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WATER CONDITIONS IN TORONTO—A PLEA FOR FILTRATION.

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• Director of the Laboratory of the Provincial Board of Health.

TORONTO takes its water supply from Lake Ontario at a point about one-quarter of a mile out from the south shore of the Island about a quarter of a mile east of the lighthouse.

The depth of the water over the turned-up intake is fifty feet. A quarter of a mile further out the depth is probably 150 feet or over.

The intake pipe then traverses the Island and lies along the bottom of the bay to a point at the foot of John street, emptying there into the "pump well." The water thus reaches the well by gravity, and is pumped to the city without any change. There is no filtration of any kind.

Two-thirds of Toronto's sewage is discharged into the Don river and finally into the bay, or directly into the bay, without any treatment whatever. The other third is discharged directly into the lake west of the Island.

In the laboratory of the Provincial Board of Health during the last three years, 663 specimens of water on as many days were examined for colon bacilli and other sewage bacteria. One hundred and nine, or 16.4 per cent., of the specimens showed the presence of these intestinal bacteria in such small quantities of water as one cubic centimeter (severe infection). Normal Lake Ontario water does not show these. The presence of these bacteria are taken as evidence (the best) of sewage pollution of a water.

If intestinal bacteria are present it requires no stretch of the imagination to see where typhoid bacilli might go.

These infections were not usually on single days, but in groups of two or three successive days.

On referring to the meteorological reports for those years, it was seen that for twenty-four or forty-eight hours before these infections there were strong winds blowing either from the east or the west, driving the sewage either from the discharging bay at the eastern gap of the harbor or from the open sewers on the shore at the west of the Island, towards the intake between these points.

Following out these findings during the past summer, Dr. Hodgetts, Secretary of the Provincial Board of Health, chartered me a small steamer to make observations and water collections off the Island shore and the lake from Scarborough Heights to Humber Bay.

Several trips were made between August 31st and November 15th, 1906. Two hundred and ninety specimens, surface and deep, were collected.

On one occasion, optically, chemically and bacterially, pollution and infection with sewage was traced to a point three miles out into the lake directly south from the eastern gap of the harbor, and along the shore a half mile and a mile, along two lines, to within one-half a mile of the intake, and I feel sure that if I had been able to go to the intake that infection would have been found over it. On another occasion infection was traced for half a mile along the south shore of the Island towards the intake, and was picked up again a half mile farther on and directly over the intake. In this case the sewage, by a strong east wind, was driven against the shore from the eastern gap and then deflected towards the intake. On another occasion, with the wind blowing strongly from the west, infection of the water was traced from the sewers on the lake shore over to the intake, being directed towards the south by the impact against the west shore of the island. This same thing was observed again with the wind blowing from the north-west. Out of seven trips, infection was found at the intake four times.

On one occasion samples taken at a depth of 40 feet over the intake showed infection as well as the surface samples taken on the same occasion. On another of the trips the temperature of the water 40 feet down showed the same as the surface water, so that surface water can find its way to the intake mouth.

The lake water five miles out from shore can fairly be taken as normal. This did not show infection. The bacterial count showed only 8 and 10 per cubic centimeter. Whereas where the infections were found the general bacterial count showed from 125 bacteria per cubic centimeter to as high as 45,000 one time over the intake.

The deaths from typhoid fever in Toronto show the effect of these water infections. The rate for the last three years, putting the population of Toronto at a quarter of a million, for every 100,000 of the population was 21.7, practically 22.

Cities having pure water supplies like Vienna, Dresden, Frankfort, The Hague, Zurich, and our own Hamilton, Ont., show only 8 to 10 per 100,000.

Typhoid fever, of course, is not the only disease that is water borne. Cholera, but especially with us diarrhœal affections, are. This last is quite sufficient to cause death in young and old subjects particularly. When the water is infected here the cases of diarrhœa come into evidence prominently. The typhoid death rate, however, is the usual gauge of the purity of a water supply.

Many cities show a larger rate by a good deal than Toronto. No city with a good wholesome water supply shows as high a rate as Toronto. Here we can safely say that during the last three years 88 deaths from typhoid fever have occurred that could have been avoided if we had had a pure water. The rest our neighbors are accountable for. One hundred and sixty-three deaths are only 7 per cent. of the cases that have occurred. Who is there that, knowing the misery of an attack of typhoid fever and the almost certain after effects, would not prefer a broken leg if he were given his choice? During one of the outbreaks of typhoid fever in Toronto 210 cases were members of the fraternal societies. Of these 12 died. It cost these societies, between death losses and an average weekly sick benefit of \$3 for each of those sick, \$175,000, and these workmen with their families are the ones least able to afford this loss.

Toronto's water is at times infected. This infection is from sewage reaching the intake from the sewers, chiefly from wind conditions. There is typhoid fever in Toronto beyond the unavoidable point. Toronto is not unique in this experience.

Chicago some years ago emptied all of its sewage directly by several sewers into the lake front. At distances apart four water intakes were situated one mile out from shore. The typhoid rate during the last three years of this condition was 115 per 100,000. Without altering the sewer outlets, the water intakes were carried from three to four miles out into the lake. For the next three years the rate dropped to 40 per 100,000. Then the famous drainage canal was opened. Three-quarters of the city's sewage was carried off by this to the Mississippi river. There was still the sewage of a quarter of a million of people being discharged into the lake. The typhoid fever rate for the next three years dropped to 22 per 100,000, the same rate as Toronto is now suffering from. The quantity of sewage entering Lake Michigan is now about the same as finally reaches Lake Ontario from Toronto.

At Cleveland, Ohio, with the intake a mile from shore near one of the outlets from the harbor, into which all their sewage entered, the death rate for some two years was 165 per 100,000. When water was taken by the new intake nearly four miles out from shore and at the end of the harbor farthest from the outlets, the rate dropped to 22 per 100,000.

In Toronto, before the new steel pipe was laid across the bay, the rate for 5 years was 55 per 100,000. For the five years after the use of the new pipe was begun the rate was 21 per 100,000. In Hamilton, Ont., where the intake is so situated that it is nearly impossible under the present conditions for the sewage to reach it, the rate is 10 per 100,000.

In Zurich, Switzerland, where their intake and sewage conditions were much the same as in Chicago, the death rate from typhoid fever was for five years 76 per 100,000. An efficient filter, such as is advocated for Toronto, was installed. The typhoid rate for the next five years was 8 per 100,000.

The following table will at a glance show the average rate over years where the waters supplied are unpolluted:—

Mountain stream, above all possibility of pollution :	
Vienna	8 per 100,000
Munich	8 “
Artesian wells in unquestioned soil :	
Frankfort	8 “
Dresden	7 “
Polluted waters efficiently filtered :	
The Hague	8 “
Zurich	8 “

The following table of questionable and certainly polluted waters will show what is happening:—

Surface waters collected behind dams, with the gathering areas policed :	
Worcester, Mass.	16 per 100,000
New York	22 “
Great Lakes, with sewage pollution of varying degrees :	
Toronto	22 per 100,000
Buffalo	45 “
Chicago	22 “
Cleveland, now	22 “
Polluted river waters (since either filtered or about to be) :	
Philadelphia	65 “
Lawrence	115 “
Albany	55 “

The last two cities have installed filters. Their rates have dropped to 30 and 20 respectively. Both of these cities have double water supplies. Lawrence for fire purposes and Albany from a surface source or, otherwise there is every reason to suppose that their rates would compare much more favorably with Zurich and The Hague. Philadelphia is rapidly installing filters in their widely extended system.

New York last week was advised unreservedly by the commission of experts appointed to report on means to reduce their death rate from typhoid, and to increase their nearly already insufficient supply, to filter all their water, when the additional supply was got from the Catskills.

At the last meeting of the American Water Works Engineers, held in Boston, it was practically the unanimous opinion that the natural waters of this country and the United States were not hygienically safe without efficient filtration because of extensive pollution from closeness of population. It was also their opinion that however extensively in practice the sewage of large communities was treated by the sewage disposal methods now in vogue, it was cheaper and more uniformly safe to filter the water used for drinking purposes, if the effluents from these disposal works were discharged into the water source. In the thickly populated districts it is next to impossible to protect water sources from pollution. By proper filtration even badly polluted waters can be made as pure as such unquestionable ones as those derived from the snow caps of the mountains or from artesian wells bored into proper soil.

The disposal of Toronto's sewage by the construction of a trunk sewer, of a large receiving tank, a pump, and 300 acres of sand filter beds near Danforth road, at the east of the city, has been proposed as a method of protecting the water supply. The cost of this would run into the millions. The maintenance and management would be high. The results would be perfect in uniform weather. During extended rainy weather the treatment end of the plant would be practically put out of commission. The sewage then would necessarily be discharged untreated into the lake at great risk to the water supply. Again in practice it would be found that sections of the city would not be connected with the system, notably the Island. The shipping also would not be looked after, and this is not a visionary danger, either. Many of the outbreaks of typhoid in the north of the Province have originated from the sewage of boats carrying typhoid fever sufferers infecting water supplies. This happened undoubtedly once at Byng Inlet. In the summer months thousands daily, many of them convalescent cases, come in and out of the harbor.

If filtration of Toronto's water was adopted, we would be sure of its uniform purity. Much simplified and cheaper methods for the removal of the gross suspended matter in the sewage could be introduced. A series of catch basins and septic tanks, requiring almost nothing for maintenance, would remove the 200 tons of organic and inorganic solids now daily reaching and filling up the bay, and cost very little.

We could then for a cost much less than by the original plan, have water filtration and a good method of sewage disposal that would meet all our requirements from a hygienic, a commercial, and an æsthetic standpoint.

THE RESPONSIBILITIES OF HOSPITAL SUPERINTENDENTS.*

By R. W. BRUCE SMITH, M.D.,

Inspector of Hospitals and Public Charities of Ontario.

THE agreeable task of presenting a few observations at this inaugural meeting of the hospital superintendents of Ontario was accepted only as an opportunity of furnishing evidence of sincere sympathy with the formation of such an association in this Province.

It would seem needless to dwell upon the good work which such an association may accomplish. The duties and responsibilities of a hospital superintendent are such that probably no class of people can derive more benefit from occasionally meeting together and discussing the many and varied problems that so often arise to perplex those engaged in institutional management. Co-operation is the key-note to success and with the right spirit infused in such an organization as the one you are to-day forming, beneficial results must follow. It is always an inspiration for those engaged in similar duties to meet together. The daily routine with its wearisome details tends to blight originality, alertness, motive and enthusiasm. Nothing is so deadly as getting into a rut. Who does not need inspiration and new ideas?

