swollen, red, and very tender to the touch. The vaginal wall bulged on the affected side.

A diagnosis of hematoma with secondary abscess formation was made. The patient at this time stated that at the time the anesthetic was about to be given she noticed a sensation of something giving away, which evidently was the truth. Fluctuation being present, a free incision was made, and a large amount of pus evacuated, after which the abscess cavity was thoroughly irrigated with hy. bichlor. 1-2000, and packed with iodoform gauze.

Temperature became normal, the difficulty of micturition became less, and speedy resolution took place.

This case developed the presence of a structurally weak circulatory system, and the possibility of an inherited tissue weakness, inherited from the father, who, as noted before, had had three strokes.

Another question of interest is this: Inasmuch as the uterine nervous supply comes from the gangliated cords of the sympathetic system and sacral nerves, could not the continued gestation and the inability to terminate such be due to defective innervation secondary to the hemiplegia?

OXYURIS VERMICULARIS IN THE APPENDIX.

ERNEST A. HALL, VANCOUVER, B.C.
Surgeon to Burrard Sanitarium.

The patient from whom the appendix was removed (a photograph of which is herewith presented), was a sturdy-looking farm laborer, aged twenty-four. He gave a history of having been kicked by a cow some two years ago. Since that time he had suffered from intermittent pains in the stomach and bowels, with flatulence and indigestion.

An examination some four months ago was negative. A second examination showed slight tenderness over the appendix. Temperature normal. He accepted my suggestion as to the advisability of removing the appendix. The superficial vessels of the appendix were engorged, the mucous membrane very much thickened, but no stricture present. No other abnormal conditions were found within the abdomen. A colony of pin-worms was found, located for the most part toward distal end. The microscope showed innumerable ova upon the surface of the mucous membrane.

This is the third case in which I have found this parasite in the appendix. In each case there were vague symptoms of chronic appendicitis, with flatulence and pain radiating towards the epigastrium, with slight tenderness over the appendix. Disorder of motor and secretory functions, as causative of the indigestion, is explained through the irritation of the sympathetic ganglia within the bowel-wall, by the parasites, snugly domiciled in the most dependent part of the appendix. To this we must add the absorption of the toxic excrement, which sufficiently explains the symptoms exhibited by these cases. The absence of abnormal temperature is a matter of little importance, since of all orthodox symptoms that of temperature in abdominal diseases is the least reliable. The frequency of the appendix as a breeding-place for parasites explains the great difficulty with which we so often meet in our efforts to dislodge this worm, as there is evidently a continuous stream of ova being discharged from the appendix into the cecum.

Clinical evidence is yet insufficient for us to assume that parasites within the appendix are causative of acute suppuration or post-cecal abscesses, but cases have been reported in which worms have been found in the peritoneal cavity after perforative appendicitis. In favor of this view, I will refer to a case which came under my observation; it is at least suggestive. A male child, aged four, had for two years passed large quantities of pin-worms, which

resisted all forms of medication. About a year ago a swelling was noticed in the lower right part of the abdomen, dull and semi-fluctuating, which gradually extended to the umbilicus. A diagnosis of tubercular peritonitis had been made. There was no tubercular history, nor did the child give evidence of any abnormality other than within the abdomen. My opinion was that the child suffered from either appendicular abscess or tubercular peritonitis, with the parasites as a possible cause of the latter in diminish-



ing the resisting power of the bowel by absorption of the toxins produced by the parasites. My advice *re* operation was refused, and the child taken to California. The abdomen increased in size and burst externally, discharging several quarts of pus, death following in a few days.

Metchnikoff (reported in *American Medicine*) found the ova of the *ascaris lumbricoides* and *trichocephalus dispar* in fecal matter from a young girl, aged nineteen, who already had six attacks of appendicitis. He also quotes another case, a boy of ten, who recovered from appendicitis after passing two *ascarides*. Lemoine

reported two similar cases, one a child of twelve, the other a man of twenty-three. It was impossible to state the exact condition of the appendix, as the four cases recovered without operation, but the clinical symptoms were typical of appendicitis. As to the results of the irritation of oxyuris, great difference of opinion appears to exist. Holt states that he has seen at least one case of chorea in which they were almost certainly the cause, and that they have been known to cause convulsions. It is the experience of many of us that after the intestinal canal is cleared of the worms the child's nutrition is improved, and neuroses lessened.

From the foregoing, it may not be an unwarranted stretch of deduction to recommend removal of the appendix in cases of oxyuris that have resisted medical treatment. When we consider the operative mortality, which is practically *nil*, the inch and a quarter incision, and the ten days' confinement, which is the rule in the majority of the writer's interim cases of appendectomy, and upon the other hand, consider the local irritation, the sepsis, and the disorder of the digestive functions, neuroses, and the possibility of appendicitis with abscess, we must admit that the consideration of the removal of the appendix in resistant cases of oxyuris vermicularis is within the bounds of legitimate therapeutics.

REFLEX CONVULSIONS IN GROWING BOYS AND GIRLS.—Eustace Smith, M.D. (*The Lancet*, London, January 24th, 1903). The author questions the diagnosis of epilepsy in the case of convulsions of children after infancy, grounding his doubts on the fact that digestive disorders or other local disturbance will cause convulsions which cease on removal of the cause. He cites a number of cases and emphasizes the danger to the nervous system of any long continued irritation. The presence of that common symptom, habitual cold feet, may thwart the best efforts to treat a chronic complaint in children. Indirectly it affects the nutrition and tends to heighten the susceptibility to chills, thus aggravating any weakness or injurious tendency. It is probable that those cases in which attacks recur after treatment are really not cases of reflex convulsion, even at first, but the intellect is not affected, as a rule. In those cases in which convulsions are caused by indigestion a removal of the cause will be followed by complete cessation of the trouble, and with proper treatment health will be restored. Many cases have been observed by him which warrant his assertion that young persons who, as late as twelve years of age, have suffered from these seizures, may grow into perfect adults, showing no further symptoms of the weakness of their childhood.—*Pediatrics*.

Miscellaneous

BANQUET TO SIR JAMES GRANT.

In recognition of fifty years spent in the practice of medicine, during forty-nine of which he was located in Ottawa, Sir James Grant was recently entertained to a banquet at the Russell House by the medical fraternity of the capital, and presented with an address and a silver loving-cup. Covers were laid at the dinner for eighty-five guests, and the medical profession of the Ottawa Valley was represented by its most distinguished members, who vied with each other in showing attention to the honored guest of the evening, who, after half a century of labor in the most arduous of callings, still retains in a marvelous degree the vigor and elasticity of youth. Sheriff Sweetland, M.D., filled the chair with dignity, having on his right Sir James Grant, and on his left Sir Frederick Borden. The usual loyal toasts were proposed and honored with characteristic heartiness, after which the chairman proposed the toast of "Our Guest," and alluded to his having introduced the first Canadian Pacific Railway bill. The address was read in an impressive manner by Dr. Cousens, and the presentation made amid enthusiastic cheers. Sir James Grant, who appeared to be greatly touched by this demonstration of friendship, returned his hearty thanks and favored the company with some reminiscences of his medical career. Proceeding, he said :

In no profession at the present day have greater advances been made than on the lines of surgery and of medicine. At the commencement of the nineteenth century the investigations of Jenner with reference to vaccination for the prevention of smallpox were being vigorously prosecuted. Since that day, notwithstanding the great opposition to this extremely important principle, it is now generally recognized that vaccination is the only safe means that can possibly be adopted to abolish finally the spread of this loathsome disease of smallpox. At that time, and for years afterwards, the study of anatomy was very much interrupted, owing to the want of material. Physiology was then in its infancy, and pathology was very largely a matter of speculation. Chemistry was in stages of possible investigation, and chemical medicine rose up almost in advance of any other department of medicine by the careful scientific investigation of Lennec, of Paris, who so advanced the theory of disease connected with lung tissue that he established a name and reputation recognized throughout the scientific world. In those days peritonitis was a common disease, and almost universally fatal. A major operation was considered the equivalent almost of a death warrant. Two great lights in London, Bright and Addison,

scientific workers in connection with Guy's Hospital, brought to light knowledge concerning the kidneys and kidney disease of a most remarkable character. Bright's disease was then defined, and dropsy, the result of it, explained clearly and scientifically, and Addison pointed out also the cause of bronzing of the skin. So these two scientific men, in connection with the hospital, accomplished an advance in the profession of a most remarkable character.

Surgery was advanced by Syme and Chopart, who, by their careful investigations, threw so much light on the whole subject as to make doubtful points at once comprehensible to the general observer, and added greatly to the means of saving life. Shortly afterwards Simpson, of Edinburgh, and Long, of the United States, introduced the principle of anesthesia, which accomplished much towards the relief of suffering humanity under severe operations. The three great advances in the medical profession during the fifty years were (1) the introduction of antitoxin for the cure of disease; (2) the germ theory of disease as advanced by Pasteur and subsequently worked up by Lister, and (3) preventive medicine as largely brought about by the medical profession, notwithstanding that it lessened their prospect of revenue.

Then we had the remarkable investigation, L. veran's plasmodium, from which the discovery was developed of mosquitoes impregnating individuals, and so disposing of the old idea that such fevers spread from marshes and decayed vegetable tissue. Then, again, tetanus, which was supposed to arise from a rusty nail, is now known to be due to germs in the soil communicating themselves to the system through the wound made by the nail. Furthermore, we have the theory of blood globules as a means of diagnosis of typhoid fever. Sir William Jenner established an almost world-wide reputation by his investigations with reference to typhoid, supposing that fever sprang from ulceration in the bowels. But Prof. Osler, of Johns Hopkins University, and a Canadian, has thrown great light upon this whole subject, and his researches show that Jenner's idea is not tenable, and that typhoid fever, as regards its origin, rests on a much wider basis. A most important advance is that with regard to X-rays and its utilization, not only in the investigation and advance of surgical conditions and diseases of the system, but also its application in the treatment of cancer. These are a few of the points to which I shall merely now advert, and from such we can form an idea of the remarkable advance which has been made in medical and surgical science within the last half century. And if science is to be progressive, and I have no doubt it will, the next quarter of a century will throw much light upon obscure points of to-day which will undoubtedly prove of vast service to humanity. (Loud applause.)

Dr. Powell, in felicitous terms, proposed the toast of the Parliament of Canada. He mentioned with it the names of Sir Frederick

Borden, Dr. Macdonald, Deputy Speaker, and Senator Sullivan, and praised, as unexcelled, the hospital equipment sent out by the Minister of Militia to South Africa.



SIR JAMES GRANT.

Sir Frederick Borden said that Parliamentary government in Canada had been a tremendous success. He paid tribute to the wisdom displayed in building the C.P.R. That was shown to-day by the thousands of settlers who were flocking to settle in the great

wheat belt. There was a magnificent future before Canada, but the problems to be worked out before the country solved its destiny would test the sagacity of the Canadian statesmen and Parliament. The possibilities in front of this country were so enormous that we could not properly appreciate them at the present moment. He did not believe that any one of them could see the possibilities that would be realized within the next quarter or half a century.

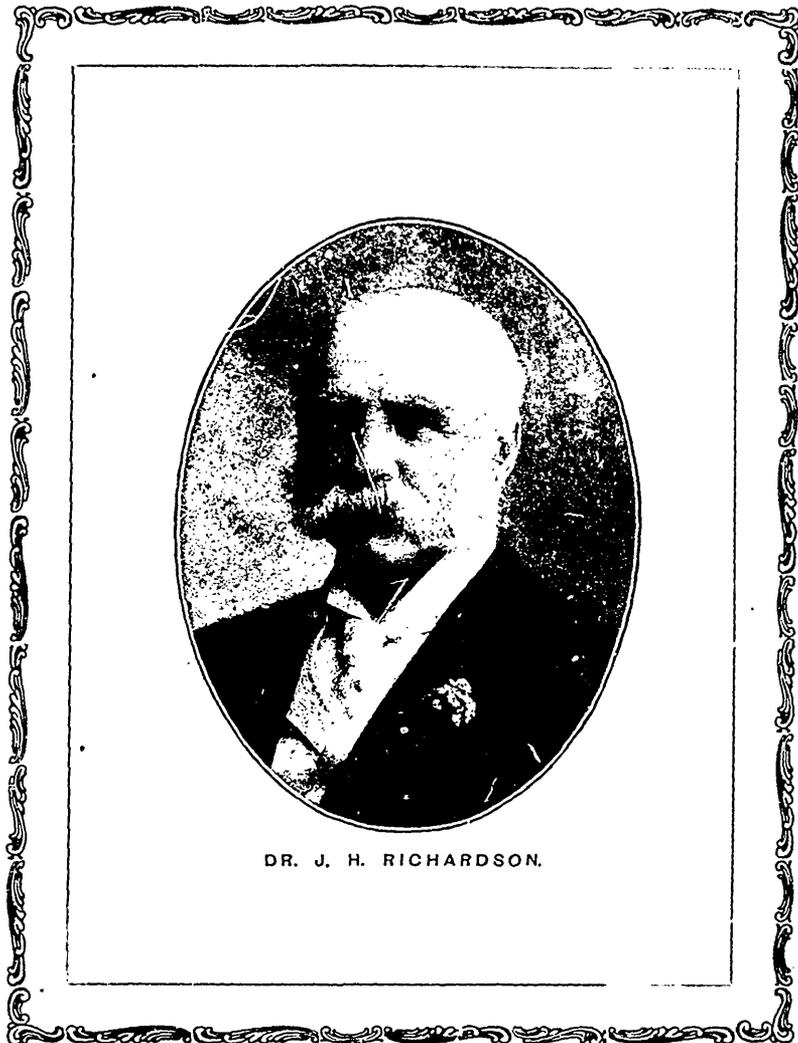
The other toasts were: "The Profession," proposed by Dr. Klotz, and acknowledged by Dr. Montizambert and Hon. Mr. Sullivan; "Our Hospitals," proposed by Dr. Cook, and replied to by Dr. Chabot, Dr. Hanna, Dr. Kidd, and Dr. Law.