The honor of founding the first hospital is usually ascribed to Fabiola, a friend of Saint Jerome, a Christian lady of Rome in the fourth century. We read that this Roman daughter of consuls and dictators sold all her goods, dressed the wounds of the maimed and wretched, and carried the sufferers on her own shoulders. Lecky, the rationalist historian, says of this charity that "planted by a woman's hand, it overspread the world, alleviating to the end of time the darkest anguish of humanity." But before this, similar institutions had been begun in the East, by Basil in Cæsarea, Saint Ephraem in Edessa, and by Presbyter Brassianus in Ephesus. Speaking of Basil's work, Gregory of Nazianzus said: "We have no longer to witness the fearful and pitiable sight of men like corpses before death, with the greater part of their limbs dead, driven from cities, dwellings, from public places and from watercourses. Basil it was who, more than any other, persuaded those who are men not to scorn men nor to dishonor Christ, the head of all, by their inhumanity toward human beings." From the East the impulse and direction came which, in the picturesque language of Saint Jerome, "transplanted this twig from the terebinth of Abraham to the Austonian shore." But, whether Fabiola was the first builder of hospitals or not, her name suggests the wonderful part which woman has had in Christian charity ever since. We are told that Placilla, the wife of Theodosius, the Em-

* An address delivered at inaugural meeting of Canadian Hospital Association at Toronto, April 1st, 1907.

peror, herself the first lady of ancient world, visited the thirty-five hospitals of Constantinople, making the beds of the poor and becoming the maid-servant of the sick-chamber. We all know the name of the angel of mercy whom the Crimean War brought to the help of the English sick and wounded, and the name of the equally worthy minister of charity whom America now honors, Clara Barton, the representative of that Red Cross Society which knows nothing of nationality, and whose standard of peace and help is now lifted by more than a score of Governments over the fields of carnage and death. We have read of that later heroine of charity whom Florence Nightingale inspired, Dorothy Pattison, usually known as Sister Dora, whose hospital work and whose marvellous strength and beauty of character have inspired many women to leave the dreary dissatisfactions of a life of fashionable pleasure for the enduring rewards of a life of charity.

A marvellous development of the hospital spirit has been made. It means more to be a hospital superintendent now than ever before. Twenty years ago the Government returns for 1886 showed that 7,035 patients had been treated during that year in the hospitals of Ontario, ten years ago the returns indicated an increase to 17,517 as the number of patients treated in our hospitals in 1896. The increase was great during those ten years, but not nearly so remarkable as those we had to present this year. The last report shows that during the past year there were treated in the hospitals of Ontario 41,950 persons and that the total annual expenditure for hospital maintenance, including capital accounts, was \$1,228,289. What do these figures mean? Do they indicate an increased public confidence, so that not only the poor, but the well-to-do class seek hospital treatment? Do those figures mean that our hospitals, by able management and greater efficiency, have justified themselves so that the rich are glad to bequeath large sums for their erection and support? With the material prosperity which Canada has been enjoying it is pleasing to note the fact that civic pride and local philanthropy have gone hand in hand in the matter of hospital progress, and we have been furnished with a manifestation of a social and humanitarian movement that is surely creditable to the people of Ontario. This growth of the hospital spirit will continue if we are able to demonstrate to the public that every dollar is used to do the most possible good. We must never forget that hospitals are established for the care of the sick poor and in these days when so much attention is paid to making private wards luxurious there is probably too great a temptation to favor the private patients at the expense of the deserving poor in the public wards. The resources of a hospital are a public trust and they must be guarded and used as such. Economy consistent with good management is so evident

in our hospitals that it is not necessary to dilate upon a subject that has been given an attention that has resulted in our hospitals being generously and deservedly commended for prudent management.

The remarkable increase in the number of patients admitted to our hospitals must be taken as an indication that the time has passed when the public looks upon a hospital as a chamber of horrors and considers it a misfortune for anyone to be admitted thereto. This pleasing change in sentiment must be largely attributed to those in charge of our institutions.

The firm determination on the part of a hospital superintendent that everything possible shall be done for the patients will infuse much of the same spirit into all those who are employed in any capacity. Discipline is absolutely necessary, but, with a strict adherence to all the principles supporting good management, a willingness to allow every privilege consistent with proper conduct will always be appreciated. Just administration is generally found to faithfully exemplify "the art of being kind." As Canadians we are blessed with an innate love of fair play and every one conversant with institution life can recall instances in which the practical application of the Golden Rule has afforded a solution for many a difficulty. The supremacy of a hospital superintendent should be held by kindly influence rather than by interference. All the various departments must, if possible, be harmoniously related and be in perfect sympathy with and loyal to the head. There can be only one head to an institution. The value of ladies' auxiliary boards can not be too highly estimated. Ontario hospitals owe a debt of gratitude for self-sacrificing devotion and zeal to such local boards, but none of the members of these should presume to dictate regarding the internal management of an institution. There is nothing to be feared from such a source if the superintendent takes and maintains a firm but dignified stand in regard to her or his responsibilities. On the other hand, a superintendent makes a mistake if the assistants in the hospital are not encouraged to go ahead and develop the different departments over which they are placed. An American hospital superintendent, whose rank is second to none, said to me not long ago, "I hope the day will never come when I shall be unwilling to learn some improved method of doing things from the employee in the most humble position in this institution." Such a remark coming from such a source left an impression on me. Our hospitals are for the care of the sick and the well-being of the patients must be the first consideration with everyone. There is sometimes a danger that the details and necessary formalities of administration may absorb so much attention that the real object for which the institution exists may be occasionally lost sight of. Simplicity may readily be made the helpmate of accur-

acy in hospital management. Complexity in detail can be avoided and at the same time have such a perfect system of management that the life of the superintendent may be kept contented and serene.

A hospital superintendent must always bear an important relation to the general public. The patients' friends require no little attention. I know a hospital, more than a thousand miles from here, where excellent medical and surgical work was done and where the patients were kindly and carefully looked after, but, on account of the superintendent being boorish in manner, a totally wrong impression was given to the public, and, in consequence, the financial results at the end of each year were not what they should have been. The visitors at a hospital are so often unreasonably exacting and difficult to control that great overdrafts are often made on the patient forbearance of the superintendent who is called upon to answer their enquiries. Three hours one day in the week should be a sufficient allowance for regular visiting days, but, of course, when a patient is very ill, it should be possible by consent of the superintendent for a patient's friends to be admitted more often.

The design of every hospital architect now is to provide a building that can be readily kept clean. The constant desire of every hospital superintendent is for immaculate cleanliness, and, to maintain that condition with too often an indifferent corps of workers, is a perplexing problem. The extent to which the responsibility for hospital housekeeping depends upon the nurses in training is a question more difficult than I would attempt to solve. While it is necessary to instil into every probationary nurse that one of the foundation stones for success consists in having a patient's surroundings clean and neat, and that it is not a menial task to keep them so, care must be taken to spare, as far as possible, and protect from physical drudgery those who have enlisted for a life work in a calling which demands mental application as much as it does muscular activity. To meet the criticism one hears in these days of the overtrained nurse is an addition to every superintendent's endless duties.

Such an association as you are forming to-day might devise a uniform method of keeping hospital accounts. Some schedule might be prepared and carefully discussed that would lead to the adoption of a method of keeping accounts that might be made common to all institutions. A uniform hospital register is a long felt want in the hospitals of Ontario. It should not be a difficult task for such an association as this to suggest the adoption of a form of register that would prove, not only labor-saving, but one which would provide all information that should be recorded concerning patients admitted. With a uniform system of accounting and recording, the necessary bookkeeping in connection with a hos-

pital would cease to be a labor and the compilation of returns would become an easy task. The question of finances is one which nearly every hospital superintendent must ever have in view. By adopting a simple system of accounting it may be known from week to week what expenditures are being made for every item and the cost per patient for each article enumerated in the maintenance account. Every careful superintendent should clearly understand the resources of the institution, and, knowing what the possibilities for increase or decrease are, uses discretion in directing and controlling expenditure. Prudent, judicious economy must, however, be distinguished from the parsimonious spirit.

A wise superintendent will never lose sight of the fact that the mission of the hospital is not confined to allay suffering and relieve the physical distress of those cared for within its walls. The hospital should ever spread a gospel of health and right living throughout the community where it exists. Not only should the institution be a model of sanitary housekeeping, but the doctrines it inculcates should do much to demonstrate the best and truest hygienic truths. The beams of light from a hospital should shine forth and enter every home within a radius of its influence so that the superstitious and baneful influences that shadow many lives may disappear as mist before the morning sun. The hospital in its great mission of teaching people how to live, in order that they may keep healthy, has a field of ever enlarging usefulness. The establishment of local sanatoria for consumptives in Germany has done more to educate the people in regard to the nature and prevention of tuberculosis than any other agency. Where prejudice once existed in regard to the establishment of these local sanatoria through a misconception of the nature of the disease it is now found that in the immediate vicinity of these institutions the disease has become practically unknown. These good results are entirely attributed to the fact that the people were taught how to live. Every hospital has its sphere of usefulness then in becoming an educational institution, not necessarily where its wards are visited by students, but through the potent influence which a wise superintendent may exert in aiming to make all the departments of the hospital helpful to all who come in contact therewith. I do not know of any calling in life that requires greater versatility in talent and larger resources than is looked for in a hospital superintendent. Patience with them must never cease to be a virtue. Their mission in life unfolds for them new fields of usefulness from day to day. As heads of institutions devoted to the care and relief of suffering humanity they must rule and guide with the spirit of Him who left for us the first example of the hospital spirit. Whether at the head of an hospital large or small, your mission is to shed forth a radiance from the torch which privilege has placed in your

hand. May this organization of the hospital superintendents of Ontario inspire new zeal and earnestness and be helpful to each one personally and to the institutions in this Province for whose welfare you have rendered such valuable and faithful service.

THE RELATION OF THE WORK OF HOSPITALS FOR THE INSANE TO THAT OF GENERAL HOSPITALS.*

By EDWARD RYAN, M. D., Rockwood Hospital, Kingston.

THE formation of an association having in view the welfare and prosperity of the various hospitals in the community, marks a new departure and a great advance in hospital administration. Not only does it mark the dawn of a new era in hospital government and usefulness, but in scientific, medical and original research, in preserving and generalizing the labors and discoveries in the vast and boundless ocean of medical life.

In looking back over the history of medicine and surgery, one cannot but be struck with the fact that the wards and amphitheatres of our hospitals were the first to witness the greatest triumphs in these wonderful fields of human labor. Not alone have they been the scenes where patient toil and brilliant achievement meet their reward, but they have witnessed deeds of self-sacrificing devotion, of heroism and valor the recording angel alone has entered in his great account.

In lands beyond the sea the Maison Dieu, St. Thomas, good old Guy's, and in America the Massachusetts General, the Philadelphia and Baltimore hospitals are names inseparably associated with the great historical events in medicine and surgery.

To extend the field of hospital usefulness, to make more perfect the way, to illumine what is dark, to lift up and inspire, should be the duty of this association. The economics of the hospital, in administration and in the division of labor, should receive unceasing study and attention. In large centres, where more than one hospital exists, classification should be earnestly considered that each department or institution may, in its own field of duty attain the highest ideal.