The committee who carried out the arrangements for the dinner were: Drs. Cousins, Minnes, Troy, Kidd, Hanna, Kennedy, Klotz, Gibson, Aubry, Law, Brown (secretary), and Chabot.—*The Globe*.

DR. J. H. RICHARDSON HONORED.

The first medical graduate of the University of Toronto, a teacher of anatomy for half a century, an octogenarian, and one of Toronto's grand old medical men, Dr. James H. Richardson was, on April 16th, honored by a dinner by his old students, on the occasion of the presentation of his portrait to the University. Prominent medical men from this city, from different parts of Ontario, and from the United States, came to show their appreciation of his strength of character, thorough methods, and high example. Mr. I. H. Cameron presided. At his right sat the guest of the evening. Others at the head table were Hon. Chas. Moss, Vice-Chancellor; President Loudon, Dean Reeve; Dr. Thos. Cullen, Baltimore, Md.; Prof. Ramsay Wright, A. Dickson Patterson, J. R. Roaf, Wm. Roaf, Wm. Freeland and Dr. Bascom. Among others noticed were Dr. Uzziel Ogden, another of Toronto's grand old medical men; Prof. Ellis, Doctors J. Price-Brown, A. Webb, W. H. Alexander, J. M. Amyot, W. R. Walters, C. H. Britton, John Ferguson, G. H. Burnham, E. E. King, W. H. B. Aikins, J. O. Orr, Dr. King, W. P. Caven, H. J. Hamilton, W. J. McCollum, J. E. Elliott; F. P. Drake, London; James Johnston, Bradford, Pa.; H. A. Bruce, H. F. McKendrick, Wm. Goldie, Geoffrey Boyd, Graham Chambers, J. T. Fotheringham, R. J. Dwyer, D. S. Hoig, J. L. Smith, D. McGillivray, H. Bascom, Uxbridge; Wm. Oldright; A. McKinnon, Guelph; Geo. H. Clemens, C. Scadding, T. W. Machell, G. H. Carveth, John Noble, C. J. Hastings, A. Primrose, Alex. Davidson, J. D. Thorburn, H. Wilberforce Aikins, J. F. W. Ross, C. R. Cuthbertson, J. M. Cotton, A. Jukes Johnson, G. Silverthorn, A. B. Macallum, G. A. Peters, John Caven; S. T. Rutherford, Listowel; Jas. L. Turnbull, Goderich.

The loyal toast honored, the portrait, which was by Mr. A. Dickson Patterson, and is a striking and natural likeness, was presented by Dr. Cleland, and accepted by Vice-Chancellor Moss, who reviewed



the career of the guest, and paid a fervent tribute to his service as a Senator of the University during an important period.

After an address had been read by Prof. Ellis, the toast of "The Guest" was proposed by Mr. Cameron, who said that Dr. Richard-

son could catch fish when even the natives failed, and it was one of the secrets of his success in life that he usually brought home fish. He was also a devotee of curling in winter and of lawn bowling in summer.

Dr. Richardson, who was most enthusiastically received, expressed heart-felt thanks for the reception, and then briefly reviewed some of the incidents of his long career. He had first studied medicine in 1841 with Dr. Rolph, then exiled in Rochester. He then attended the first course of medical lectures at King's College, Toronto, there being only one other student, who was absent most of the time, and he was the first graduate. In 1844 he crossed the ocean and entered Guy's Hospital in London, and was present at the first demonstration of ether in London. In 1847, having graduated, he returned and commenced practice. In 1850 he succeeded Dr. Sullivan as professor of anatomy in the recently-constituted medical department of the University of Toronto, and when that faculty was discontinued in 1853 he accepted the chair in anatomy in the Toronto School of Medicine, which he held until 1887, when, the medical faculty of the University being restored, he returned to the same position there, resigning only a year ago. Dr. Richardson gave many incidents illustrating the progress of medicine, and was loudly cheered as he resumed his seat.

Dr. Cullen proposed the toast of "The University," and President Loudon responded, and the health of Mr. Patterson, the artist, was proposed by Dr. Ross.—*The Globe*.

GATHER TO HONOR DR. WM. BAYARD.

A tribute of public regard and personal esteem was paid to Dr. William Bayard of St. John, N.B., recently, when the resolution passed by the Municipal Council, because of his resignation from the Board of Commissioners of the General Public Hospital, was presented to him at his home in Germain Street.

The resolution was handsomely engrossed on parchment by D. R. Willet, and bound in red morocco, with gold finish by J. & A. McMillan. On the cover was this legend, in letters of gold: Municipality of the City and County of St. John, to Wm. Bayard, Esq., M.D., LL.D., A.D. 1903.

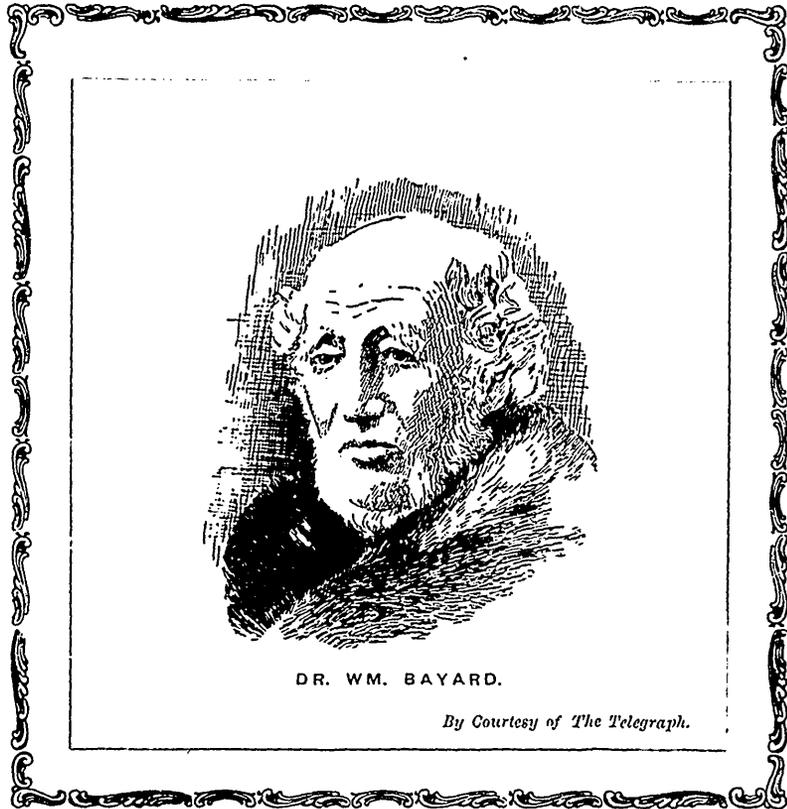
At 4 o'clock there assembled at County Secretary Vincent's office, Warden John McMulkin, County Secretary Vincent, Councillors McGoldrick, Baxter, Millidge, Lewis Lee, Hogan and Dean. More of the city councillors would have been there had they not been engaged in an important city hall meeting.

The party went to Dr. Bayard's residence and were heartily welcomed by him, they being presented by Councillor McGoldrick,

who is also one of the hospital commissioners. Later, Councillors Allan and Macrae arrived.

THE PRESENTATION.

Addressing Dr. Bayard, Warden McMulkin said they had met with feelings of mingled pleasure and regret ; pleasure at seeing the



venerable doctor in the good health he was enjoying at his time of life, and regret that he had severed his connection with the Board of Commissioners of the hospital. His resignation had come at a time when the board would have been glad indeed to retain him, because they were going to make extensive improvements at the hospital, and would have been glad to have had him at the head of affairs. So it was with an added regret that they found he had made up his mind to sever his connection with the commission.

Warden McMulkin, with a few words expressing the warm feeling of all for Dr. Bayard, called on the county secretary to read the address.

THE COUNTY'S GOOD WISHES.

County Secretary Vincent, who gave an added dignity to the event by wearing his barrister's gown, then read the address, as follows :

"At a meeting of the Council of the Municipality of the City and County of St. John, held at the court house in the city of St. John on the 20th day of January, A.D. 1903, the following resolution was unanimously adopted :

"The Municipality of the City and County of St. John, while they have been compelled with reluctance to accede to the request of William Bayard, Esquire, M.D., that his resignation of the office of Commissioner of the General Public Hospital should be accepted, cannot allow the occasion to pass without a public expression of their high appreciation of the value of the services which, for more than two generations, he has rendered to the suffering poor of this community. It is not too much to say that the hospital itself would not have come into existence as a municipal work, but for his unwearied exertions. Voluntary efforts to provide for the afflicted having failed, the aid of the legislature, at his instance, was invoked ; and the present institution, created for the benefit of all, has been sustained by the contributions of all. While he has been connected with the hospital in an administrative capacity alone, in his general practice, the general public, for more than sixty-five years, has received the benefit of his medical and surgical skill, and that remarkable intuition in the diagnosis of disease which could only have found adequate recognition in a wider sphere.

"During his professional career, two great improvements have tended materially to alleviate the lot of humanity ; the use of anesthetics, and the application of antiseptic methods to surgical operations. While Dr. Bayard has always led the van in the use of these and all other discoveries of real utility, he has persistently opposed charlatanism in every form. By the consent of all he holds a commanding position in that noble profession to which he has devoted his life. That that life may long be spared is the prayer, not only of the citizens of this municipality, but also of the people throughout the whole province.

"(L.S.) JOHN MCMULKIN, *Warden.*

"GEORGE S. VINCENT, *Secretary.*"

DR. BAYARD'S REPLY.

Dr. Bayard had listened attentively to the reading and when Mr. Vincent concluded the doctor replied. He said it was true

that for nearly forty years he had given the best that was in him to the hospital, and while doing so he felt, whenever he passed through the wards that he was amply rewarded for anything he had done, but when a resolution couched as was the one before him, was presented, he felt he could not find words to thank those whom he addressed. It was true that he had received many hard kicks during that period, but such kindly acts as this had helped to take the sting away and no doubt in time would efface them from his memory.

He left the hospital commission with regret and, while he claimed the privilege of withholding his reasons, he had no doubt that all would say he was justified if he were at liberty to make the reasons known.

The resolution had emphasized the fact that the hospital was built as a municipal institution and paid for by all. This was as it should be and the institution would not be supported, under present requirements at least, by voluntary subscriptions of those who should support it.

He acknowledged he was the one who secured the imposition of a tax for this purpose and he saw no reason to regret it. He had obtained about \$10,000 in promises at that time for the hospital and went to four wealthy property men for aid, but they would give none. Then he felt satisfied the only way to get it from them was by means of the tax collector. He had a bill drawn up and Judge Barker allowed him to read it before the grand jury and it soon was taken up and made law.

WHY TAX IS JUSTIFIABLE.

He said there were one hundred hospitals in London, all heavily in debt and that at Queen Victoria's Jubilee the Prince of Wales (now King Edward) tried to raise £1,000,000 to pay off these debts. He succeeded in getting only £124,000. And why was this so? About 80,000 beds were in these hospitals and 2,000,000 enjoyed the benefits of the institutions, and many were able to pay but did not. In St. John things were the same, people who were well able to pay went to the hospital.

He had not lost his interest in the hospital, and in connection with the new improvements he asked to make two suggestions. The first was that a proper fire-proof and safe roof of copper be put on. The expense of putting it on would be the greatest part, and the whole cost would be \$5,000 or \$6,000.

Warden McMulkin here said that the commissioners were contemplating this.

Dr. Bayard continued, and also suggested proper ventilation and spoke of the Boyle system, which he explained. He closed with again expressing the thanks for the honor done him.

A SOCIAL HOUR.

On invitation of Dr. Bayard all then partook of his hospitality, and a very pleasant hour was spent. Councillor McGoldrick was toastmaster, and the health of the warden, the county council, the hospital commissioners, the county secretary brought speeches from Warden McMulkin, Councillors Lee, Horgan, Dean, Millidge, McGoldrick, Lewis, Baxter, Allan, Macrae, County Secretary Vincent and representatives of the *Sun* and *Telegraph*.

By all good words were spoken for the venerable Dr. Bayard, and at 6 o'clock, with hearty handshakes and renewed good wishes, the delegation left, after having taken part in a very pleasant function.—*St. John Telegraph*.

MEDICO-LEGAL CASE IN BRITISH COLUMBIA.

An application involving serious charges against Dr. E. B. C. Hannington, of Victoria, came up in Chambers a short time ago before Mr. Justice Drake. W. J. Taylor, K.C., made a motion for a writ of mandamus to compel the College of Physicians and Surgeons of British Columbia to hear and determine a complaint made against Dr. Hannington by A. J. M. Inverarity. A. E. McPhillips, K.C., was present representing the council, but was not called upon, as the motion for the writ of mandamus was changed into an application for a rule *nisi* calling upon the Medical Council to show cause why an order to hear and determine the complaint should not be made. This change in the proceedings made them altogether *ex parte*, and Mr. McPhillips was not heard, although it is understood that he was fully prepared to rebut the charges made against the doctor. Mr. Taylor and Mr. McPhillips had arranged to argue the matter exhaustively on the motion yesterday for a mandamus, but the change of procedure postpones the argument until the hearing of the rule *nisi*.

The ground upon which the college is asked to act is the allegation that Mrs. Inverarity's life was sacrificed about August 4th, 1901, by unskilful treatment, Dr. Hannington being accused of drunkenness.

The case against the doctor was contained in a number of letters read as exhibits to the complainant's affidavit.

It appears that the doctor attended Mrs. Inverarity in her confinement, and it is claimed that her death was due to a variety of preventible causes. Ether is said to have been administered for eight hours, and cocaine poisoning is also alleged. The complainant avers that the improper course of treatment was due to the intoxication of the doctor, and this contention is held to be substantiated by five

witnesses. Another grievance is that the body of deceased was subjected to the knife without the consent of the complainant.

Mr. Taylor in his argument held that the Medical Act left no choice to the college in the matter, and he cited authorities indicating that the clauses granting the college power to put names on the roll made it obligatory upon the Medical Council to investigate such a serious charge. The council had declined considering the matter by reasons of the body being taken to Scotland, and a post mortem examination not therefore being possible. This, he submitted, was no answer to the charge.

To an inquiry by His Lordship, whether any other course of procedure was open, Mr. Taylor observed that action had to be taken within one year from the commission or omission of any act by a practitioner, if such practitioner were to be held liable for negligence or malpractice. Proceedings before the Medical Council subject to an appeal to the courts were the only remedy. It was intended that the Medical Council should protect the public in addition to guarding the interests of the practitioner.

His Lordship objected to the form of proceeding, and it was altered to an application to show cause why the council should not hear and determine the matter.

Mr. McPhillips, when spoken to later, intimated that no hasty conclusion should be formed upon the proceedings, as only one side of the case had been presented, and he hopes when the matter again comes up for hearing, to completely exonerate Dr. Hannington from all blame.

Mr. Inverarity, it is stated, has appealed to the Medical Council instead of instituting a civil action for damages against the doctor, upon the ground that whilst he would not think of accepting any money consideration for the loss of his wife, he believes that the public should be protected from physicians rendered incapable by chronic indulgence to liquor.

The complainant also alleges that English physicians pronounced the treatment given to his deceased wife as barbarous.

Argument on the rule *nisi* calling upon the College of Physicians and Surgeons to show cause why it should not hear and determine certain complaints made by A. J. M. Inverarity in connection with the death of his wife in August, 1901, whilst under medical treatment during confinement, was heard later on in Chambers before Mr. Justice Drake.

His Lordship intimated that counsel should confine their argument to a consideration of the duties cast upon the college by the Act, and that the merits of the allegation preferred by the complainant need not be discussed on the application.

A. E. McPhillips, K.C., who appeared for the college, contended that mandamus proceedings could only be invoked after all other remedies had been exhausted. In this application the alleged

ground of complaint had occurred so long ago as August, 1901, and although a solicitor had been consulted at that time, no action had been taken. The Act required proceedings to be taken within one year from the time when the professional service called into question had terminated. It could not be argued that the complainant could allow the period of limitation for taking action to pass by, and then afterwards ask for an extraordinary remedy when he could have taken steps within the period allowed by the statute.

Mr. McPhillips contended that the Medical Council's powers were discretionary, unless three registered medical practitioners had applied for an inquiry to be held. The case had been first brought up in operation in Ontario, and Chief Justice Armour had held that the powers were discretionary in an analogous case. He further argued that the local act was only intended to apply to questions of professional ethics, and not of grave offences. The council could take action to remove a practitioner's name from the rolls after a competent tribunal had inquired into and determined a complaint.

Mr. Taylor in reply said that the case of *Julius vs. the Lord Bishop of Oxford* shows that the meaning of permissive words such as "may," "It shall be lawful" is the same whether there is or is not a duty or obligation to use the power which they confer. They are potential and never in themselves significant of any obligation. The question whether a judge or a public officer to whom a power is given by such words is bound to use it upon any particular occasion or in any particular manner must be solved *aliunde* and in general it is to be solved from the context, from the particular provisions or from the general scope and objects of the enactment conferring the power.

The Medical Act was passed for the protection of the public. The society was created by statute and endowed with the power of regulating who should or should not practise medicine and surgery. It possessed the sole power within the Province of determining qualification or non-qualification, subject in some instances to revision by the courts. In all cases, however, the society must initiate the proceeding. The council must act before a court had power to interfere. The Medical Act furnished ample machinery for the exercise of the council's power. The present application was to compel the council to hear an application to strike a name off the register. The council alone possessed this power. A physician's intoxication would not be sufficient ground for an action unless damage resulted to the patient if living, yet such a condition might amount to unprofessional conduct.

Similarly an action could not be successfully maintained under Lord Campbell's Act, for mutilation of a body after death, as such an action was founded upon pecuniary loss sustained. The council

should determine these questions and a mandamus is the only remedy to move the council to action.

The remark of the Chief Justice in the Ontario case was a mere *obiter dictum*. The point decided was as to the authority of the Medical Council to strike a practitioner's name off the register for unprofessional conduct in advertising a certain cure. There the council acted. Here it refuses to act.

Judgment was reserved at this time.

Hon. Mr. Justice Drake some days after handed down the following judgment in relation to the application of A. J. M. Inverarity to compel the committee of the Medical and Surgical Society to hear and determine certain charges preferred against a medical man:

The rule *nisi* was granted in this case upon the facts stated in Mr. Inverarity's affidavit, in which he makes certain definite charges against a medical man for malpractice and want of care and skill owing to intoxication while attending the wife of the complainant, and for cutting up the body of Mrs. Inverarity after death without obtaining the leave of her husband. The charges are sufficiently serious to call for inquiry, but on this application I have to deal with the question whether or not the remedy asked for, that of a mandamus, is one which the court should grant to compel an inquiry by the committee of the Medical and Surgical Society into the charges made. A mandamus is a prerogative writ issued for the purpose of compelling a subordinate tribunal to do that which the law compels them to do, and which they have neglected or refused to perform. If this tribunal has merely the power given them to do an act which implies a discretion to do it or not, a mandamus will not be granted, as that would be overriding the statute, and would in fact be compelling the performance of an act which the legislature had not seen fit to make compulsory.

Mr. Inverarity, on 8th July, 1902, asked the Medical Council to investigate the circumstances detailed by him. To this no answer was given until November 20th, when the council stated that they had referred the matter to their solicitors, who suggested that it was not the province of the council to deal with that which might be the subject-matter of a suit at law, and they refused inquiry.

There is nothing in the Act which confines inquiries to matters which are capable of being investigated in a court of law. The charges of infamous or unprofessional conduct, to use the language of the Act, can be dealt with independent of any legal rights the complainant may have. The remedy given by the Act is one which cannot be given by a court of law. Section 61 of the Act protects professional men from any action of negligence or malpractice unless brought within a year. This protecting section has no bearing on sections 35 and 36, which are not in the nature of actions, but deal with criminal convictions and unprofessional

conduct by a practitioner. These sections give power to the council to refuse registration or to erase the name of a person from the register after due inquiry made. However, the Medical Association made use of this opinion of their legal advisers to avoid the inquiry asked for, and the question is, can this court compel them now to hold an inquiry? I am of the opinion it cannot. The Act draws a sharp distinction between the permissive "may" and the compulsory "shall" in section 36. The council may, and upon application of three registered medical practitioners shall hold an inquiry. Thus the council have the power, but they need not exercise it, and in this case they have refused to exercise it; and such being the case this court will not compel the exercise of a power which is in the discretion of the council; neither will the court inquire into the merits of the case submitted to them. If the council hesitate to clear a professional man of serious charges made against him, or to make an inquiry in the interest of those who have to rely on the members of the profession, they can, as they have done in this case, decline to make any inquiry into charges which, whether well or ill-founded, must have a most prejudicial effect on the professional reputation of a member of their society.

I must, however, refuse the mandamus asked for with costs.—
Victoria Colonist.

QUEBEC LEGISLATURE AND THE PROFESSIONS.

It must give every citizen of this province an assured and comfortable feeling to read that a committee of the Legislature is engaged in the benevolent task of making lawyers, druggists, dentists and doctors "by Act of Parliament." Presumably some of these fortunate individuals have found it inconvenient to pass examinations in the usual way; and so they are to be permitted to mix drugs or to deal out legal advice, to pull teeth or diagnose an illness, by the simple process of getting a Bill passed by the Legislature.

There are people who deny that men can be made sober by Act of Parliament; but now they will know that, at all events, they can be made wise by that means. A "get-rich-quick" scheme is a fool to this. This is "get-an-education-like-lightning" plan which must challenge the admiration of every person not liable to be practised on by these professional gentlemen, "made while you wait" by the Legislature.

Let it be understood that we do not cast any reflection upon their ability to pull teeth or handle a case of typhoid. The Legislature is composed of a number of gentlemen who never pass any

legislation which they have not taken the utmost pains to assure themselves is wholly in the public interest. They never dream of shutting their eyes to any possible point of doubt in a suggested measure for selfish reasons or a party advantage. We all have the utmost faith in the politicians who represent us so patriotically and wisely and independently at Quebec. When they make a man a physician, we know at once that he is a physician; and we would be perfectly willing to prove our faith in their discernment and perspicacity by permitting him to practise on the persons of these very public men whom we so esteem and value.

But strangers may not have our faith in the Legislature. Down in New York, and up in Ontario, and in other far-away places, people have sometimes found it necessary to say unkind things about politicians; and if a family were to move to Quebec from one of those unfavored districts where the politician is not—as with us—a model of unselfishness and wisdom, they might be rendered uneasy if told that some of our doctors here have passed the usual college examinations all right, but that others have been voted into their degrees by the local Legislature. We fear that these strangers might want to know “which were which”; and, when we had told them that so supreme was our confidence in our politicians that we had quite forgotten, calling both kinds in indifferently, they might not even then be reassured. They would look at a doctor's sign and wonder whether he had worked his way through College, or had just worked the Legislature.

Thus, for the sake of these new-comers—and not for ourselves at all—we wonder if it would not be just as well for our industrious Legislature to leave the making of doctors, dentists, druggists, and even lawyers, to the usual processes. The community is not really suffering from any scarcity along these lines. There seem to be nearly enough professional gentlemen to collect all the fees we can pay. And some of us have an old-fogeyish preference for a college-trained man to attend our families when they are sick, and for a chap who can pass the customary drug examinations to make up a prescription for us from shelves punctuated with poisons. It may show evidence of a “strong pull” for a young man to get a special Bill through the Legislature, but the regularly certificated dentists have quite strong enough a pull when they get attached to the end of a tooth; and when it comes to drilling a hole in one's inner soul to be filled with beaten gold, it is just as well to feel certain that the man behind the drill knows how far he is going.

The Legislature had better attend to law-making, and leave lawyer-making alone. The first thing it knows it will be over-worked, and will have to call in one of its own manufacture of doctors.—*Montreal Star*.

THE PATH THE CALF MADE.

The following lines by that brilliant young poet, Sam Walter Foss, now deceased, were reproduced in a recent number of the *Chicago Tribune*. We are inclined to think that the poet was "ordained to preach," and that members of the medical profession may profitably listen to his "preachment." Is it not too often true that in obedience to the "honored traditions of medicine" we are following the "path the calf made?"

One day through the primeval wood
 A calf walked home, as good calves should,
 But made a trail all bent askew,
 A crooked trail, as all calves do.

Since then two hundred years have fled,
 And, I infer, the calf is dead;
 But still he left behind his trail
 And thereby hangs my moral tale.

The trail was taken up next day
 By a lone dog that passed that way,
 And then a wise bell-wether sheep
 Pursued the trail o'er vale and steep,
 And drew the flock behind him, too,
 As good bell-wethers always do.