The relation of the work of the general hospitals to the work of hospitals for the insane may justly claim a fair share of our time and thought.

Well nigh four centuries ago, the same problem confronted our forefathers. St. Bartholomew's and Bethlehem in 1546 and 1547 respectively were founded for the well-being of the sick and afflicted, the former for physical, the latter for mental diseases. Since these far-off days, the work

*Read at the Hospital Association, 1st April, 1907.

has drifted apart, often without sympathy or co-operation. Our duty should be to reconcile, to harmonize, that each may fulfil its noble mission, and bring the greatest possible good to humanity.

The relation of the general hospital to the hospital for the insane may be discussed under two heads. First, in regard to administration, equipment and treatment. Second, in regard to the classification of the patients, or the economic and scientific division of labor.

If our hospitals for the insane are to properly discharge their duty, advantage must be taken of the latest hospital methods, procedure and treatment. I need scarcely mention that physical restraint, punishment and abuse have long since passed away, at least in this country. Kindness on the part of the nursing staff, gentle treatment, moral encouragement, close attention to duty, constant care and watchfulness on the part of all, are necessary essentials.

Nurses are given a careful course of training in general medicine and in mental disease by the hospital staff. For the past two years an additional course of lectures has been given to the nurses of Rockwood Hospital by the staff of Queen's University Medical Department, making the training most thorough and complete.

Our nurses, before graduating, are obliged to pass a careful examination, written and oral. These examinations are conducted both by the hospital staff and the outside lecturers. The nurses of Rockwood are fully qualified to take their place with the graduates of any hospital.

Every patient on admission receives a careful physical examination, with an endeavor to arrive if possible at the physical cause of the psychosis. The excreta are examined, blood count taken, blood pressure noted and every indication of any abnormality carefully investigated; the line of treatment, after earnest consultation, is then determined upon.

The hygienic and dietetic wants of our patients receive careful consideration from the outset. Every accessory to medicinal treatment as conducted in general hospitals is fully supplied. Special treatment as demanded by the various psychoses is patiently and persistently followed.

The application of hydrotherapy has, for many years, played an important part in general medicine, in mental diseases it has found special favor. Last year, four continuous baths were installed in Rockwood, the first in Canada, and the results have been most gratifying. Patients are maintained therein from one to eight hours, under close inspection. They are then removed from the baths, carefully rubbed with alcohol, massaged, and sent to rooms specially heated and prepared for their reception. In acute cases I cannot speak too highly of this form of treatment. We are now engaged in installing at Rockwood, hot air cabinets for this special form of treatment. It is the intention to immediately fol-

low this by the installation of a complete electric equipment, the X ray, the spray, the douche bath, in fact all forms of electricity as applied to medicine.

Massage, as a method of treatment, possesses great value in neurasthenic cases, hence our nurses are carefully trained in this department and the treatment regularly invoked in suitable cases. I feel satisfied that the future will witness even more general and thorough application of this form of treatment.

In connection with Rockwood Hospital, during the past year, an operating room, equipped in modern form, and with all modern essentials, has been established. It is proposed to perform therein such surgical work as the physical welfare of the patients demands. Already the departure has proved of the greatest possible value. The psychic as well as the physical effect on patients of timely surgery has been satisfactorily demonstrated. In the training of nurses, the management of a modern operating room, and the surgical technique demonstrated therein, are important considerations.

Until the present day, the study of pathology in connection with an hospital for the insane, has been sadly neglected, and, if little advance has been made in the study of mental diseases, it is mainly due to this fact.

I need scarcely say to a meeting of this character, how superficial is the medical knowledge not founded on pathological research. Hospitals for the insane are now realizing this fact. At Rockwood Hospital, Dr. W. T. Connell, pathologist of Queen's University, has taken charge of the pathological work. Upon admission to the hospital each patient is subject to a careful clinical examination, the blood and various excreta are examined by the pathologist. All the autopsies are conducted by him, sections made of all pathological tissues, departures from the normal are carefully noted, alternate sections are furnished the hospital, and a careful report made on each case. In this way the clinical and pathological work are identified throughout.

The question of dietary forms one of the most important problems of hospital administration. A step in advance has been made at Rockwood Hospital during the past year by the installation of a steam carving table, with covered hot water dishes. Experienced carvers take charge of the work, and the meat is sent to the dining tables in the covered hot water dishes, and the meal is thus served warm and palatable. The economic and dietetic value of the departure is beyond question.

The general hospital of to-day owes its capacity for good to the loyalty and devotion of those who, within its walls, were inspired with love for the noblest of human callings. The hospitals for the insane

should be opened wide for the student, that more general knowledge of the etiology, pathology and treatment of mental disease should be the property of every graduate in medicine. Rockwood Hospital has opened its wards for clinical purposes, and a thorough course of lectures on mental diseases is given annually by the staff to the University students. Not only are diagnosis, prognosis and treatment of the various psychoses carefully elucidated, but the physical incidents leading thereto are fully demonstrated, in the medical and surgical clinics, in the wards and in the hospital amphitheatre. That such a course has been received with lively appreciation I know, that it will be productive of good to the community I feel assured.

Now I come to the second portion of my task. How shall we classify our patients to bring about the best results?

There is a growing demand for earlier and more effective treatment of the various forms of psychosis. For this reason it is urged that psychopathic wards should be maintained, in connection with our general hospitals. For my part I have no hesitation in urging we should make hospitals of our asylums, instead of making asylums of our hospitals.

While it may be true, as Diller remarks, that insanity is but one group of many observable phenomena of physical disease, and it is never the sole expression of disease, that physical signs and symptoms always accompany it, yet, with properly equipped hospitals for the insane, and with the true spirit of investigation dominating those in charge, surely these phenomena can be best studied and treated by physicians who give their time and thought to this special work.

The alcoholic, the neurasthenic, the hysterical, the so-called border land patient, has had his day in the general hospital. His disease, his condition, his phenomena have not been appreciated, and therefore his treatment has been a profound failure. Sooner or later he finds his way to the hospital for the insane.

Any one who has had any experience in the management of our general hospitals knows full well the utter inutility of attempting to treat therein cases of acute insanity. The nurses are entirely inexperienced in this class of work. Accommodation for the reception of these patients is wanting. There is no means of isolating them from the patients the general hospital is designed to treat. The time and care each individual case demands cannot possibly be given in the present state of our general hospitals without immense additional expense.

Far better were it for both the patients and the hospitals that each class of hospital should broaden and develop in its own particular sphere of usefulness.

I am fully aware of the public mind with regard to the hospitals for the insane, but time and education have overcome difficulties more serious than this, and if it be that the great good of these hospitals may accomplish is in any way hampered by the general term now applied to them, by all means let the name of "asylum" and "hospital for the insane" disappear, and that of psychopathic hospital be used instead. Neither superstition nor ignorance nor prejudice should stand in the way of any great advancement.

AN ADDRESS ON THE WORK OF TRINITY MEDICAL COLLEGE.

By W. B. GEIKIE, M.D., Former Dean of the College.

AT the reunion of Trinity Medical College, held April 1, 1907, this being the second, one having been held a year or two ago, Dr. Walter B. Geikie, the honorary chairman, replied to the toast, "Old Trinity Medical College," by special request. He spoke as follows:—

First, thanking the large number of graduates present for their exceedingly warm reception, he referred to the origin and phenomenal success of this College from the very first. This gave it a position as one of the best medical colleges in Canada, which it retained to the last. The doctor, who was the means of setting the College agoing in 1871, exhibited the original memorandum in his own handwriting, of that date, suggesting its formation. The first clause of this was to secure for it such a teaching faculty as would ensure its full success from the outset. Men of established reputation as medical teachers were selected for the principal chairs, and early in 1872 the College was established. Its first act was to hold examinations in the primary and final subjects, as many candidates for these had applied. Amongst the primary candidates were Dr. Osler, now regius professor of medicine in Oxford, England, and Dr. Peter Macdonald, M.P., Deputy Speaker of the House of Commons; also Dr. Angus Mackay, ex-M.P.P., now of Ingersoll, Ont. So in the primary, as well as in the final examinations, as the first step taken by the new faculty, the College had a good many who have since risen to fill most honorable positions. In 1872, after holding her first session (1871-1872) examinations in the spring brought a considerable number of candidates. Dr. Logan More, now of Brandon, Man., and Dr. Peter Macdonald, M.P., were amongst the final men who obtained their degree. The Medical Faculty thus made its mark and was well received from the beginning by the public and by the profession. All the Royal Colleges of Physicians and Surgeons in Great Britain and Ireland recognized the College at once, and gave it as high a recognition as any college in the

various British colonies had ever received. This was found to be a great advantage, and ever since large numbers of the graduates of Trinity Medical College have taken British diplomas, every year several doing so; and not a few have gone on to the Fellowship examinations in the British Royal Colleges, and have created a very good impression of their Canadian Medical College (Trinity) by the high standing they were able to take at the examinations.

Much care was taken all through the history of the College in conducting the correspondence with intending students, to show the interest taken by the College in the progress and success of every diligent student. The entire curriculum of the College, primary and final, was very carefully considered. It was based on the best of those adopted by the best British colleges and universities. No subject of any *practical* value was omitted; but minor subjects (*i.e.*, of minor importance in *medical* education) were not allowed to encroach on the time required for those which are essential, and most necessary for the success in life of medical men. The special desire was to send out no man who was not well grounded in the work *essential at the bedside*, as the *diagnosis*, prognosis and *treatment* of such cases as the general practitioner is most certain to meet with in practice. The results of this policy are seen to-day everywhere these men have settled, by the good impression they make on the public by their success and the great demand there is for them.