And from that day o'er hill and glade
 Through those old woods a path was made,
 And many men wound in and out,
 And dodged and turned, and bent about,
 And uttered words of righteous wrath
 Because 'twas such a crooked path.

But still they followed—do not laugh—
 The first migrations of that calf,
 And through this winding woodway stalked,
 Because he wobbled when he walked.

This forest path became a lane,
 That bent and turned and turned again;
 This crooked lane became a road,
 Where many a poor horse with his load

Toiled on beneath the burning sun,
 And travelled some three miles in one.
 And thus a century and a half
 They trod in the footsteps of that calf.

The years passed on in swiftness fleet,
 The road became a village street,
 And this, before men were aware,
 A city's crowded thoroughfare;
 And soon the central street was this
 Of a renowned metropolis.
 And men two centuries and a-half
 Trod in the footsteps of that calf.

Each day a hundred thousand rout
 Followed the zigzag calf about,
 And o'er his crooked journey went
 The traffic of a continent.
 A hundred thousand men were led
 By one calf near three centuries dead.
 They followed still his crooked way,
 And lost one hundred years a day,
 For such reverence is lent
 To well-established precedent.

A moral lesson this might teach
 Were I ordained and called to preach,
 For men are prone to go it blind
 Along the calf-paths of the mind.
 And work away from sun to sun
 To do what other men have done.

They follow in the beaten track,
 And out, and in, and forth, and back,
 And still their devious course pursue,
 To keep the path that others do.
 But how the wise old wood gods laugh
 Who saw the first primeval calf!
 Ah! many things this tale might teach,
 But I am not ordained to preach.

—*Maryland Medical Journal.*

VICTIM—"Phew! What kind of cheese is that?" Waiter—
 "De Brie, monsieur." Victim—"Well, remove the debris."—
Harvard Lampoon.

The Physician's Library

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. Third edition. 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 Française de Dermatologie; Correspondierendes Mitglied der Wiener Dermatologischen Gesellschaft; Socio Onorario della Società Italiana di Dermatologia e Sifilografia; late 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. 1,400 pages. Cloth, \$5.00; sheep, \$6.00 net. P. Blackiston's Son & Co., 1012 Walnut Street, Philadelphia. Canadian Agents: Chandler & Massey, Toronto.

"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 teachings 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 is dictated. The result is a work every page of which bears the impress of thoroughness and large personal experience.

Diseases of the Pancreas, Diseases of the Suprarenal Capsules, and Diseases of the Liver. By DR. L. OSLER, of Vienna; DR. E. NEUSSER, of Vienna; and DRs. H. QUINCKE and G. HOPPE-SEYLER, of Kiel. The entire volume edited, with additions, by FREDERICK A. PACKARD, M.D., late Physician to the Pennsylvania and to the Children's Hospitals, Philadelphia; and REGINALD H. FITZ, M.D.; Hersey Professor of Theory and Practice of Physic, Harvard University Medical School, Boston. Handsome octavo of 918 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. Cloth, \$5.00 net; half morocco, \$6.00 net. Canadian Agents: J. A. Carveth & Co., Toronto.

This book combines in one volume the sum of our knowledge concerning diseases of the pancreas, the suprarenal capsules, and the liver. Any contribution on these subjects is of great interest to the profession, and these monographs, proceeding from such distinguished investigators, will be found of unusual importance. In the sections on the pancreas and the suprarenals, the numerous experiments upon animals cited will be of the greatest value to the pathologist, the clinician, and the pathologic anatomist, affording an insight into the more deep-seated processes, and offering an opportunity of comparing the disturbances of function produced by morbid conditions experimentally induced, with bedside and autopsy observations. In editing these sections the editor has availed himself of the writings of Korte and Mayo Robson, especially the latter's important treatise on the etiology and treatment of chronic pancreatitis. An editorial addition to the section on the suprarenal capsules which seems especially noteworthy, is the investigations and discoveries on the active principles and therapeutic properties of suprarenal extract. The excellent article on the liver is as thorough and complete as those on the pancreas and suprarenals. Dr. Packard's careful clinical work, and his interest in the diseases of the liver, mark him as the most suitable

person to edit this article. A survey of this work shows numerous critical additions, embodying the very latest contributions, besides expressions of his own views regarding subjects under discussion. He has devoted special care to diagnosis and treatment, including the surgical procedures that have recently found their place in this field. With these numerous editorial additions the articles are brought fully up to date, and have no equal in our language.

Tuberculosis: Recast from Lectures delivered at Rush Medical College, in affiliation with the University of Chicago. By NORMAN BRIDGE, A.M., M.D., Emeritus Professor of Medicine in Rush Medical College; Member of the Association of American Physicians. Handsome 12mo volume of 302 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. Cloth, \$1.50 net. J. A. Carveth & Co., Limited, 413-415 Parliament St., Toronto, Canada.

In this excellent work the practical side of the care and management of those sick with the various non-surgical forms of tuberculosis has been concisely stated. Full consideration has been given to prophylaxis, an all-important phase of the subject that has heretofore been much neglected. There are also chapters upon the bacillus of tuberculosis; on the pathology, etiology, symptoms, physical signs, diagnosis and prognosis of the disease, each treated in the judicious and thorough manner to be expected in a work by such a well-known authority as Dr. Bridge. Treatment is accorded unusual space, there being chapters upon hygienic treatment, management of the diseased lung, climatic treatment, medicinal and local treatments, special treatments, besides a chapter devoted to the subject of sanatoria. Altogether the book is a most valuable one, and we heartily recommend it to practitioners as the latest and best work of its pretensions it has been our good fortune to review.

Diseases of the Stomach. American edition of Nothangel's Practice. By DR. F. RIEGEL, of Giessen. Edited, with additions, by CHARLES G. STOCKTON, M.D., Professor of Medicine in the University of Buffalo. Handsome octavo volume of 835 pages, illustrated, including 6 full-page plates. Philadelphia, New York, London: W. B. Saunders & Co. 1903. J. A. Carveth & Co., Canadian Agents. Cloth, \$5.00 net; half morocco, \$6.00 net.

This volume, like the others of this excellent practice, is thorough and complete. The importance of examining the stomach-contents in diagnosis, and the various methods of obtaining

the contents and performing the examination, are discussed with the accuracy and clearness that spring from wide experience. Full consideration is given to the hydrochloric acid question as a factor in the pathology of stomach diseases, the latest views having been incorporated by the editor. Particular attention has been accorded disturbances of motility, and their influence in the disturbances of secretion. It is evident that careful study has been devoted to the subject of impairment of the absorptive powers, and the significance of gas-fermentation has been emphasized. The name of Riegel, as an authority on diseases of the stomach, is well known to the medical profession. He was one of the earliest workers in the modern method of studying gastric diseases, and is therefore in a position to make an excellent presentation of the subject, both from a theoretical and clinical standpoint. The editor, Prof. Stockton, of the University of Buffalo, a recognized authority on diseases of the stomach on this continent, has added considerable matter to the text, bringing the work in accord with our present knowledge. We recommend specially this work to the medical profession, as we believe it to be the best work on the subject of gastric diseases yet published in the English language

A Text-Book of Legal Medicine and Toxicology. Edited by FREDERICK PETERSON, M.D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and WALTER S. HAINES, M.D., Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College, in affiliation with the University of Chicago. Two imperial octavo volumes of about 750 pages each, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. Per volume, cloth, \$5.00 net; sheep or half morocco, \$6.00 net. J. A. Carveth & Co., Limited, 413-415 Parliament Street, Toronto, Canada.

This work presents to the medical and legal professions a comprehensive survey of forensic medicine and toxicology in moderate compass. For convenience of reference the treatise has been divided into two sections, Part I. and Part II., the latter being devoted to Toxicology and all other portions of legal medicine in which laboratory investigation is an essential feature. Under "Expert Evidence" not only is advice given to medical experts, but suggestions are also made to attorneys as to the best methods of obtaining the desired information from the witness. The Bertillon and Greenleaf-Smart systems of identification are concisely and intelligently described, and the advantages of each stated. An interesting and important chapter is that on "The Destruction and Attempted Destruction of the Human Body by

Fire and Chemicals;" for on the determination of the human or animal source of the remains frequently depends the legal conduct of a given case, and the guilt or innocence of the accused. A chapter not usually found in works on Legal Medicine, though of far more than passing significance to both the medical expert and the attorney, is that on the medico-legal relations of the X-rays. The responsibility of pharmacists in the compounding of prescriptions, in the selling of poisons, in substituting drugs other than those prescribed, etc., furnishes a chapter of the greatest interest to everyone concerned with questions of medical jurisprudence. Also included in the work is the enumeration of the laws of the various States relating to the commitment and retention of the insane. In fact, the entire work is overflowing with matters of the utmost importance, and expresses clearly, concisely, and accurately the very latest opinions on all branches of forensic medicine and toxicology.

Operative Surgery. By HERBERT W. ALLINGHAM, F. R. C. S., Surgeon to the Household of His Majesty the King; Surgeon-in-Ordinary to His Royal Highness the Prince of Wales; Senior Assistant Surgeon and Lecturer on Operative Surgery at St. George's Hospital; Consulting Surgeon to the Surgical Aid Society; Late Surgeon to the Great Northern Hospital; Late Assistant Surgeon to St. Mark's Hospital for Diseases of the Rectum. London: Baillière, Tindall & Co.

Concise, accurate, practical, can well be applied to this neat little production of 367 pages from the pen of this distinguished surgeon. Allingham is so well and favorably known on this side of the Atlantic, that his operative surgery will be sure to meet with great favor here. The description of each operation is brief and to the point; there are no lengthy drawn-out details, just salient points which receive special attention. What anatomy is given is brief and to the point.

Medical Jurisprudence, Insanity and Toxicology. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College, Philadelphia. Third edition, thoroughly revised, greatly enlarged, and entirely reset. Handsome 12mo volume of 329 pages, fully illustrated, including four colored plates. Philadelphia, New York, London: W. B. Saunders & Company. 1903. Cloth, \$1.75 net. J. A. Carveth & Co., Limited, 413-415 Parliament Street, Toronto, Canada.

This work is based on the author's practical experience as coroner's physician of the City of Philadelphia for a period of six years. Dr. Chapman's book, therefore, is of unusual value to the medical and legal professions, presenting, as it does, the information gained from active participation in medico-legal cases. This third edition, enlarged by the addition of new matter to the extent of seventy-five pages, has been entirely reset, and it is evident that in its preparation every page has undergone a careful scrutiny, so as to include the very latest advances in this important branch of medical science. Much of the matter has been rearranged, the text has been more fully illuminated by additional references to cases, and a number of new figures and tables have been added.

In reviewing this excellent work we have found that it covers the field completely and thoroughly, nothing of practical importance to the physician or lawyer having been omitted. In our opinion, there is no doubt that the work will meet with as great favor as the previous edition—a popularity which it certainly deserves.

The Internal Secretions and the Principles of Medicine. By CHARLES E. DE. M. SAJOUS, M.D, Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society; the Academy of Natural Sciences of Philadelphia. Volume I., with forty-two illustrations. Philadelphia: F. A. Davis Company.

The subject-matter of this work covers a very extensive field of study and is of immense importance to medical science. The study is not only extensive, but is extremely difficult, as a thorough knowledge of the physiology and chemistry of the ductless glands and of the effects of their secretions on metabolism is necessary in order to master it. This requires a much more thorough knowledge of physiology and of pathology than is known at the present day. No doubt we are in possession of some chemical facts and clinical observations which are guiding investigators in their researches. For instance, we know that degeneration or complete removal of the thyroid gland results in cretinism or myxedema; that degeneration of the pituitary body produces acromegaly; that similar changes in the suprarenal bodies produces Addison's disease; that the liver, pancreas, ovaries and various other organs yield to the blood secretions which are absolutely necessary for normal metabolism. The interpretation of such data may be said to form the basis of the present work. Dr. Sajous propounds a working theory of the functions of the internal secretions. He believes the adrenals secrete an oxidizing substance which is the same as the oxidation ferment detected by Schmiedeberg, Sal-

kowski, Jaquet and other investigators. This oxidizing substance endows both hemoglobin and plasma with their affinity for oxygen. Myosinogen of muscle also united with this oxidizing substance gives rise to the energy for a muscular contraction. Similarly, combinations are formed with myelin and other constituents of the body. With regard to the thyroid gland Dr. Sajous believes that the function is to secrete a substance—thyroidine—whose function is to stimulate the anterior pituitary body. Diminished stimulation of the pituitary body causes myxedema; while over-stimulation gives rise to exophthalmic goitre. Again, Dr. Sajous has determined that the anterior pituitary body is connected by means of the solar plexus, the splanchnic nerves and the cervico-thoracic ganglia with the adrenals. In fact, the thyroid gland, anterior pituitary body, and the adrenals are functionally united, forming a system to which he gives the name "adrenal system." In this way the author molds his theory in such a manner that it will offer an explanation for all the chemical, physiological and clinical facts concerning the normal and pathological metabolism known at the present day. The work is a most important one and should be in the hands of every physician who wishes to keep himself in a position to grasp the advances of medical science along these lines.