Another good feature in the education given in Trinity Medical College was, that the principal subjects were in no case subdivided into fragments, and a fragment only given to each teacher. It was felt that such method is sure to reduce to zero the interest felt in their work by teachers and students alike. Enthusiasm in teaching, and in receiving teaching, was regarded as essential; and, on this account, every really good teacher should have such an amount of teaching as will interest himself and enable him to interest his students. One might as well try to play golf in a room, or enjoy curling or hockey on a sheet of ice 12 feet square, or a game of billiards in a bagatelle board, as to try to teach a fragment of a subject enthusiastically. It can't be done. Trinity Medical College gave each teacher his subject, and expected him to know it, and to teach it well and thoroughly, or a change would soon be made. The didactic and clinical teachings were both full in Trinity Medical College. This was regarded as wise, and in this the College followed the practice of the best British medical teaching bodies. Some teachers now undervalue didactic teaching, and think that it cannot be too much reduced in amount. It is admitted at once that of *inferior, poky* didactic teaching the less given the better, for this is waste of time to the listening students, if any do

really listen to it. But if good, the didactic course should be full and should always be so given as to be interesting. Those opposed to didactic teaching say "Students can read this work up for themselves, and giving it in lectures is labor largely wasted." But good students say men *can read up work, but a large majority do not and will not do so sufficiently*, and that nothing sets men, not only good students, but even those inclined to be indifferent, to reading up so certainly as having heard good lectures on it, and no matter what subject is lectured upon this holds true. Didactic teaching, too, enables men who follow it regularly and carefully, to get ten times more benefit from clinical teaching than those do who ignore or neglect their didactic courses. This is indisputable, and it will be found that the greatest *readers* of their class books are, as a rule, those who follow the didacter as well as the clinical teaching they receive most regularly and most carefully. Any one who hears lectures, say Dr. Grenfell's, on his Labrador work, or on what Great Britain has done for opening up Egypt and India, will eagerly read all they can get hold of on these subjects, in which they have become interested by hearing interesting lectures on them. Dr. Geikie stated that he formed this opinion regarding teaching long ago, when himself a student, and has found the best teachers everywhere hold very similar views on this subject. Professor McKendrick, who has very lately retired from the chair of physiology in the University of Glasgow, which he filled with great success for many years, in his closing lecture to the class, refers to his rule as to making the teaching of students as practical as possible. He said, and he was referring to his didactic lectures, "that he had made it a rule always to remember that the great majority of his large class were studying physiology, not to become physiologists, but to become medical men, and that it was ever, and even had been, his aim to teach his students the broad essentials of physiology required by medical practitioners, and to avoid the tendency to wander off into the seductive paths of pure physiology." These are wise words from a great teacher, and yet some teachers of physiology spend weeks over matters of no practical importance whatever.

Trinity Medical College had "*the practical*" in view, and made it her chief business to do so, in every part of her course, *i.e.*, to have the men they sent out well informed as to all subjects, which were certain to be useful to them at the bedside in future life. Fifty-one consecutive years in connection with medical education have confirmed Dr. Geikie in the view that, on this basis, and on no other, can a good medical college rest—*i.e.*, a medical college which will prove fully successful and be a blessing to the country, and to all its students.

In regard to Trinity Medical College itself, Dr. Geikie said that at her own cost she had been able to occupy good buildings, to add largely to them more than once, to equip the College well for every practical purpose, to add to her equipment every year, to provide large and good lecture rooms and laboratories as well, convenient and furnished with all needed appliances and constantly adding to and improving these; and had an excellent and ever enlarging museum creditable to any medical college. Dr. Allbutt of Cambridge, England, and a very distinguished professor in that university, who, on a visit some years ago, Dr. Geikie took over the College, expressed his pleasure and surprise at seeing "*the buildings and all the appliances so excellent*," to use his own words.

Trinity Medical College educated some 2,000 graduates, the peers of any in Canada. It had a list of 196 gold and silver medalists, besides the very large number of scholarships won in the several years, all of these the gifts of the College, and all competed for, and deservedly bestowed. Then it had its special Act of incorporation given it by the *unanimous* vote of the Legislature of the Province. Mr. Biggar, son-in-law of the late Sir Oliver Mowat, drew it up for the College in 1877, with what help he was able to give him, and Mr. Biggar (for some years the professor of botany) and an eminent lawyer, said he considered it the most complete Act incorporating a medical college which he knew of, and this was emphatically the case.

Up to 1903, the College had been prospering year by year, sometimes more, sometimes less. The last two sessions of the College were amongst the best, and *the very best*, so far as the amount and quality of the teaching done during these sessions is concerned. Financially the College was in a good state, able to pay everyone very fairly, indeed, for the work done. He said that the payments made to teachers were a good deal larger than in some other medical colleges at present. Now, although Trinity Medical College is, since July, 1903, but a memory, it is in view of the great and splendid work she did, and the many years she kept it up, a very grand one.

Dr. Geikie said in closing: With his intense devotion to her interests for 32 years of the best of his life, having been Dean for the last 25 years of her existence, and her chief executive officer, so far as doing all the exacting work it required for the full 32 years, having represented her on the Medical Council from her incorporation in 1877 till 1902, 25 years, involving great responsibility, and being the person who was the means of setting her agoing in 1871, it would have been quite impossible for him to have been a consenting party to the changes of 1903, by which her name and her autonomy were blotted out. He had fondly hoped that

a college, having so fine a record, would continue to exist as a famous medical teaching body long after he had been gathered to his fathers.

To him the loss of her autonomy was a very great and unexpected disappointment. He comforts himself with being thankful that she existed long enough to do all she has done for medical education. No wonder her name should be dear to him, when he thinks of the many years of teaching he did within her walls, and the great amount of time spent otherwise, and always willingly, working for her prosperity, and of the many large classes of good students who for so many years filled her class-rooms, and by whom her extinction, as a college, is greatly regretted. No graduate worthy the name, or student, who was privileged to attend her teachings can or will ever forget the dear old College. The deserved eminence which many of her sons have attained, and the love of all her true sons, will, he trusts, for many years to come, throw very bright halos round her much loved name, which they will ever cherish when it is mentioned, as it is sure to be very often, as they recall how much she did for them in their never-to-be-forgotten student days. Doubtless these pleasant reflections will prove an inspiration, and a stimulus often while engaged in the responsible duties of their profession. Her widely scattered graduates will, he hopes, at least now and then, may it be often, meet in every part of the Dominion and in the United States and elsewhere in the world where they may be, as we do to-night, to speak of their *Alma Mater* with an affection which no lapse of time can ever decrease. He felt justified in going one step further to say, and to hope, that the character and extent of the work of Trinity Medical College, and the acknowledged position and influence her success gave her, may have much influence in the improvement of the medical education of the future in causing it to be made more practical than ever it has been heretofore, thus fitting the graduates sent out from the colleges of this and perhaps of other lands in future years more fully for the exceedingly exacting responsibilities which fall to the lot of all worthy members of our noble profession.

ILLUSTRATIONS OF DISLOCATIONS.

With the March, 1907, pamphlet, the Battle Company commence the issue of a series of eighteen illustrations of dislocations, the first being bilateral dislocation of the jaw. These illustrations will complement the illustrations of long bone fractures, and the two series will make a valuable collection for the busy practitioner. Physicians who are not on the mailing list can get them free, by application, to Battle & Co., St. Louis.

PROVINCE OF QUEBEC NEWS.

Conducted by MALCOLM MACKAY, B.A., M.D., Windsor Mills, Quebec.

After mature deliberation it has been decided by the Board of Governors of the Montreal General Hospital that the present medical building will be destroyed and a new hospital built on the same location at the cost of some \$500,000. The question of the site has been carefully considered, some thinking that another place should be chosen before spending half a million on a building, but eventually the block bounded by Dorchester, Lagauchetiere, Cadieux and St. Dominique streets, was selected as being the most suitable. During the last session of the Legislature at Quebec, the hospital authorities obtained permission to secure a clear title to the Labonté property, which had been purchased for \$12,000. This gives to the institution the entire square bounded as above mentioned, with an additional holding on the south side of Lagauchetiere street. The intention is to rebuild the whole medical wing, and it is expected that this can be done without seriously interfering with the work of the hospital. A new power-house has already been contracted for and will be started at once; it will cost in the neighborhood of \$80,000. The Governors intend that the new building will, in itself, and in its equipment, be equal to anything of a similar nature in America.

The Civic Hygiene Committee of Montreal has decided to recommend to the City Council that a new twenty-five year contract be drawn up between the city and the Alexandra and St. Paul's Hospitals for the treatment of contagious diseases. This contract will increase the annual grants from \$15,000 to \$30,000 to each hospital and end the old arrangement under which the city paid one dollar a day for each additional patient after twenty beds were occupied. Each hospital must erect an additional pavilion for erysipelas, and the whole building is to be open to the inspection of the city health officers. To these conditions two clauses have been added, the first, that the chairman of the Health Committee shall form part of the executive of each hospital, and the second that at the expiration of the contract, twenty-five years hence, the city may expropriate the properties of both hospitals, the value to be determined by recognized appraisers.

Several important appointments have been made on the staff of the McGill Medical Faculty, owing to the death of Dr. James Stewart, who held the position of professor of medicine and clinical medicine. In his place have been elected as professors in medicine and clinical medicine Drs. Finley, Lafleur and Martin. Dr. F. G. Finley will be in charge of the organization and didactic work of the department, while the hospital

work will be largely in the hands of Drs. H. A. Lafleur, B.A., and Chas. F. Martin, B.A. All three are graduates of McGill, and have studied for long periods on the Continent. They are well known in the medical societies of Montreal and Canada and have written frequently in the medical journals both of America and Europe. Drs. Finley and Lafleur are on the staff of the Montreal General Hospital, while Dr. Martin is connected with the Royal Victoria. All three have been on the teaching staff of the McGill Faculty of Medicine for several years. Owing to the large increase of work which will fall upon the professoriate in connection with the new five-year course, the appointment of these three well-known men has been considered essential for the proper carrying on of the work and the appointments have been enthusiastically received by the staff and associated medical men.

An order has been issued by Dr. Laberge, Medical Health Officer of Montreal, in regard to school inspection, to the effect that no further inspection is to be done after March. Lack of funds is the cause. The three thousand dollars voted has been expended, and not until May can fresh funds be secured. In consequence a new crop of diseases may be expected to be found among school children very shortly, as the need of the inspection has been amply shown in preliminary reports. It is possible that an emergency meeting may be called to deal with the matter, as the situation is considered critical by the health authorities.

Dr. Amedée Marien, professor of histology at Laval University, has been appointed head surgeon of the Hotel Dieu in place of the late Sir William Hingston. Dr. Marien, who has been connected with the staff of the Hotel Dieu for six years, studied surgery in Paris for a considerable time, and was a contributor to the treatise on gynaecology published by Prof. Leguen in 1898. He is president of the Société Medical de Montreal, a director of the Union Medicale du Canada, and corresponding member of the Société Anatomique de Paris. In connection with the Hotel Dieu it is proposed that the two hundred and fifteenth anniversary be celebrated by raising a sum of \$50,000 for improvements which are required by the increased demands on the institution. Archbishop Bruchesi has consented to act as president of the committee in charge and has himself subscribed the sum of one thousand dollars.

The visit of Prof. Müller of Munich to Montreal has been of the utmost interest to medical men, and every opportunity of hearing him has been eagerly seized by the profession. Perhaps the most popular of all the German professors, among those who have gone to Germany from this side to study, Dr. Müller is an interesting personality. From Marburg to Basle, as clinical professor of medicine, and from Basle to Munich as professor of internal medicine, Prof. Müller's reputation has

increased by leaps and bounds and at present he is considered to be among the leaders of his profession. On Tuesday, April 2nd, he lectured at the Royal Victoria Hospital on Leucæmia in a very interesting and comprehensive way, and in the evening he gave a lantern demonstration and lecture on multiple sclerosis, beautifully illustrated with slides. He was then entertained at the German Club and on the following day gave a clinic on pneumonia, dwelling particularly on the excretion of chlorides in this disease. Dr. Finley entertained him and several guests at the St. James' Club and in the afternoon Dr. Blackadder gave a quiet reception, after which he was guest of the Medical Faculty at the Mount Royal Club for the evening. On the following day he left for Toronto.

The following cases were reported at the Montreal Medico-Chirurgical Society: Surgical treatment of diseases of the stomach, Dr. Garrow; cystopexy, Dr. Smith; malaria with blood changes of pernicious character, Dr. Finley; puerperal convulsions due to increased intracranial pressure, lumbar puncture, recovery, Dr. Reddy; four cases of paralysis of the upper extremity, Dr. Forbes; is cancer contagious? (lantern slides), Dr. Smith; four unusual cases of mastoiditis, Dr. Mathewson.

The illness and death of Dr. W. H. Drummond was received with grief by all the members of the profession in Montreal. Best known as a genial *raconteur* of delightful stories and reciter of interesting verse, he will be greatly missed at the banquets and concerts which he graced with his presence. He was always willing to take part and add his quota to an evening's enjoyment and one was always sure of something good when Dr. Drummond rose to speak. Of strong constitution and robust frame, it was with surprise that the news of his dangerous condition was received in Montreal, although he was known to have recently recovered from influenza. The sympathy of the profession goes out to his bereaved wife and family.

All will unite in the sincerest regret at the heavy loss sustained by the University of McGill arising from the two recent fires. Only a few weeks ago the splendid Science Building was destroyed by fire. This building was the gift of Sir W. C. Macdonald. At the moment of writing word comes that the fine Medical College Buildings are destroyed by fire, with all the collections in the museum for seventy years. The loss in these two buildings is estimated to be about \$1,000,000. From an educational standpoint the loss of the splendid museum is very great. It was unusually complete in every detail and was the product of the united efforts of many persons over long years. Temporary arrangements have been made for the continuation of the various classes. A heavy task now rests upon the friends of McGill University. It is felt they will not be found wanting.

CURRENT MEDICAL LITERATURE

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MEDICINE.Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.
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ADMINISTRATION OF CASTOR OIL.

In the *Pacific Medical Journal*, January, McKee gives the following :

Make a powder composed of equal parts of gum acacia, licorice, lactose, and flavored with vanilla. A pinch of this powder added to water and shaken makes a very persistent froth in which may be given, without the slightest taste, such oils as castor oil, as well as much lighter substances, salicylates, cod liver oil, iodized or phosphate oil as of methyl, essence of santal, and so on.

The following are good formulas :

Recipe—

Ol. ricini	30.00 (oz. 1)
Glycerinæ	30.00 (oz. 1)
Ol. gaultheriæ	1.00 (gtt. 15)

Misce et sig.

Take one to four teaspoonfuls.

Recipe—

Vanillin	0.075 (gr. 1¼)
Ol. menth. piperitæ	0.25 (gr. 4)
Saccharine	0.30 (gr. 4½)
Alcoholis	6.00 (dr. 1½)

Mix and add tincture cudbear 1.00 (M. 15). Mix Ol. ricini, add 120.00 or 4 oz.

Mix, shake, and add two mixtures together.

Recipe—

Gum acaciæ puvis	15.00 (oz. ½)
Ol ricini	30.00 (oz. 1)
Saccharine	0.65 (gr. 10)
Ol. cloves	0.12 (gr. 2)

Aquæ add 60.00 to oz. 2.

Dissolve the gum in the water, add the oil and last of all the flavoring.

Recipe—

Saccharine	0.12 (gr. 2)
Menth. piperitæ	0.30 (gr. 4½)

Alcoholis, q.s., Misce fiat solution, and add Ol. ricini, 240.00.

Dose same as castor oil.

EXPERIMENTAL GLYCOSURIA.

In the *Cleveland Medical Journal*, February, McLeod and Briggs report some investigations on this subject. It has long been known that there may be produced a glycosuria by the stimulation of the floor of the fourth ventricle, or of the central cut ends of certain sensory nerves. It has been commonly believed that this result was due to efferent nerve impulses transmitted to the liver from a so-called "diabetic centre" for the liver, which caused an abnormal transformation of glycogen to dextrose. If this be the case the track of these fibres must be *via* the upper part of the spinal cord, the sympathetic chain and the splanchnic nerves to the liver; they cannot travel by the vagus, as the section of the vagus does not affect the production of dextrose. It is true that cutting of the splanchnics does make it impossible to produce this experimental glycosuria, and this is the argument that Pavy used, but stimulation of the great splanchnic does not affect this. In a series of experiments, the writer showed that the cases of experimental glycosuria were those in which dyspnœa was present. Stimulation of the spinal cord throws the intercostal muscles into spasm, hence the dyspnœa; when oxygen was administered, so as to relieve the dyspnœa, there was no induced excess of sugar in the blood. Dyspnœa is known to produce glycosuria under other circumstances, so that it would appear that we may question the existence of any "diabetic" centre in the brain. Glycosurias in man resulting from brain tumor, etc., then should be relieved by the administering of oxygen, but not in diabetes melitus. Here the chemistry is quite different.

THE EFFECTS OF HOT ATMOSPHERES ON THE ANIMAL BODY.

In the *Cleveland Medical Journal*, McLeod and Knox report a number of experiments on rats with the object of determining whether humidity affects the results of hot air on animals. Of course rats do not perspire; loss of heat from the body is brought about by radiation, conduction, etc. By means of a dessicator fitted with apparatus for the measurement of the excreted carbonic dioxide, the animals were subjected to a variety of temperatures, with varying humidity, and were at the same time forced to perform muscular exertion by means of a revolving platform. It was found that the excretion increases with a rise in the temperature of the chamber, and greatly with the increase in muscular work, but that it does not vary with moisture or dryness of the air. Small animals, it is seen, show a similar rise of temperature in dry as in moist air, and so do not depend upon evaporation in regulating their body temperature.

DETECTION OF SUGAR IN URINE.

Drs. Keilas and Wethered have recently made a most exhaustive re-examination of the whole subject of the detection of sugar in urine. The details of their work are embodied in a report to the *Lancet* (London), Oct. 20-27, from whence we extract the following conclusions:—

1. The Fehling's test for sugar in urine is complicated by the retarding effects of creatinine, creatine, and mucin as regards the formation of a precipitate and by the auxiliary effect due to urates. Creatinine has a much greater retarding influence than either creatine or mucin.

2. When testing for small quantities of sugar in order to carry out the test satisfactorily the inhibiting influence must be neutralized in one of the following ways. (a) By diluting the urine if necessary so that its specific gravity is lowered to 1012 to 1015, when the presence is not more than 0.15 per cent. of sugar may be masked. (b) By increasing the volume of Fehling's solution used. The following proportions give good results as a rule:

Specific gravity of urine.	Cubic centimetres of urine.	Cubic centimetres of Fehling's solution.
Up to 1020	2	2.0
1020 " 1025	2	2.5
1025 " 1030	2	3.0
1030 " 1035	2	3.5
1035 " 1040	2	4.0
1040 " 1045		4.5

(c) By precipitating the interfering substances—including urates—by either (1) Allen's method, where copper sulphate and sodium acetate are used to bring down urates, etc.; or (2) Stillingfleet Johnson's method, when mercuric chloride and sodium acetate are used.

3. Temperature has a very important influence both on the appearance and formation of a precipitate, as shown in Tables VII. to XI., if only small quantities of sugar are present. Boiling for a few minutes undoubtedly aids the formation of a precipitate, but may possibly bring down a green precipitate due to excess of urates, unless these have been previously removed.

4. Taking the above facts into consideration, we are of opinion that the most convenient method of procedure when testing for life insurance purposes is as follows: Either dilute the urine until its specific gravity is from 1012 to 1015 (*e.g.*, a urine of specific gravity from 1025 to 1030 would require dilution with an equal volume of water) and then mix with an equal volume of Fehling's solution as indicated above; then boil for a

few seconds. If no precipitate forms within two minutes it may confidently be concluded that there is no sugar present of pathological import. 0.4 per cent. or more would generally under such conditions give an orange to red precipitate within one minute of reaching the boiling point, while from 0.2 to 0.25 per cent. would give a precipitate within two minutes.

5. The alkaline safranin test for sugar deserves to come into more general use. In the present state of our knowledge it is a more scientific test for sugar in urine than that of Fehling or Pavy, or the picrate test, since the reagent is unaffected by creatinine, creatine, mucin, uric acid and urates. and only slowly by albumin.

6. The fact that safranin invariably gives a reaction with ordinary urine would seem to directly negative Stillingfleet Johnson's statement, sometimes met with in physiological text-books, that with normal urine three-fourths of the reducing action is due to creatinine and one-fourth to urates.

7. As the results obtained so far indicate that the reaction with safranin indicates a reducing substance or substances which, if calculated as grape sugar, usually varies from 0.02 to 0.20 per cent., Dr. Pavy's values for sugar in urine, and perhaps in blood, probably require modification.

8. The phenylhydrazine test must be used with caution when testing for small quantities of sugar. In doubtful cases the crystals should always at least be examined microscopically and the melting point should preferably be determined.

9. The fermentation test is untrustworthy for small quantities of sugar and in this connection requires further investigation.

10. The balance of evidence strongly supports the view that small quantities of sugar are normally present in urine. The minimum value which could be assigned for the average amount present would probably be 0.01 per cent., approximately, and the maximum average value assignable would probably be between from 0.05 to 0.09 per cent., and certainly not over 0.01 per cent. Sir G. Johnson's application of the picrate test to prove the absence of sugar from urine, Seegan's carbon test, and Fluckiger's statement regarding the decomposition of reducing substances present in urine on evaporation at 100° C., requires further study.

11. From the results of other observers and theoretical considerations, Wender's methylene blue test, Nylander's bismuth test, Seyler's ortho-nitrophenyl propiolic acid test, Sacchse's potassio-mercuric iodide test, and Knapp's mercuric cyanide test are probably inferior in convenience, or accuracy, or both, to the safranin test.

12. Finally, in testing for life insurance, as many tests as possible should be applied in doubtful cases. The safranin test if used as an

auxiliary to the Fehling test might alone be sufficient to settle troublesome cases where small quantities of sugar and large quantities of creatinine cause the latter test to be uncertain. Glycuronic acid can be distinguished from glucose by the fermentation and phenylhydrazine tests.—*Pacific Medical Journal*, February, 1907

LOCAL TREATMENT FOR BOILS.