The Care of the Baby. A Manual for Mothers and Nurses, containing Practical Directions for the Management of Infancy and Childhood in Health and in Disease. By J. P. CROZER GRIFFITH, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia. Third edition, thoroughly revised. Handsome 12mo volume of 436 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. Cloth, \$1.50 net. J. A. Carveth & Co., Limited, 413-415 Parliament Street, Toronto, Canada.

Dr. Griffith's manual on the Care of the Baby is without question the best work on the subject we have seen. The fact of a third edition being called for within such a short time, is sufficient evidence of its popularity. In preparing this edition every part of the book has been carefully revised and brought fully in accord with the latest advances in the subject. Several new recipes have been included in the appendix, making this excellent part of the work even more complete than before. A large number of new illustrations have been added, greatly increasing the value of the book to mothers and nurses. As we mentioned above, of the many works on this important subject that have come to our desk, this is, undoubtedly, the best, distinguished by soundness of advice,

conciseness of expression, and clearness of style. Physicians could not perform a better service for their patients than the recommending of this excellent work to every mother.

Practical Points in Nursing. For Nurses in Private Practice. With an Appendix containing Rules for Feeding the Sick; Recipes for Invalid Food and Beverages; Weights and Measures; Dose List; and a full Glossary of Medical Terms and Nursing Treatment. By EMILY A. M. STONEY, late Superintendent of the Training School for Nurses, Carney Hospital, South Boston, Mass. Third edition, thoroughly revised. Handsome 12mo of 458 pages, fully illustrated, including 8 colored and half-tone plates. Philadelphia, New York, London: W. B. Saunders & Co. 1903. Cloth, \$1.75 net. J. A. Carveth & Co., Limited, 413-415 Parliament Street, Toronto, Canada.

The continued and increasing popularity of this little volume has placed the publishers under the obligation of keeping it abreast of the times, of making it reflect the latest advances in the progressive profession of nursing. The revision has been extensive, every page showing evidences of careful scrutiny. Considerable portions of the work have been either amended, modified or amplified in accordance with the progressive spirit of medicine and its indispensable handmaid, nursing. The sections treating of certain diseases, especially the infectious diseases, as well as the treatment of the common poisonings, have been in large part recast and rewritten. By the extensive revision the usefulness of the book has been greatly extended and its trustworthiness enhanced. There is no doubt that the work in its third revised form, will maintain the popularity justly won by the earlier edition.

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, other than Drug Giving, Useful in the Prevention of Disease, and in the Treatment of the Sick. Edited by SOLOMON SOLIS COHEN, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College, etc. Vol. V., Prophylaxis—Personal Hygiene, Civic Hygiene, Care of the Sick. Illustrated. Philadelphia: P. Blackiston's Son & Co. Canadian Agents: Chandler & Massey, Toronto.

The first four volumes of this series were devoted to the consideration of the subjects of electrotherapy, climatology, health resorts and mineral springs. This, the fifth, treats of the origin, dissemination and prevention of disease, and therefore may be said to form an introduction to the science of medicine. The book is divided into three parts: Part I., which treats of the Origin and

Prevention of Disease, is contributed by Joseph McFarland, M.D., Professor of Bacteriology and Pathology in the Medico-Chirurgical College, Philadelphia, and W. Wayne Babcock, M.D., Lecturer in Pathology and Bacteriology, Medico-Chirurgical College, Philadelphia. In Part II. Henry Leffmann, M.D., Professor of Chemistry in the Woman's Medical College, Philadelphia, writes on civic hygiene, and in Part III. the subject-matters are domestic and personal hygiene, nursing and care of the sick, which are all from the pen of Albert Abrams, A.M., M.D., formerly Professor of Pathology, Cooper Medical College, San Francisco. All these subjects, practically important to every practitioner, are treated in a clear, concise manner.

The American Year-Book of Medicine and Surgery for 1903. A Yearly Digest of Scientific Progress and Authoritative Opinions in all branches of Medicine and Surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of GEORGE M. GOULD, A.M., M.D. In two volumes—Volume I, including "General Medicine," octavo, 700 pages, fully illustrated; Volume II, "General Surgery," octavo, 670 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. Canadian Agents, J. A. Carveth & Co., Toronto. 1903. Per volume: Cloth, \$3.00 net; half morocco, \$3.75 net.

The volume before us is devoted to "General Medicine." The contributors are well-known physicians, among whom we may mention Alfred Stengel, Louis Starr, Archibald Church, Louis A. Duhring, Reynold Webb Wilcox, Samuel Abbot and G. H. Stewart. The work is very complete, as every new theory and scientific discovery worthy of the consideration of the medical profession has been considered. Physicians will find the study of this work an easy and an excellent method of keeping in touch with the progress of medical science. Every physician should purchase a year-book, and there are none better than Gould's.

NEW BOOKS.

W. B. Saunders & Co., Philadelphia, announce the early appearance of the following:

Myomata of the Uterus. By HOWARD A. KELLY, M.D., Professor of Gynecology, Johns Hopkins University, Baltimore.

A Text-Book of Pathology. By JOSEPH MCFARLAND, M.D., Professor of Pathology and Bacteriology, Medico-Chirurgical College, Philadelphia.

Tuberculosis. By NORMAN BRIDGE, M.D., of Los Angeles, Emeritus Professor of Medicine, Rush Medical College, in affiliation with the University of Chicago.

A Text-Book of Operative Surgery. By WARREN STONE BICKHAM, M.D., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York City.

Practical Points in Nursing for Nurses in Private Practice. By the late EMILY A. M. STONEY, Supt. of the Training School for Nurses, Garney Hospital, South Boston, Mass.

A Text-Book of Obstetrics. By J. CLARENCE WEBSTER, M.D., F.R.C.P. (Edin.), Professor of Obstetrics and Gynecology, Rush Medical College, in affiliation with the University of Chicago.

A Text-Book of Modern Therapeutics. By A. A. STEVENS, M.D., Lecturer on Physical Diagnosis, University of Pennsylvania, Professor of Pathology, Woman's Medical College, Philadelphia.

The Care of the Baby. By J. P. CROZER GRIFFITH, M.D., Clinical Professor of Diseases of Children, University of Pennsylvania; Physician to the Children's Hospital, Philadelphia, etc.

A Text-Book of Diseases of Women. By BARTON COOK HIRST, M.D., Professor of Obstetrics, University of Pennsylvania, Gynecologist to the Howard, the Orthopedic, and the Philadelphia Hospitals.

The Vermiform Appendix and Its Diseases. By HOWARD A. KELLY, M.D., Professor of Gynecology, Johns Hopkins University, Baltimore; and E. HURDON, M.D., Assistant in Gynecology, Johns Hopkins University, Baltimore.

The Blood in Its Clinical and Pathologic Relations. By ALFRED STENGEL, M.D., Professor of Clinical Medicine, University of Pennsylvania; and C. Y. WHITE, JR., M.D., Instructor in Clinical Medicine, University of Pennsylvania.

Medical Jurisprudence and Toxicology. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence, Jefferson Medical College, Philadelphia, Member of the College of Physicians and Surgeons, Philadelphia, etc.

A Thesaurus of Medical Words and Phrases. By WILFRID M. BARTON, M.D., Assistant to Professor of Materia Medica and

Therapeutics and Lecturer on Pharmacy, Georgetown University, Washington, D.C.; and WALTER A. WELLS, M.D., Demonstrator of Laryngology and Rhinology, Georgetown University, D.C.

A Text-Book of Legal Medicine and Toxicology. Edited by FREDERICK PETERSON, M.D., Chief of Clinic Department of Neurology, College of Physicians and Surgeons of New York City; and WALTER S. HAINES, M.D., Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College, in affiliation with the University of Chicago.

The Practical Application of the Röntgen Rays in Therapeutics and Diagnosis. By WILLIAM ALLEN PUSEY, M.D., Professor of Dermatology, College of Physicians and Surgeons, Chicago, and EUGENE W. CALDWELL, B.S., Director of the Edward N. Gibbs Memorial X-ray Laboratory, and University and Bellevue Hospital Medical College, New York City.

CONCERNING ANTIPYRESIS IN CHILDREN.—Dr. E. W. Saunders (*St. Louis Courier of Medicine*, December, 1902), thinks that, though the urgency of antipyresis is dependent on the concomitant symptoms instead of the height of the mercury, even in mild disease any increase in temperature should be carefully noted if suffering is caused. For relief hydrotherapy ranks first, but it will be found advantageous to combine the external and internal antipyretics at times. This method is too little practised. He does not object to the occasional use of coal-tar products if the fact that they are heart depressants be realized. The relief they afford in the beginning of scarlet fever and other exanthemata justifies their use, but they should not be employed in affections where the heart is liable to fail, such as in pneumonia and diphtheria. In influenza some cardiac stimulant should be added. He emphasizes the value of pilocarpine in scarlet fever and diphtheria, as an eliminant and antipyretic. *Veratrum viride* is the best antipyretic in pneumonia and is generally unduly neglected. He has found the external application of guaiacol of value in treating infants and children, for many pneumonia cases do not bear cold baths well. There need be no doubt about using it in typhoid fever and tuberculosis. If it is employed with judgment the danger of depression resulting is slight. In some cases one drop will be sufficient, while others will require several. Care should be exercised in the application of hydrotherapy. While some children take the full bath nicely, others become chilled and do not react promptly. The wet pack is most likely to agree for general use.—*Pediatrics*.

Desiring to make a practical, useful journal for the General Practitioner,
the Editors respectfully solicit Clinical Reports from subscribers and others.

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PREScription REPETITION AND ITS DANGERS.

In *The Journal of the American Medical Association* of the 18th of April, William C. Alpers, Sc.D., New York City, has a practical article with the above title. Prescription repetition is a much vexed question, and in this respect we are glad to learn that a little leaven is about to be introduced amongst the drug fraternity in Toronto, which will work for the eradication of the pernicious habit, in so far as narcotic drugs are concerned, at all events. There are three persons primarily concerned in a prescription, consecutively, the doctor, the patient, the pharmacist; but there are sometimes more. The patient may hawk it around to his friends, and the druggists may do likewise to their patrons. This, next to getting it repeated for himself, is one of the great dangers of this evil. Ownership in a prescription has often been debated and several judicial decisions have been given thereon. We think we can recall one in England where it was decided that the prescription belonged to the patient. In the United States it has been decided on different occasions that it belongs to the physician, again to the patient, and yet again to the druggist. The patient very often comes to the doctor, having in mind the getting of a prescription, but it is for the doctor to decide whether or not he will give a prescription. The physician signs or initials the prescription, which identifies it as his, and the product of his brain is

simply loaned for the time being, just as an author writes a story and the publishing house sells the book. The patient has as much right to ownership in a prescription as the buyer of a book has in the text, and we know what right one has to that. In the case of the prescription he buys the slip of paper. In the case of the novel he buys the book. Let any one who buys a book take the text, affix his name thereto and dispose of it as his property to some other publisher, and see where both will land. The prescription is nothing more than an order on the druggist from the doctor to give the patient the necessary medicines for so much cold cash. The druggist has the right to retain this order in his possession to prove that he gave the patient the proper medicine prescribed by the doctor. He has no other right to it, whatever. The prime fault lies in the moral tonus of that patient who, mercenary himself to the extreme degree, imagines the physician who warns him of the harmfulness in having prescriptions repeated without authority, equally mercenary. The patient's predominating idea is that the doctor always wants him back for another fee, an idea which divides equal importance in his brain with the other that he is getting his prescription filled again without having to pay that fee. Our weak-kneed friend, the druggist, caters to these two ideas innocently so far as the first is concerned, of course. It is business for him and more coppers for his coffers.

Mr. Alpers, who is a New York pharmacist, tells us of the law which exists in the State of New York "that a prescription containing a certain dose of opium, morphine or any similar preparation must not be renewed more than twice." This is a good law and it might be well for the Ontario Medical Association to agitate for a similar law for this province. The medical associations in the other provinces could also engage themselves in this wise profitably. The Canadian Medical Association could pass a resolution giving such legislation the stamp of its powerful approval.

HONORING THE OLD.

We publish in this issue press reports relative to recent honors which have been bestowed upon three highly respected yet aged practitioners residing in different sections of the Dominion, viz.,

Sir James Grant, Ottawa; Dr. Wm. Bayard, St. John, and Dr. J. H. Richardson, Toronto, all of whom once occupied prominent positions in medicine in this country, and who to-day enjoy in the fulness of years and honors the love and esteem of the profession all over Canada. Canadian medicine may well be proud of her sons who have grown grey in practice. To attain to the eighth decade of life, holding the confidence and respect of profession and laity, having laid aside the work of active professional life, is a noble end and aim to which to aspire; and those remaining in active work do well, and in honoring these honor themselves by these testimonials of love and respect. It is a great encouragement to see the man who has done his work faithfully and well resting from his labors at the evening of life, thus respected and honored by his younger confreres. No doubt he feels he is in a measure deserving of these honors, for he has not lagged too long on the stage, but has given place to youth, energy and enthusiasm. In this he has guarded well the esteem and confidence of his fellow-man, and the reward comes to him through these unanimous expressions of love and respect.