Boils, or furunculosis, are considered difficult to cure. The existence of a special diathesis was mentioned to explain the failure of therapeutic treatment. Be that as it may, one thing is certain—that furunculosis can be cured by purely local treatment. M. Gallois is accustomed for several years to treat such cases as follows, and always successfully:—

Metallic iodine	dr. j.
Acetone	dr. iiss.
Absorbent cotton wool.	
Glycerine	oz. vj.
Boric acid	dr. v.
Ordinary cotton.	
Three bandages of muslin.	

He proceeds as follows:—

In case of furunculosis there exists a large boil under development and a lot of small ones forming satellites. He takes a match and surrounds its free extremity with a piece of cotton, and dips it into the iod-acetone and touches each of the little boils, giving them the appearance of so many "beauty spots." For the large boil, if it has not burst, he paints on the same solution; if it is open, he does not touch it with the bistoury. He never incises boils, and rarely an anthrax.

He then takes a piece of absorbent cotton, large enough to cover the whole region, and steeps it in a solution of boric acid or simply in boiled water, and wrings it out as much as possible. He pours on it the solution of boric acid in glycerin until it is thoroughly wet with it, and applies it to the boils and covers it with ordinary cotton, and the whole is fixed with a bandage.

The dressing is renewed once a day, or twice if suppuration were abundant. After the first dressing the boil is observed to be less turgescient, while the surrounding skin is in a perfect condition, all the redness and the little pustulæ have disappeared.—Correspondent of the *Medical Press and Circular*, Paris.

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., Surgeon Toronto Western Hospital ;
 Consulting Surgeon Toronto Orthopedic Hospital ; and Chief Surgeon Ontario
 Division, Canadian Pacific Railway.

THE TRYPSIN TREATMENT OF CANCER.

In the *Boston Medical and Surgical Journal*, January 31st, 1907, W. P. Graves reports four cases of recurrent cancer of the breast in which he employed the trypsin treatment.

The cases chosen seemed to be especially valuable to test the efficacy of the remedy, first, because all that was possible to be done in the way of surgery had been done; secondly, because being in comparatively good general health they were not beyond the point where nature could assist artificial remedies; thirdly, because the carcinomatous growths appearing in small nodules immediately beneath the skin offered an excellent opportunity to study in gross the various changes which the injection of trypsin might cause in their size and consistency; fourthly, because on account of the convenient and superficial location of these nodules it might be possible at any time to excise them under cocaine to study their changes microscopically.

Graves presents the following conclusions from his casts:—

First, a discreet cancerous node systematically attacked by injections of trypsin shrinks and becomes hard and fibrous or disappears.

Second, neighboring nodes are little if at all affected, and are probably influenced only when the trypsin comes into actual contact with the growing cells.

Third, the treatment of a given node causing it to shrink or disappear does not prevent the appearance later of another node in immediate proximity to it.

Fourth, there is no evidence in these cases to show that trypsin affects cancer cells by circulating in the blood, or that it affects them in any way excepting by direct contact.

Fifth, the internal administration of the various ferments of the pancreas is of benefit to cachectic patients; but from my experience there is nothing to show that this benefit is due to anything else than the assistance given to the intestinal digestive secretions of the individual patient.

Sixth, the direct action of trypsin on growing cancer cells as shown clinically and microscopically, is sufficient warrant to continue the treatment in inoperable cases, especially in view of the fact that there are apparently no serious results that can occur from its use.

A PRACTICAL DRESSING FOR THE TREATMENT OF FRACTURES OF THE CLAVICLE.

In the *International Journal of Surgery*, March, 1907, C. S. Parkhill discusses fractures of the clavicle, and writes as follows in regard to his method of treatment:—

“The three cardinal principles in the treatment of fractured clavicle are that the shoulder must be held upwards, outwards and backwards. This I have succeeded in doing most satisfactorily by a simple method, which at the same time permits the patient unlimited freedom, and enables him to be about with little inconvenience and no pain. This method, which I have employed exclusively for more than thirty years, consists in the use of two rolls or rings made of cotton or gauze to fit over the shoulder. The ring on the right side of the fracture should be made larger so as to act as a pad or fulcrum to throw the shoulder outwards; then with the bandage connecting the rings, the shoulder should be brought backward. To support the arm and hold the shoulder upwards a well-adjusted sling is applied. The dressings are kept in place by safety pins. The ring will not loosen to any extent, and, if necessary, can be tightened to overcome any tendency to loosen by compression of the cotton and stretching of the rings.

The principle of outward, backward and upward position of the shoulder is easily carried out by this treatment; and if given proper attention no deformity will result, except the usual provisional callus which in time becomes absorbed, leaving the clavicle in the same condition as before the fracture.

In the August number of the *International Journal of Surgery*, N. T. Underwood describes a similar method, and advises completing the dressing with circular turns of the roller bandage, beginning at a level with the elbow and binding the arm and forearm securely to the thorax, also carrying the bandage under the elbow directly over the shoulder of the same side and down again to the elbow, three or four of these turns being made. I have never found it necessary to apply a bandage in the manner described. If a well-adjusted sling is used, the slight movement of the humerus will not be sufficient to displace the fracture or the dressing.”

ULCER OF THE STOMACH.

In the *International Journal of Surgery*, October, 1906, H. M. Lee considers the surgical aspects of ulcer of the stomach. After discussing the four conditions which may arise from chronic ulcer of the stomach—

perforation, cicatricial contraction, carcinoma, and hæmorrhage—the writer advances the following conclusions:—

1. A single acute ulcer may be excised, or the edges brought together by suture. Both procedures are efficient in stopping hæmorrhage.

2. Either of these procedures may be supplemented by a gastrojejunostomy if conditions seem to demand it.

3. Single chronic ulcer may be excised, or may be treated in various other ways, according to the existing conditions and the resources of the surgeon, but a posterior gastrojejunostomy is always demanded.

4. Gastrojejunostomy may be done alone without interfering with the ulcer.

5. Posterior gastrojejunostomy must be done when the ulcer cannot be located.

GYNÆCOLOGY.

Under the charge of S. M. HAY, M.D., C.M., Gynecologist Toronto Western Hospital, and
Consulting Surgeon Toronto Orthopedic Hospital.

FIBROID TUMORS OF THE UTERUS.

At the American Medical Association meeting of June, 1906, Dr. Charles P. Noble presented a very exhaustive paper on this subject. Some of his conclusions are well worth quoting. In speaking of the advantages of early operation, he says:—

“It seems to me that the evidence presented is an ample demonstration of the soundness of the conclusions at which I arrived in 1894, namely, that ‘it is the part of wisdom to remove fibroid tumors so soon as they are discovered, unless in particular cases some sufficient reason exists to vary the general rule. In other words, that the principle of early operation which is now (1894) generally accepted with reference to ovarian tumors is equally applicable to the treatment of fibroid tumors.’ The existence of constitutional disease may render operation inadvisable because of the risk involved. The desire for child-bearing in a young and childless woman may properly influence the temporary postponement of an operation or decide the question in favor of a myomectomy rather than a hysterectomy. In other cases in which the tumor is small, and especially when it is subperitoneal, and in which the symptoms are slight, the question of operation is still debatable. Which is the more dangerous—operation, or the risks inherent in the natural history of such tumors? I believe myself that this question must be left to the future for decision, and that the decision will depend chiefly on whether or not cancer of the uterus occurs as frequently in this particular group of cases as in the

whole series. Should this prove to be true, the question will be decided in favor of operation."

"It also seems to me that the evidence presented demonstrates the soundness of the teaching that a fibroid tumor should be removed because of the dangers inherent in the natural history of the disease, and not because of the particular symptoms complained of when the woman comes under the observation of the physician."

"Early operation offers the following advantages over the expectant method of treatment:

"1. It saves long years of invalidism or semi-invalidism.

"2. It enables women to fulfil the duties which devolve on them instead of having their activities limited in the effort to reduce their symptoms to the minimum and to prevent accidents to the tumor.

"3. It avoids the risks to life from the development of sarcoma in the tumor and from the development of cancer in the uterus, more especially in the corpus uteri.

"4. It avoids the risks to life from degenerations in the tumor, such as necrobiosis, necrosis, secondary septicæmia; cystic degeneration; such accidents as twisted pedicle; pressure on the urinary organs; pressure on the bowels; anæmia, cardiovascular degeneration, thrombosis, phlebitis and embolism; malnutrition; and the greater liability to intercurrent diseases arising from lowered vitality, due to anæmia or to malnutrition.

"5. It greatly lessens the risk of operation. It is only necessary to contrast the risk of removing a fibroid tumor or of performing a hysterectomy for fibroid tumor in a relatively young woman with good general health and with none of the secondary ill consequences which arise from the continued development of the tumor, to similar operations on a woman reduced by hæmorrhage, or suffering from malnutrition due to disturbances of the functions of the intestines, or on women having cardiovascular or renal degenerations, to appreciate what is gained by early operation.

"Early operation would probably eliminate, or certainly reduce to a minimum, deaths from embolism, which are relatively so common after operations when performed late in the natural course of fibroid tumors. The mortality from operation for fibroid tumors performed early would be reduced to 1 per cent. or less, as compared with probably 5 per cent. when the operation is performed under conditions as they exist at the present time.

"I would suggest that the most important questions for discussion are:—

"1. Shall the gravity of fibroid tumors be estimated from the natural history of the disease, from the degenerations in the tumor and the

complications arising in the uterus, with the secondary effects on the general economy caused by these growths; together with the complications outside of the tumor and uterus which exist in women having fibroid tumors; or, shall the gravity of the fibroid tumor be estimated by the symptoms in the particular case when the woman comes under observation?

"2. The relative risks of fibroid tumors and the operation for their removal.

"3. Shall small fibroid tumors which are growing, but slowly, or not at all, and which are producing few or no symptoms, be removed?

"4. Shall all other fibroid tumors be removed unless in the particular case there is some sufficient contraindication?"

STYPTOL IN UTERINE HÆMORRHAGES.

Dr. M. Handfield-Jones, obstetric physician to St. Mary's Hospital, London, writes thus in *Folia Therapeutica* :—

(1) That Styptol is principally useful in cases, in which there is an unhealthy condition of the uterine mucous membrane, and that it is of little value in cases in which fibroid, cancer or other new growths are present.

(2) That it is of very little value in connection with pregnancy.

(3) That $2\frac{1}{2}$ to 3 grains may be assumed to be the minimum dose, and may be repeated three or four times in the twenty-four hours, and that the exhibition of the drug should be continued for long periods of time.

(4) That there is no necessity to leave off the drug during the menstrual epoch.

(5) That its action on the capillary circulation seems to exercise a soothing influence in congestive or inflammatory dysmenorrhœa, although there is as yet no decided proof of its sedative action on the "large nervous centres."

CONSERVATIVE SURGERY IN SEVERE INFLAMMATORY AFFECTIONS OF THE UTERINE ADNEXA.