QUEBEC REJECTS THE CANADA MEDICAL ACT.

As was expected and foreseen, the Quebec Legislature has refused to ratify Dominion Registration as embodied in the Canada Medical Act, 1902. The opposition to the proposal comes mainly from country practitioners, as we believe the French-Canadian practitioners in Montreal are almost unanimously in favor of the measure. What the country practitioner in Quebec has to fear from Dominion Registration is difficult to elicit. Our French-Canadian brother is very jealous of his "provincial rights," whatever they may be; and the fear, probably, that if once the thin end of the wedge entered, other curtailments might follow, may have had much to do with the rejection of the motion for ratification. We do not understand by any means that this ends Dominion Registration. All the other provinces will, no doubt, soon concur in the Act, and the examples will prepare the way both for the Medical Council in Quebec and the Legislature at another time to view this matter in a broader and more liberal spirit. Nor do we believe

that the indefatigable energy and stick-to-it-iveness of Dr. Roddick will be any the more relaxed. The Canadian medical profession have entrusted this matter to his care. Reverses have been encountered and overcome before. In the end we fully believe Dr. Roddick will triumph and that Dominion Registration will yet become an accomplished fact.

THE ECONOMIC ASPECT OF THE TUBERCULOSIS PROBLEM IN CANADA.

Elsewhere in this issue will be found a paper which was read at Ottawa on the 16th of April in connection with the Tuberculosis Convention in that city by Dr. Arthur J. Richer, of Montreal, Honorable Secretary of the League for the Prevention of Tuberculosis in that city. These financial deductions put a new and important aspect upon the prevention and spread of consumption and if they be true will furnish good food for thought by legislators. When we are told, and come to fully realize, that the Federal Government spends twenty times as much in the prevention of the disease amongst cattle as it does in man, while the average percentage of prevalence is as $2\frac{1}{2}$ to 14, one cannot but marvel and wonder at the attention paid to the beasts of the field over that devoted to humankind. It must be just, then, to infer that governments have not as yet come to appreciate the economic side of the tuberculosis problem; so here opens up a new field for education. We fully believe this is the proper direction in which to work, as philanthropic assistance must always be more or less limited. Dr. Richer's paper serves a markedly good purpose, and the economic idea should be kept well to the fore. Surely the financial value of a life to the state must concern the representatives of the people.

News Items

DR. STIRLING, of Montreal, is in Bermuda.

DR. J. M. ELDER, of McGill, has gone to Europe.

DR. RUTTAN, of McGill, has left for a trip to the South.

PROFESSOR SHUTTLEWORTH, Toronto, is travelling through Europe.

DR. H. T. MACHELL, Toronto, has returned from a trip to New York.

DR. CHARLES SHEARD, Medical Health Officer, Toronto, has been spending his holidays in New York.

DR. HARVEY, of Watford, who was injured in the Wanstead disaster, has been paid \$6,000 in full for all claims by the G.T.R.

DR. P. J. SCOTT, Southampton, was the recipient of a handsome past master's jewel lately from his brethren of the A.O.U.W.

DR. STANTON, Simcoe, Ont., is having a new office building put up on the north-west corner of his lot on Argyle street, east of the Bank of Hamilton.

DR. JOHN CAMPBELL, who gave up his practice in Barrie with the intention of going to Ridgetown, has hung out his shingle at Blenheim, his old home.

DR. GRAHAM, of Clinton, has sold his medical practice to Dr. J. R. Hamilton, of Stratford, and the former will take a well-earned rest after thirty-five years of toil as a medical man.

DR. MCCORDICK, who has been house physician at the Sarnia General Hospital for some time past, has left for New York, where he will enter Bellevue Hospital in that city.

DR. JAMES F. BOYLE, of Toronto, has just completed a post-graduate course in Scotland, where he has succeeded in taking the degrees of L.R.C.P. and L.R.C.S., Edinburgh, and L.F.P.S., Glasgow.

DRS. C. W. MCLEAY, and Basil Harvey, of Watford, have sailed from New York for Naples. They purpose spending several months visiting the leading medical institutions of Italy, Germany and Austria, and will return *via* Edinburgh and London.

A POSTGRADUATE COURSE.—Dr. Burrows, of Seaforth, left about the first of May for Baltimore, where he will take a two months' postgraduate course in general medicine at the

Johns Hopkins University. During the doctor's absence his practice will be taken by Dr. Elliott, of London.

THE Council of Physicians and Surgeons of New Brunswick, acting for the New Brunswick Medical Society, has sent to the Provincial Legislature a Bill with the object of securing a limit to the time in which an action may be brought for injuries resulting from alleged malpractice. One year is the limit to be asked.

DR. EDGAR MACKLIN, of London, sailed on steamship *Mongolian* from New York to Glasgow. It is his intention to take a special course in London or Edinburgh before his return. Several medical and other friends were at the station to wish him success and a pleasant voyage. He was ship's surgeon on the *Mongolian* for a year, a few years ago.

THE death is announced of Dr. W. H. Crysler, one of the oldest practitioners of Brant County. The doctor, who was in his 70th year, had practised medicine and conducted a drug store in Burford for well nigh forty years. He was a bachelor and had accumulated considerable real estate in Burford and Burford township. Some two years ago he fell from an apple tree and bruised his face. This finally resulted in a cancerous growth, which ended fatally.

THE memorial notice of the late Dr. R. M. Bucke, formerly superintendent of the London Insane Asylum, read before the American Medico-Psychological Association at Montreal by Dr. T. J. W. Burgess, superintendent of the Verdun (Montreal) Asylum, has been printed in pamphlet form, and will be highly treasured by the numerous admirers of that great man. Dr. Burgess was assistant superintendent at the London Asylum for several years.

A UNIVERSITY FOR BRITISH COLUMBIA.—A provincial university, with power to grant degrees, is the proposal of the graduates of the University of Toronto in British Columbia. A large number of those in the Terminal City, who own that institution of learning as their *alma mater*, met and decided to send a circular to all the graduates throughout the province regarding the matter. The proposal is to have a university with an examining body with power to grant degrees, and without a teaching staff.

QUEEN'S medical convocation was held on the afternoon of April 9th. It was announced that A. H. Leonard, of Kingston, had won the Chancellor's prize of \$70, but was unable to hold it and a hospital house surgeoncy, so it passes to G. H. Ward, of Napanee. The graduates were laureated by the Chancellor and Dr. Herald, secretary of the medical faculty. J. L. McDowall was the valedictorian. On account of illness, Dr. R. A. Reeve, Dean of

the Toronto University medical faculty, was unable to be present to address graduates.

THE third annual meeting of the Canadian Association for the Prevention of Consumption was held at Ottawa on the 16th of April, at which the Governor-General delivered an address. Lord Minto gave it as his belief that there were 30,000 cases of tuberculosis in Canada, and that the number of deaths was about 9,000 annually. Dr. H. Beaumont Small read the annual report. In Canada, out of thirty-six hospitals, only thirteen had special accommodation for tuberculous patients. Dr. P. H. Bryce read a report of the work of the Ontario branch. The paper contributed by Dr. A. J. Richer will be found in another column.

THE general principle of inter-provincial registration for medical practitioners was endorsed at a meeting of the French-Canadian Medical Society of Montreal at a largely attended meeting in Laval University recently. It was the concensus of opinion that the desired end—interprovincial registration—could be brought about by two methods, the passage of a Federal Bill similar to that sponsored by Dr. Roddick, M.P., in the Dominion House, or by the establishment of an examination system such as obtains in Ontario. Dr. Roddick's Bill was reported to the meeting, and in response to the query as to whether the Society favored the general idea of interprovincial registration, there was an enthusiastic affirmative. A provincial Act agreeing to the provisions of the examination system was discussed at length.

TORONTO UNIVERSITY FACULTY OF MEDICINE, CLASS OF 1877.—J. P. Armour, M.B., is a physician at St. Catharines, Ont.; J. J. Esmond, M.B., is a physician at 3618 Independence Avenue, Kansas City, Missouri; B. Field, M.B., is a physician at 599 Spadina Avenue, Toronto; D. M. Fisher, M.B. (ob.); J. M. Good, M.B., is a physician in Dawson City, Y.T.; A. Grant, M.B., is a physician at Beaverton, Ont.; G. A. Langstaff, M.B., is a physician at Thornhill, Ont.; M. Macklin, M.B., is a physician in Winnipeg, Man.; G. T. McKeough, M.B., is a physician at Chatham, Ont.; A. H. McKinnon, M.B. (ob.); R. B. Orr, M.B., is a physician at 147 Cowan Avenue, Toronto; W. T. Parke, M.B., M.D. '80, is a physician at Woodstock, Ont.; N. D. Richards, M.B., is a physician at Warkworth, Ont.; J. B. Smith, M.B. (ob.); D. A. Stewart, M.B., is a physician in Ailsa Craig, Ont.; W. T. Stuart, M.B., is a physician at 197 Spadina Avenue, Toronto; M. Sutton, M.B., is a physician in Cooksville, Ont.; W. Tisdale, M.B., is a physician in Lynedoch, Ont.; F. B. Wilkinson, M.B., is a physician at Sarnia, Ont.; T. H. Wilson, M.B. (ob.); W. E. Winskell, M.B., is a physician at 9154 Commercial Avenue, Chicago,

Ill.; O. Young, M.B. (ob.). The address of William A. Munn, M.B., is unknown.—*Univ. Review*.

THE Montreal League for the Prevention of Tuberculosis is rapidly growing in importance. Its application for membership in the Central Association at Ottawa has been favorably considered, and the Montreal League is now virtually associated with the main body, which held its annual meeting at Ottawa, on April 16th. Dr. Roddick, chairman of the Executive, and Dr. Richer, secretary, represented the League officially; and Senator Drummond, president of the League, Dr. Lachappelle and Dr. Adami were also present. Dr. Roddick, M.P., presided at an Executive meeting held one Saturday afternoon recently, in the rooms of the Medico-Chirurgical Society, and attended by Mrs. J. B. Learmont, Senator Drummond, Messrs. C. M. Holt, J. C. Holden, S. P. Stearns and W. J. Stethem, and Drs. Lachappelle, Richer, Lacavallier, Adami, Lesage, and Professor Bovey. It was announced that the result of the interview of a deputation from the League to the Health Committee, in the City Hall, had been most satisfactory. The city has promised to co-operate with the League and will assist in the work of the publication of suitable literature. Furthermore, all cases noted through the Health Committee or the League, shall be supervised by a member of the Board of Health. A strong resolution was read by Dr. Lachappelle, to be presented to the City Council, recommending that a by-law be passed against the obnoxious habit of spitting in public places, especially on sidewalks. The members expressed surprise that there was no law against the indulgence in such a disgusting habit, such as is in force in other large cities. The League will very soon occupy premises of its own. Mr. Stethem brought forward the question of suitable premises and these will very shortly be obtained.

SHE OPENED THE CAPSULES.

A Baltimore physician had occasion a few days ago to prescribe an extremely unpalatable dose for a patient, and, wishing to make the situation as pleasant as possible for the sufferer, ordered the medicine to be put up in gelatine capsules.

On his next visit, the patient—a woman, by the way—said: “Doctor, I took that medicine and it did me some good, but I had a terrible time to open those little glass boxes it was in. The next time you give me anything like that, won’t you please get the druggist to see that the little glass boxes come apart more easily?”
—*Baltimore Sun*.

Selected Articles.

THE REMEDIAL POSSIBILITIES OF MASSAGE.

BY G. H. PATCHEN, M.D.

Every physician who has kept pace with the advance of medical progress has learned many things concerning disease and its treatment which were unknown to his predecessor of even a generation ago.

Among the most important of these items of medical knowledge are: 1st. That health and disease are both products; both the result of the operation of the very same organs and functions, health resulting when vital processes are vigorously and harmoniously performed, and disease occurring when the same processes are weak or inharmonious in their action.

2nd. That faulty hygiene (accidents excepted) is the primary cause of all illness.

3rd. That the same conditions and factors which most readily and perfectly maintain health, afford, when intelligently modified and adopted, the best means for its restoration.

4th. That the *cure* of disease is always accomplished by the remedial force or energy of the system itself—the *vis medicatrix naturae*—as some writers are pleased to call it.

5th. That this force cannot be directly conferred upon, or transferred to the system, in the slightest degree, as an entity, but is the result, always and only, of the vital process of nutrition.

This better understanding of disease and its remedial requirements not only broadens and simplifies medical practice, but is necessarily attended with important, and, in many instances, radical changes in methods of treatment.