Hiram N. Vineberg defines his use of the term "conservative surgery upon the adnext," as the opening of the peritoneal cavity, be it through the vagina or through the abdominal parietes, and excising under the sight of the eye the most diseased structures, leaving such behind as are fairly normal, as well as those which present the prospect of restitution

to the normal. The writer reviews the history of fifty-one cases. There were two deaths. Of these fifty-one patients, forty-three are practically cured and have menstruated regularly and normally since the operation. The writer emphasizes the fact that every effort should be made in the case of women much under the climacteric age to cure the patient without sacrificing all of her pelvic organs and without bringing on the artificial menopause.—*Medical Record*, February 9, 1907.

PRURIGO OF THE VULVA.

A pruriginous eruption is occasionally found upon the vulva, either transient (appearing with the menses) or more or less permanent, as when accompanying pregnancy; in rare instances appearing only at time of confinement; and a few cases have been recorded in which it persisted for years. Examination shows that it is not, usually, confined to the mucous membrane up to the cervix; and the most aggravating cases are those in which the disease affects not only the mucous membrane of the labia but also extends backward over the perineum to and around the anus—the last-named variety being the most likely to become chronic. The irritation is so great as to interfere with sleep; and the sufferers nearly always say they are “nearly wild from the distress and annoyance.” If it continue long the parts are apt to become much irritated by the constant scratching; the most seriously affected part of the mucous membrane turns white and thickened, and red fissures may form. The application of a hot solution of borax is very grateful, and if oft repeated may effect a cure. In persistent cases its use may be alternated with a solution of acetate of lead—the official “lead and opium lotion” being serviceable. In the worst cases severe astringents (nitrate of silver, 10 grains to the ounce, alum or tannic acid) must be resorted to.—From the *April Journal of Clinical Medicine*.

ALKALINE INJECTIONS IN LEUCORRHŒA.

One of the most useful (and unused because so simple) injections for leucorrhœa is a solution of bicarbonate of sodium, common “cooking soda,” one teaspoonful to the quart of warm water. It is most effective when the leucorrhœa depends chiefly upon an increased secretion of the glands of the cervix. Whenever the discharge is clear or when it is cheesy (white—not yellow) a very few injections will almost always check

it until after the next menstruation, when it may be ordered again for a few days. If, however, the leucorrhœal discharge is more like pus, yellow and creamy, the sodium solution will do little good; and, of course, it will fail completely if the trouble depends entirely upon a bad laceration of the cervix with thick granulations: the "erosion of the os" of the older writers—in which class of cases nothing will prove effective save repair of the cervix. The saline douche must be taken while lying down, as it is absolutely necessary that the liquid shall come in direct contact with the os uteri. If it can be used cold without great discomfort, speedier results will follow.—From the April *Journal of Clinical Medicine*.

ELATERIN IN ABDOMINAL SURGERY.

After certain operations it becomes necessary to secure very early bowel movement; calomel is too slow and salines are apt to provoke vomiting. Here elaterin (the glucoside active principle of the elaterium of the shops) can be employed with the greatest satisfaction. It should be given in granules, each containing one milligram; $\frac{1}{67}$ th of a grain; one every hour until five or six have been taken or copious movements have been secured. If emesis results, the elaterin should be temporarily discontinued and one milligram of salicylate of eserine given hypodermically every hour, four times; by this the peristaltic wave will be reversed and the fœcal current started downward; then the elaterin may be resumed. When black-vomit begins after operation, this is by far the most effective treatment.—From the April *Journal of Clinical Medicine*.

ONE-CHILD STERILITY.

Dr. Frank S. Matthews, of New York, has an article in the May number of *Surgery, Gynæcology and Obstetrics*, in which he reports the inspection of a thousand consecutive gynæcological histories taken from dispensary practice to learn the frequency of this condition. There were seventy-five cases of sterility in women married over three years; eighty-two of one-child sterility.

The causes given by the doctor are gonorrhœa, sepsis, retroversion or flexion of the uterus, tumor, etc. He concludes that "one-child sterility" is as frequent as absolute sterility. It is usually due to a pathological condition of the female genital tract. It is not a congenital but an acquired sterility. Gonorrhœa is the commonest single cause.

OBSTETRICS AND DISEASES OF CHILDREN.

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THE MEDICAL MANAGEMENT OF PREGNANCY.

The following authorities have contributed papers on the "Medical Management of Pregnancy" to the February 15th, 1907, number of the *Therapeutic Gazette of Detroit, Mich.* :—

Edward P. Davis, M.D., dwells on the importance of the early diagnosis of pregnancy and of vaginal examination to determine the position of the uterus. Methods of replacing the organ, if found necessary, are carefully described and the employment of pessaries discussed.

The diet of pregnancy should be adjusted to meet the patient's natural tendencies. The ideal diet should consist of milk, fruit, and bread. Meat once daily is quite sufficient. Water should be employed as a beverage in large quantities, either aerated or plain, except when the kidneys are overburdened or the heart muscle weak, in which case the diet should be restricted to milk, with other treatment appropriate to the condition.

The bowels should be carefully regulated. Sponge and tub baths may be permitted, but shower baths should be avoided. Sea-bathing in summer and gentle swimming may be permitted, but surf-bathing should be avoided.

Motoring is to be avoided during pregnancy. With regard to toxæmia, the author considers the examination of the urine of secondary importance. Of primary importance is the condition of the patient's nervous system, as indicated by the occurrence of headache, increased pulse tension, abnormalities of the cerebral condition, and marked disturbances of the action of the secretory nerves. The quantity and character of the urine should be noted. No mention is made of albumen, but of significance are the urea content, the specific gravity, and the occurrence of kidney debris. Toxæmia is to be avoided by careful attention to hygienic rules, moderate diet and regulation of the bowels. Some cases require increased rest and others additional exercise. A course of calomel, extending over two weeks, is of value. Normally the percentage of solid waste is at its lowest at the seventh month of pregnancy, while shortly before labor it is higher than at any other period. Prolongation of pregnancy beyond 280 days is of no importance, as long as the child's head can be made to engage in the brim. A careful external and internal examination of the pelvis should be made in the seventh month of pregnancy.

George M. Boyd, M.D., considers that while the diet should be regulated the patient should completely satisfy the appetite morning and at midday, but in the evening a light meal should be the rule. No reason for this view is given. He advises the examination of the urine once a month during the early period, and weekly during the last three months of pregnancy. The presence of albumen should be regarded with suspicion. Details of the antepartum examination are given.

Richard C. Norris, M.D., advises that the patient should be seen after the second missed period, when a history should be taken and an examination made. Any abnormal condition should then receive attention. Ovarian tumors should be removed as soon as recognized, but fibroids of the uterus may be left, as they rarely interfere with pregnancy though they should be carefully watched. Their greatest danger is necrosis and infection during the puerperium.

Printed directions as regards diet, rest and exercise should be given each case. "Plain, nourishing food, an abundance of fruit and water, milk between meals to lessen the appetite for an undue amount of red meats, at least eight hours of sleep at night, with an afternoon siesta for the irritable neurasthenic are useful hygienic rules to enforce."

Motoring may be permitted except in very cold weather, or during the period when menstruation should have occurred. The patient may be permitted to follow her usual habit in regard to bathing. Rest and quiet should specially be observed during the days of the menstrual epoch. The author gives throughout a week of each month during the pregnancy a pill containing hepatic stimulants and laxatives. "Bilious" attacks should be immediately reported to the physician, as they are very often the expression of pregnancy toxæmia. The author's remarks on urinalyses are interesting. A twenty-four hour specimen is collected once a month for nine months, and thereafter every ten days. The specific gravity, percentage of urea, albumin, and character and number of casts are noted. Eight per cent. of his cases gave the presence of albumen. Gonorrhœal vaginitis should be treated by douches and 25 per cent. argyrol gelatine suppositories.

THE TREATMENT OF ECLAMPSIA.

Prof. Robert Jardine, writing in the February *Antiseptic*, describes his method of treating eclampsia, based upon six cases. The patients were bled until the pulse was decidedly softened. Saline solution was transfused directly into the vein, containing one drachm chloride of sodium to the pint. But here Dr. Jardine makes an important addition in the

form of one drachm of acetate of sodium to the pint. He contends that this addition is most necessary. The patients are freely purged. Hot packs are employed sometimes, and an enema of bromide of potash and chloral, 60 grains and 30 grains respectively, is given when the patient is restless and the os rigid. His concluding remarks are as follows:—

“I have so often seen several cases within a short time of one another, generally when there has been a sudden fall of temperature, that I believe that the atmospheric condition may determine the onset of the convulsions. If a patient is suffering from toxæmia, and the weather suddenly becomes colder, elimination from her skin will be lessened, and the strain upon her kidneys increased, so that the poison will accumulate in her system, and convulsions probably result. Just before these four cases were admitted, there had been a sudden fall in the temperature, and I told my residents that they might expect to have some cases of eclampsia for treatment within a short time. My prediction was soon verified. I have frequently seen two cases in one day, and a few months ago, I had three lying side by side, having fits.

“The method of treatment adopted in these cases is that which I have found to give the best results. I wish to point out that the saline solution used is not the ordinary normal one, but has, in addition, one drachm of sodium acetate to the pint. Longridge maintains that the blood of eclamptics is less alkaline than that of ordinary cases, and he thinks the efficacy of my treatment lies in the addition of the alkali to the blood. I know of several cases treated with ordinary saline solution, without any benefit, but as soon as acetate of sodium was transfused, the fits ceased. According to a recent theory, the poison lies in the placenta, and, therefore, immediate delivery is called for. If the placenta contains the poison, how is it that there are so many cases of postpartum eclampsia? A few days ago, I treated a case where the fits did not begin till two days after delivery, and in the *Journal of Obstetrics of the British Empire*, for July, 1906, the records of a case of mine will be found, where the patient recovered after having 199 fits during the puerperium.

“If labor has not begun, I do not attempt to bring it on, but if it has advanced sufficiently to admit of easy delivery, I finish the delivery, as a rule, while the patient is under chloroform, for venesection and transfusion. If the fits recur, interference will be necessary, and also if the labor is prolonged or obstructed, but otherwise nature may be allowed to take its course. In Case 2, I did not interfere, although the urine was nearly solid with albumen, and the result was most satisfactory. Cases 3 and 6 illustrate the fact that the fits do not invariably cease after the uterus is emptied. I have now had a very extensive experience in treat-

ing eclampsia, and have delivered many cases by accouchement force, but within the last year or two I have seldom interfered actively as regards delivery, and my later results compare favorably with the earlier ones.

OPHTHALMOLOGY AND OTOTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Edin., Professor of Ophthalmology and Otology Medical Faculty of the University of Toronto.

OPHTHALMIC DIAGNOSIS OF ARTERIOSCLEROSIS.

A. L. Macleish, M.A., M.D., Los Angeles, Cal., in *Southern California Practitioner*, contributes a paper on the above topic.