The wise physician no longer assumes the role of an autocrat dictating to Nature the method she must pursue to overcome disease as well as the special manner in which the work must be done, but humbly adopts and closely follows the course which Nature herself unmistakably indicates.

Nor is he satisfied with the limited effects which drugs are able to produce. He is always aware that there exist other curative means and forces, as water, heat, cold, oxygen, electricity, exercise, diet, and massage, which are often more relevant and helpful than drugs, because they more directly and powerfully control the functional activities which, by either their excess or

deficiency, constitute the disease. By the judicious use of these additional medical resources his percentage of cures is greatly augmented, and his professional ability and skill correspondingly increased.

The fact that diseases can be cured in other ways than by the administration of drugs has led to the multiplication, within the profession, of specialists and specialism with the best of results. But as no good ever exists without attending evil, so this commendable outgrowth of medical progress is accompanied by undesirable and even censurable features, the chief of which is the harmful effects these simple but powerful remedies often produce when administered by persons unqualified by medical knowledge to use them in a proper manner. If the disastrous results arising from their improper use could be confined only to those who are responsible for them, "the punishment would fit the crime" and a kind of retributive justice would result, of which no one would care to complain. But since this discrimination cannot be made the innocent must continue to suffer from the wrong-doing of the guilty until the presumption of ignorance is overcome by the humility of wisdom.

One of the most important and useful of the drugless remedies mentioned, and also one which has been most neglected by the profession, is massage.

Why so valuable a remedy—one so relevant to, and fundamentally curative in, diseased states of the most serious as well as of the most diversified character, when applied with the same medical knowledge and skill which dictates the appropriate prescription or directs the keen edge of the knife—why such a remedy should fail to be appreciated at its true, practical worth, and, when unmistakably indicated, not more frequently administered, is most difficult to comprehend.

Many reasons have been suggested, but, to my mind, there is only one of sufficient importance to deserve serious consideration.

It cannot be due to the physical effort the giving of massage requires, because the obstetrician, the surgeon, and even the general practitioner frequently undergo, without protest, much more physical exertion than is called for in the regular and orderly administration of the process of massage. Besides, the physician competent to give massage can have as much of it as pleases him done under his personal supervision, by assistants thoroughly trained by himself.

Neither can it be because physicians consider that the personal application of massage tends, in any way, to lessen professional dignity, for they are notoriously ever ready to afford relief to the suffering by any legitimate means, at whatever personal

inconvenience or sacrifice to themselves, and, in the line of duty, cheerfully perform many services of a decidedly menial character.

Nor is it for lack of proper remuneration, for the value of a physician's services is more or less arbitrary, being determined largely by his reputation for medical knowledge and skill, and patients are as willing to pay for the doctor's visit and an additional amount for massage as for the visit, and a written prescription with an accompanying apothecary's fee

If, then, the reasons mentioned fail to account for the infrequent employment of massage in the many cases where it would prove to be a superior and all-sufficient remedy, it must be because its remedial scope and power is too little understood.

The value of a remedy is determined by its relevancy to the diseased conditions to which it is applied, its adequacy, its range of action, its availability, and the promptness, certainty, and uniformity of its effects. Judged by this standard, how completely does massage stand the test? To what position is it entitled in the scale of remedial merit? Let us see.

The attribute of relevancy exists in several forms, and is not possessed by any remedies in an equal degree. Mere palliation is one form, a form common to many remedies of different classes, and one which, in the estimation of the patient, is of great value. Unfortunately, as the observing physician well knows, there is no necessary relation between palliation and cure. A remedy may afford relief from pain and bring comfort and even hope, to the suffering patient, without contributing, in the slightest degree, either to the removal of the disease or the causes which induced it. In fact, the use of the most powerful remedies of this class only tends, in many cases, to aggravate the disease and prolong its existence. Palliatives, whose action is neither accompanied nor followed by some undesirable or injurious effect, are very rare, and are highly prized by physicians of every school of practice. It is worthy of note that remedies which possess this characteristic are only those which possess the most hygienic qualities.

Another form of relevancy, and one of greater value than palliation, is the curative power displayed by a remedy, its ability to overcome or remove disease.

This power, in a greater or less degree of efficiency, is an inherent property of remedies of every class and kind. Indeed, it would be difficult to mention any substance, in either the mineral, vegetable, or animal kingdom, which has not, at some time, been used as a remedy with seeming success. The adjective is used advisedly, for the physician of much thought and experience has discovered that a cure cannot always be attributed to the remedy

employed. He has learned that there are negative as well as positive remedies; that a cure often results as much because certain things are not done as for the reason that certain other things are done. And this is not the only therapeutic anomaly that confronts him. He finds that not only is the same remedy employed to cure diseases of a widely differing, and, even, of an entirely opposite character, but that the same disease is cured by any one of a list of diverse remedies ranging in form and action all the way from the extreme of mental suggestion, on the one hand, to a dose of calomel on the other.

He learns, further, that the most popular and effective remedies used for a given disease by one generation are discarded or forgotten by the next, and by inference, if not by direct statement, he finds ample and logical grounds for the belief that in the not so far distant past, patients frequently recovered *in spite of*, instead of *because of* the medical treatment they received.

But all through this woof of contradiction and uncertainty there runs the warp of true, therapeutic consistency which is that, although the remedies directed against any designated form of disease may vary greatly, from one decade to another, they are always selected on account of their power to remove what, at the time, is believed to be the cause of the malady in question. In shorter phrase, our theories control our practice.

This is eminently proper, and affords the only practical method of procedure. It is in the theoretical department of therapeutics that faulty and unsuccessful methods of treatment have their origin, and it is to the same department that we must look for all improvements in remedial methods. A third form of remedial relevancy is that of prevention. Although from every point of view, except that of the invalid, prevention of disease is more important than its cure, the number of remedies which are truly prophylactic is comparatively small, and, for obvious reasons, are seldom found outside of the list comprising those of a purely hygienic character.

Very few remedies enjoy the distinction of possessing all three grades or degrees of relevancy. Of drugs, it may be said that those which under proper conditions display the greatest curative activity are rarely either distinctively palliative or reliably prophylactic. Electricity is, in a large measure, both palliative and curative, but in prophylactic power it is lamentably deficient.

All hygienic agencies, however, possess every form of remedial relevancy—they palliate, they cure, and they prevent disease. For this reason they are the most desirable of all remedial resources. The success of modern methods of treatment is due

almost entirely to their more frequent and more scientific use, and yet, although they antedate all other remedies, having been instinctively used, in some practical, though at first, perhaps, crude way, since man's advent upon the earth, we have hardly begun to appreciate their worth, much less to use them in the many ways in which they are pre-eminently and often indispensably helpful.

We know how to use them to relieve pain, to lessen fever, and to control the intensity and duration of many acute forms of illness; we have learned their power to control, stamp out, and even prevent the ravages of the most virulent contagions and epidemics, but their full value will not be appreciated until scientific investigation shall have confirmed the simple but important fact that, as disease, in any of its possible forms is, in its last analysis, the result of faulty nutrition, those natural agencies by which alone nutrition is controlled and maintained, afford the most direct, powerful and reliable means of cure.

The most prominent hygienic agencies, those most closely identified with and responsible for our physical welfare, are water, air, food, and exercise. In their distinctively remedial character they take the form of baths, oxygen, diet, and massage. Of these, in point of merit, massage easily stands at the head of the list, because it possesses every qualification of an ideal remedy. In action, its promptness is as rapid as the movements of the circulation, which it equalizes and promotes; its certainty is as positive as the mechanical and chemical activities, which it hastens and intensifies, and its uniformity of action is as reliable as the physiological laws of organic function and activity, which it favors and assists.

Its availability is well-nigh universal. Wherever there is a pair of willing hands, it can be immediately and advantageously employed, and in cases of emergency the patient can, in many instances, temporarily even use it on himself.

Its range of action is limited, with a few exceptions, to chronic forms of disease, but it meets the specific requirements of this large and exacting field of practice in the most satisfactory manner.

Massage, prior to the invention of machines for administering its various processes, lacked the very essential attribute of adequacy. There were many diseased states and conditions for which massage, theoretically, is the closely-indicated and all-sufficient remedy, but which, practically, failed to be cured, simply because the human hand is not able to continue the necessary processes long enough to produce the expected result.

Mechanical massage has overcome this serious defect. The

pressure motions it imparts are derived from an unlimited source of power, as steam or electricity, and may be continued for any desired length of time.

Another characteristic feature of mechanical massage, one of which adds greatly to the adequacy of manual processes, is its ability to supply motion, in a most agreeable manner, at rates much above and also below those possible to the hand, thereby producing chemical and nutritive changes of a remedial character otherwise unattainable.

In these important respects have mechanical processes so increased the scope and efficacy of massage that it is now fully adequate to meet remedial demands for pressure motions in any form and to any extent.

Massage is excelled by no other remedy in relevancy. It not only possesses this necessary factor in all three of its practical forms, in a high degree, but by its dominating influence over the fundamental processes of nutrition and vitality, it is peculiarly adapted to prevent, palliate and cure a greater number and variety of diseases than any other single remedy.

This ability on the part of massage to reach, with its modifying influence, every vital organ and function of the body is due to two causes. First, that by its anatomical construction the human body is as perfectly adapted to receive and distribute pressure, motions, and vibrations, from without, as if it had been created solely for this purpose. The fleshy masses which constitute the greater portion of it are soft, semi-fluid, spongy, and elastic, and within certain limits very movable. In addition to these qualities so favorable to massage, they contain blood-vessels and nerves which extend to and penetrate the interior organs and convey to them the physical stimulus they require for perfect functional work.

The second reason for the remedial efficiency of massage is the fact that, practically, the same physiological efforts are produced when the muscles are acted upon as when they act themselves.—*Eachen, v.*

APPENDICULAR DYSPEPSIA.

BY JAMES B. EAGLESON, M.D., SEATTLE, WASH.

For more than a year past I have been firmly convinced in my mind that the dyspepsia and acute attacks of indigestion which precede many cases of appendicitis have no weight as an etiologic factor in this disease, but on the contrary, they are the result of some irritation in or around this organ.

It has been recognized for a long time that the local irritations in other parts of the digestive tract, the gall bladder and ducts, for example, will produce dyspepsia. Is it not just as reasonable to believe that indigestion will cause an inflammation of the gall bladder as it is to believe that it will cause an attack of appendicitis? There may be cases in which indigestion may irritate an already inflamed appendix, but I believe it seldom, if ever, causes it.

I have searched the latest literature on the subject at my command, and have been somewhat surprised at the meagre references to the gastric disturbances in connection with the symptomatology of appendicitis. Almost all the authorities, both medical and surgical, regard them as etiologic, and not as symptoms of some pathologic change already taken place in the organ.

Hartley says, "Indigestion appears to be a cause, in that the matter in the intestines, taken in excess, poorly digested and badly tolerated, provokes a catarrh and anomalous constriction of the intestine."

Mynter says, "Constipation, diarrhea, and digestive disturbances favor the development of appendicitis. These alone would probably not produce an appendicitis, but add to them an abnormal position of the appendix, by which stagnation is favored, and the result will sooner or later be an attack of appendicitis."

Morris (Robert T.) speaks of gastric disturbances only in connection with the acute attacks of the disease.

Deaver, in his last edition, says that, "Of the exciting causes of appendicitis, from a clinical point of view, disturbances of digestion are the most important. Such is the pre-eminence of these in the etiology of appendicitis, and with such constancy have they been observed, that it is unhesitatingly asserted that appropriate inquiry will elicit a history of such disturbances in almost all cases." He goes on to state that the indigestion causes an increased virulence of the intestinal bacteria, which, in turn, cause the inflammation of the appendix.

Fowler maintains the same theory and says: "In the rare instances in which the digestive disturbances seem to precede the development of the disease, the connection between the two occurrences may still be dependent upon bacterial agency."

Talamon holds to the belief that "the erratic peristalsis produced by the presence of irritating material within the digestive tract determines the engagement of a stercoral calculus in the orifice of the appendix. This, in turn, gives rise to the symptoms constituting the first stage of the disease."

Anders says indiscretions in diet may precede a primary attack, and are of paramount etiologic importance in the recurrent forms of the malady.

Hawkins, in "Gibson's Practice," makes mention only of the possibility of the presence of indigestible articles provoking disease in this rudimentary organ.

Hemmeter barely refers to digestive disturbances as a factor in the etiology of the disease.

Johnson (W. W.) says: "Appendicitis is probably often the final stage in intestinal indigestion, which leads to catarrh of the cecum and consequent multiplication of bacteria, with infection of the local peritoneum."

McNut, in "Loomis' System," states that "indigestion and too highly-seasoned foods, by provoking catarrhal conditions, by distending the bowels with fecal matter and gases, are also etiologic factors."

Osler merely refers to the frequency in which inflammation of the appendix follows the eating of indigestible articles of food.

McBurney, in his article on appendicitis in the "International Text-book of Surgery," does not mention gastric disturbances.

Lockwood gives "the first phase as that during which ulceration of the mucosa is spreading, and strictures are forming, and concretions growing. During this phase the diagnosis is often easy, but may be difficult, and only accomplished after the patient has been kept under the closest observation. As we have seen, the symptoms are obscure abdominal pains, settling at last in the right iliac fossa, indigestion, flatulence, disorders of the bowels, constipation, or diarrhea, capricious appetite, inability to eat fruit or vegetables, unpleasant taste in mouth, odors in the nostrils, slight variations in temperature, tender on pressure in the iliac fossa, slight muscular rigidity, tender in Douglas' pouch. At length a classical attack of appendicitis supervenes and may eventuate in abscess, perforating ulcer, or gangrene and their sequelæ."

In the list of cases which he describes so minutely are several that give a history of gastric disturbances for months and years before any appendicular disease was suspected.

Ochsner, in a little work on appendicitis just issued, hits the nail squarely on the head when he says: "I have found many patients suffering from an acute attack of appendicitis, who had formerly suffered for a longer or shorter time from indigestion, whose appendices contained fecal concretions which had evidently been present for a long time on account of the contracted condition of the lumen of the appendix at the point of entrance into the cecum. In most of these patients I have found that they have

suffered severely from colicky pains in the region of the stomach or the appendix, and that there has always been a marked degree of gaseous distension of the intestines. In children, in almost every case which has come under my care, the attack was primarily diagnosed not as appendicitis, but as acute gastritis, and only after serious symptoms pointed to a localized peritonitis was the correct diagnosis made. In every instance the appendix contained fecal concretions; in almost all the appendix was either gangrenous or perforated. These facts, I believe, indicate two things: First, many children who are supposed to suffer from acute gastritis are really suffering from appendicitis, from which they may die without the disease having been properly diagnosed; or they may recover and suffer secondarily from digestive disturbances until they have a recurrence, or until nature eliminates the effects of the primary attack by absorption."

During the past year I have operated on five cases which gave no history of any previous attack of appendicitis, but every one had suffered for a longer or shorter period from chronic indigestion. In each case one or more fecal concretions were found in the appendix. They have all been completely cured of the indigestion by the operation.

There is no doubt but that fecal concretions may be retained by the appendix for a considerable time without exciting an acute inflammation, just as gall-stones may remain latent for years. In fact, Ribbert, in his necropsies, claims to have found concretions in about ten per cent. of all normal appendices.

Since the plentiful nerve supply of the appendix is intimately connected with the superior mesenteric and solar plexus, it is but reasonable to believe that the irritation caused by the fecal concretions in the appendix will cause more or less disturbance of the gastro-intestinal canal.

There is no doubt in my mind that there are quite a number of cases of chronic indigestion resulting from some irritation of the appendix, and that, sooner or later, these cases will develop an acute attack of appendicitis. Ochsner says, "I am certain that in many cases suffering from chronic digestive disturbances it is well to look for a chronic appendicitis."

Longuet, in a recent article on "Appendicular Dyspepsia," in the *Semaine Medicale*, reports two personal cases and twenty-eight others gathered from the literature on appendicitis in which the dyspepsia was caused by some disease of the appendix. Of these thirty cases twenty-five were promptly and radically cured after the appendectomy, although the dyspeptic symptoms had lasted from one to twenty years.

In cases giving no history of any previous appendicular trouble the origin of the gastric symptoms may be revealed, unless a tenderness is discovered on palpation at the McBurney point, or an acute attack of appendicitis occurs. In other cases the diagnosis may be made almost positively by a history of an inflammation or pains in the region of the abdomen, probably many years before.

As quoted from Ochsner above, no doubt many suffer from more or less acute attacks of appendicitis during infancy and early childhood which are unrecognized, and I see no reason why the results of these attacks may not cause gastric disturbances in later life. As a proof of the great frequency of inflammation in this organ, Byron Robinson claims that in two hundred and thirty autopsies he found evidences of chronic inflammation of the peritoneum around the appendicular region in 70 per cent. of the cases.

Of this class of cases Ochsner says: "The appendix may be adherent to the ilium, causing more or less acute flexure, or it may be surrounded by a portion of omentum, which interfered with the ilium at the point of crossing; or the cecum, the ilium, and appendix may be drawn down into the pelvis by adhesions in this region. In fact, any one of a dozen conditions may be present as a result of adhesions in different locations caused by a former appendicitis. In such cases the subsequent attack is frequently supposed to be caused by chronic indigestion, while, as a matter of fact, the latter is due to the former attack of appendicitis, and the recurrence is due to the presence of infectious material and an abraded surface in what is left of the diseased appendix, in which the normal drainage has been impaired by the cicatricial tissue deposited during the recovery from a former attack. These facts can be established by carefully studying the history, and by noting the pathologic condition at the time of the operation."

We thus see the theory that the dyspepsia is an etiologic factor controverted by the fact that, in most if not all of these cases, it is a result of appendicular irritation. To me, the most convincing argument is the fact that the dyspepsia is cured and stays cured after the operation, while if the dyspepsia was the cause of the appendicitis, the removal of this organ would not cure the gastric disturbances, but they would continue just the same as before the operation.

When we have carefully studied a case of chronic indigestion, and have determined fully that the cause is some irritation of the appendix, after a faithful course of medicinal treatment, without any relief to the patient, why should we let him continue to drag

out a miserable existence, and then sooner or later have him suffer an acute attack of appendicitis? I believe in such cases that it is not only justifiable, but that the only rational and scientific treatment is to resort to surgery for the removal of the appendix.

From my study of this subject, I have come to the following conclusions, viz.:

1. There is a form of dyspepsia of appendicular origin.
2. In one class of cases, it is largely reflex, depending upon the presence of a fecal concretion within the organ, or a slight ulceration or catarrhal condition of the mucosa.
3. In another class of cases it is mechanical, caused by an obstruction or irritation resulting from adhesions following a more or less acute attack of inflammation at some previous time.
4. These cases are cured by surgical interference.
5. In all cases of chronic dyspepsia the condition of the appendix should be carefully investigated.

When a chronic dyspepsia has resisted all medicinal treatment and its origin has been diagnosed as appendicular, an operation should be advised.—*Northwest Medicine*.

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TREATMENT OF SCARLET FEVER BY A SCARLET FEVER STREPTOCOCCUS SERUM.—Dr. P. Moser (*Weiner klinische Wochenschrift*, October 9th, 1902), has isolated streptococci from the blood contained in the heart of patients who died from scarlet fever, using the blood-serum of animals inoculated with these streptococci to control the outbreak of scarlet fever. There is no real evidence that the streptococci obtained from cases of scarlet fever are peculiar to this disease. Although the author grants this, he nevertheless thinks that the efficacy of the immunizing process, which is based on the assumption of the activity of these streptococci, is confirmed by experiment, and also states that these streptococci are not invariably harmful to animals. Horses have been injected with stronger and stronger doses of a mixture of living streptococci culture which had not passed through the body of any other animal, but had been conveyed from bouillon to bouillon. The blood of these horses was drawn after many months, and the serum thereof, without the addition of carbolic

acid, was injected hypodermically in scarlet fever patients. The author thinks that both infection and intoxication may be amenable to the action of a specific streptococci serum. Out of 699 children suffering from scarlatina 84 were treated by serum injection, and the cases then divided into four classes: (1) Slight, (2) moderate, (3) severe, (4) lethal. In the first observations treatment was begun too late, and the quantities of serum used too small, better results being obtained later, when these mistakes had been corrected. The single dose of serum varied from 30 to 180 centimetres, the latter being the quantity generally employed by the author. A second injection was frequently administered. All of the first division, including five cases, recovered, which would no doubt have been the case had no serum been used, mild cases of scarlatina invariably recovering. Those in whom the symptoms were moderately severe are contained in the second group, all of whom recovered. In the third case, containing those in whom the malady was severe, 28 in all, only one died. The lethal cases, contained in the fourth class, were 34, of whom 15 died. From these cases, only one thing is clear; if treatment is to be of any use it must be commenced early in the disease. The mortality increases according to the lateness of the period at which the treatment is commenced. If the serum was injected on the third day the mortality was 14.29 per cent., rising to 50 per cent. when delayed until the ninth day. When an early injection has been made with the proper quantity, the result has been a marked improvement, either preventing the development of the rash or causing it to disappear much before the usual time. Previously high temperature fell, nervous disturbance was alleviated, and heart weaknesses were favorably influenced also. Apparently, too, throat complications were less marked. Certainly the treatment did not cause nephritis even when used in large doses, though it is impossible to say whether throat and ear complications were less frequent. It is worthy of note that on the failure of supply of the special serum and the employment of normal blood-serum and the antistreptococcic serum of Marmorek, no influence was made upon the course of the disease by the latter. As regards the immunizing power of this serum, the author does not make any statement, on account of the uncertainty as to the incubation period of the disease, and also because of the small number of cases observed. It is something to be able to state that no untoward results whatever were noticed as regards this treatment, and as a result of his labor the author recommends the adoption of this method of dealing with scarlet fever.—*Pediatrics*.

Special Selections

SPRING MEDICINE.

BY A. H. OUMANN-DUMESNIL, ST. LOUIS.

It is in the vernal season that the public in general is in quest of what it is pleased to term "spring medicine." This is easily understood and is entirely rational from a certain standpoint.

During the winter the functions of the organism are not in that active mood which they should manifest. The artificial heat, the avoidance of pure air, the lack of exercise and other similar conditions contribute to torpidity and this in turn acts as a powerful factor in favoring deficient elimination, causing an absorption of a number of waste products left over from retrograde metabolism. These products are of a more or less toxic nature and produce more or less physical hebetude in which there is a condition of tissues analogous to narcotism.

The individual so affected is soon thoroughly aware of the fact and begins to suffer from a thousand and one minor ills which, while not alarming or particularly dangerous, are sufficiently disagreeable to give rise to a certain amount of uneasiness. With a progressive increase of such symptoms there arises a certain amount of anxiety. Instinctively the individual resorts to methods to clear his organism of these products which are the cause of his trouble. One will take a large dose of calomel, others will take other active cathartics, but the majority will take "spring medicine." Sarsaparilla is a favorite and is regarded as especially efficacious if taken in conjunction with aloes. In the country sassafras tea still holds its own in popular favor. In the cities quinine has a number of followers.

But it is not the intention here of dilating on any or all of the superstitions entertained in connection with "spring medicine." That the clearing up of the emunctories and that the re-establishing of proper elimination are necessary at this period is acknowledged and appreciated by all. The proper method of obtaining this end is known to many, but the agents which should be used are not so generally recognized.

To him who has studied the therapeutics of modern times and who has devoted some small share of attention to the action of comparatively new remedies, there is nothing more evident than the efficacy of tongaline for the prompt and thorough elimination of these poisonous secretions, which are accumulated as the result of a failure on the part of the emunctories to properly perform their functions.

On the other hand, it is a well-known fact that the excessive accumulation of uric acid in the organism and the deficient elimination of urea are very prominent factors in bringing about conditions always serious and often fatal. It is here again that another agent acts with the happiest results. We all know that lithia and its salts are particularly efficacious in making uric acid soluble and easily eliminated by way of the urinary organs, without in the least producing any disagreeable or untoward symptoms. The great influence of lithia and its salts in the rheumatic and gouty diathesis depends entirely on this and the popularity of lithia waters, undeserved as it may be, is due to this very property, which with them is but feebly exerted.

That concerning which we desire to speak more particularly is a preparation which has proven itself equal to the task and invariably produces the desired results. We refer to tongaline and lithia tablets, a preparation which not only does what is attributed to tongaline, but to this is added the beneficial properties of lithia. This is a remedy so scientifically combined as to induce those effects which promptly dissipate the symptoms that are so marked in the spring of the year. It brings on that clean sensation which is always secured by a complete depuration of the system and which always follows an increased activity of the emunctories. In fact, it "cleans out" the system, just when the necessity of doing so is particularly demanded. It places the individual in the condition of being endowed with greater resistance, of having tissues better prepared for the demands which may be made upon them, and putting vitality upon a much higher level than it has hitherto been. In other words it thoroughly eliminates all the old, foul detritus which has often been accumulating for months and it places the organism once more in a condition fit to combat with the demands and to overcome all the wear and tear as well as the fatigue which occurs invariably in the spring.

Those who have had occasion to use tongaline and lithia tablets are fully aware of the truth of our statements and they are the ones who are the firmest upholders of this excellent remedy as a rational "spring medicine."

No remedy can be called good or can be honestly recommended which is purely empirical, but in tongaline and lithia tablets the addition of lithia to tongaline presents an ideal combination which does not rely upon its action on the kidneys alone as is the case when lithia salts or lithia waters are administered, hence the kidneys are not compelled to do all the work, but are materially assisted by the extraordinary eliminative action of tongaline upon the other emunctories and the equilibrium of the system is undisturbed.