“Ophthalmology is rightfully a specialty; but we can justify our position as specialists only by bringing every detail of our work into the closest possible relation to the whole round of medical science, of which it forms a part. General pathology and general therapeutics have much to say with regard to ocular conditions; and correspondingly our observations as to the pathology and treatment of ocular conditions ought to throw a flood of light on general medicine. He is the worthy specialist who brings his knowledge of the general to bear upon the special, and from his skilled observation of the special, contributes in turn to the general.”

“Consider what a field of observation is furnished to us in the eye and its adnexa, and how openly it is spread out to our view, so that pathological processes and therapeutic results, which elsewhere are a matter of inference, or of knowledge acquired from post-mortem dissection, can be observed *in vivo*, and to a large extent followed through successive stages, as in the pictures of a biograph. To confine ourselves to one structure at this time, we have spread out to our inspection in the fundus oculi the vascular system of the retina, arteries and veins in a living chart, magnified by the dioptric apparatus of the eye to some 16 diameters, and when errors of refraction are corrected, so perfectly in focus that they may be traced to the finest visible twigs—a view of a typical part of the blood-vascular system, little removed from the main channels and currents of the larger vessels, such as is to be obtained in no other part of the body. It would be strange if there were not much to be learned from such a living picture.

“It is well established that the arteriosclerotic process begins in the smaller arterial branches, and microscopically can be found in these before any material change is to be detected in the larger trunks. It is just this fact that makes the careful examination of the retinal arteries of such

outstanding importance in the early diagnosis of the condition. Nowhere else in the body are the smaller arterial branches visible, so that structural changes, short of the microscopic, can be detected. It happens, too, that the retinal circulation is usually a terminal system, without active anastomoses, so that the effect of vascular changes is not obscured and nullified, as it would be in many tissues. *Pari passu* with the degeneration of small branches of the artery, and with impairment of their function in nutrition of the retina, are to be found evidences of tissue degeneration in the retina itself, not relieved by collateral circulation. Indeed it has been proved that interstitial induration invariably accompanies arteriosclerosis in any tissue; and there is certainly much to be said for the view that tissue-change, due to faulty metabolism, is the primary cause of the vascular degeneration, which in turn, by local increase in the blood-pressure and stagnation of the blood-current, contributes in a vicious circle to the fibrosis of the parenchyma.

“One of the earliest, yet most typical, changes to be found, is confined to the smaller terminal branches of the artery, especially those converging towards the macular region. It consists in a pronounced ‘kinkiness,’ accompanied sometimes by slight irregularities of outline, due, it would appear, to an increased rigidity of the tube, with possibly a local rise in the blood pressure. This change is not necessarily a persistent one; indeed in cases showing more marked degeneration, it is usually less pronounced, or even absent. It is probably characteristic of the earliest stage, where the terminal twigs have to bear the brunt of the local increase in the blood pressure. Along with this kinkiness is usually to be found a slight haziness of the adjoining retina, due, some say, to a local œdema—more probably expressive of the metabolic fault in the retina itself, which underlies and is causative of the sclerotizing process in the arterial terminals. This localized retinitis, sometimes very slight, sometimes of more marked intensity, can almost always be found by careful search, and serves to stamp the tortuous twigs with a pathological character, and to distinguish them from what is found in eyes with a high refractive error. At this stage in the process, probably on account of the minute size of the affected branches, there is no visible change in the vessel, save the tortuosity and slight irregularity of outline.

“A further stage is marked by the extension of the rigidity to more proximal portions of the artery, and here as a rule structural changes, indicative of the degenerative process, are more readily made out. One evidence is to be found in an observable increase in the light-reflex from the arteries, accentuating the distinction between arteries and veins. Little change may be found in the arterial wall, as we trace the vessel along its course, till we come to some point where it crosses an under-

lying vein, but there the nature of the process becomes outstandingly evident. Instead of lying apparently flat on the vein, so as almost to seem to fuse with it at the crossing—the normal condition—the somewhat rigid artery curves unduly, and we find the underlying vein apparently pinched by the pressure, as it disappears from view under some opaque tissue extending beyond the visible width of the artery—proof positive that at least the tunica adventitia of the artery is thickened by exudation, and that the whole vessel has an abnormal rigidity. This is a point that should never be overlooked: it hardly needs to be searched for. These crossings, with the artery in front, are rarely absent; and, when one examines the fundus with the possibility of arteriosclerosis in mind, abnormalities there simply stare at him. They are like the warning posts at grade-crossings of the railroad,—‘Stop, Look,—Think.’

“It is but a step from this condition to one of more pronounced gravity. The reflex from the arteries shows more silvery still, the course of the vessels more tortuous, and even somewhat beaded, the vessel along a large part of its course may be more or less sharply outlined in white, most visibly so at the crossings,—obviously a sclerosis of the vessel-wall itself, a fibrosis of the adventitia. The condition of the intima we cannot determine with the ophthalmoscope; but if we find, as we sometimes do at this stage, that the blood-column at places seems diminished, we can readily infer that the patency of the tube is impaired. Indeed by this time there is often no lack of lesions to demonstrate the nature of the process. The sclerosis, which we have been tracing along the larger vessels, has not remained inactive in the smaller branches. As the circulation becomes impeded by narrowing of the lumen, we may find œdema of the implicated retina, extensive in proportion to the size of the obstructed vessel, or even an active local retinitis of sufficient intensity to hide the vessels from view. Later, as the swelling subsides, the vessels may be found transformed into opaque white bands, coursing over a degenerated area of retina, to which they have ceased to carry nutriment. Or the vessel itself, weakened by the inflammatory process, often gives way at various points, and the affected area becomes studded with hæmorrhages, small and large.

“The picture is typical of advanced arteriosclerosis, and is one which fills the observer with forebodings, which it is sometimes exceedingly difficult to communicate in any attenuated form to a patient, whose only complaint has been a paltry impairment of vision. And yet we know only too well that the condition which we have been reviewing is, even in its earliest manifestations, no local disease, but a progressive systemic disease, prominent locally only because the conditions for its display are specially favorable in the eye. ‘A man is as old as his arteries’: how old

his arteries are, the ophthalmologist is in a position to discover, before brain, or heart, or even kidney tells the tale."

THE VALUE OF BLOOD-CLOT AS A PRIMARY DRESSING IN MASTOID OPERATIONS.

Clarence J. Blake (*Jour. Laryngology*), in a paper on this subject, at the recent meeting of the B. M. A., draws the following conclusions from his extensive experience with blood-clot dressing:—

1. Of the largest bone cavities susceptible to pyogenic invasion, both through the medium of the circulation and ærially, the mastoid cavity is the most readily accessible to surgical interference for the removal of its diseased contents.

2. That the thorough removal of diseased tissue, to the inclusion of inflamed or necrosed portions of the inner mastoid cortex itself, down to the surrounding healthy, soft tissue, supplemented by personal care in the after dressings, is requisite to the best results obtainable in the reparative process, of which the surgical interference is the inceptor.

3. That the mastoid cavity, thus thoroughly cleansed and safeguarded from without, is subject to reinfection mainly through one channel, that leading from the middle ear, which cavity should itself be thoroughly cleaned and independently drained through the external auditory canal.

4. That the blood clot is not an inert filling material merely, but has in its serum a protective defence, viable for at least 48 hours after the formation of the clot, and in its clot a repair material capable of producing dense fibrous bands traversing the unified mastoid space.

5. That the use of the blood clot, completely filling a carefully cleaned out mastoid cavity, results, when it persists, in healing by first intention, in a varying percentage of cases.

6. That the persistence of the blood clot during the period of its protective viability only, even though it then breaks down and comes away entirely, results in the formation of foundation granulomata, which are a basis for subsequent repair, with speedier and more satisfactory results in healing than are obtainable when the wound is dry packed from the beginning.

7. That the safety of this procedure is assured by the limitation of the protective viability of the clot itself, that it breaks down under a volume of pyogenic material which it is in itself insufficient to conquer, and provides exit along the line of least resistance through the surgically-created channel.

8. That the only cases to which this blood-clot dressing are applicable are those in which, on account of pyogenic invasion of surrounding structures, it is desirable to keep the mastoid cavity open as a path of access; and those in which the systemic conditions of the patient, or the extent of the local infection, do not warrant the expectation of speedy repair.

IMMERSION TREATMENT OF PURULENT OPHTHALMIA WITH ARGYROL SOLUTIONS.

H. R. Burns, in the *Ophthalmic Record* for December, 1906, states that he began using in 1903 argyrol freely in ophthalmia neonatorum, first as an adjuvant to a 1 per cent. solution of nitrate of silver, and later as he observed how quickly pus disappeared under its use, he trusted to argyrol alone. All other applications were abandoned and argyrol used every 15 to 30 minutes in 10 per cent. solution. The results were most gratifying. In incipient ulcers of the cornea he used argyrol freely with 50 per cent. euzymol solution. He has also used argyrol in the treatment of all wounds, operative and accidental, where any discharge was present. This constant use of the drug led him to very positive results and opinions, as to its qualities. Not only is it painless and non-irritating, but on the contrary was so soothing to the eye as to be somewhat anæsthetic.

Its diffusability is striking. A drop spreads immediately over the eye. It clings persistently to the tissues and may be traced for some hours afterwards. He believes that it not only clings to, but soaks into the tissues.

Its disadvantages are: 1st. It is unstable; two to three weeks is the longest it will remain without decomposition. In dark and cool places it will last much longer. When decomposition of the salt begins it starts to sting and irritate. 2nd. It is expensive. 3rd. There is reason to believe that its prolonged use will cause permanent staining of the conjunctiva, though Dr. Burns does not mention this.

In time, the cessation of the formation of pus varies from the fourth to the seventh day. The conclusions he reaches are:—

1. The treatment of gonorrhœal ophthalmia with argyrol is efficient, provided it is instilled often enough.

2. The instillation must be continued day and night.

3. Until the formation of pus has ceased, the eye should not be treated by the instillation of any other drug.

4. He believes more strenuous methods are liable to abrade the cornea and open ways of invasion for the gonococci.

5. The best results are attained when the remedy is thoroughly applied in the beginning of the disease.

6. Under this plan of treatment corneal ulcers are uncommon.
7. Argyrol is not a powerful astringent. Therefore, after pus formation ceases and the lids have become flaccid, silver nitrate solutions should be applied to restore tone to the parts. Soaking corneal ulcers in a 50 per cent. solution seems to cleanse them.
8. The unaffected eye should be treated one half as often as the affected organ, as a preventive measure.
9. The method is far less painful than any other yet proposed.
10. He has never seen argyrosis after its use; but opinions differ on this point.

TOBACCO AND THE AUDITORY FUNCTION.

Luigi Chierici states that, although there is no drug that gives more pleasant sensations than tobacco, still we must acknowledge that consumers of tobacco, as well as those who work in it, are subject to alterations of the auditory functions, due to pathological conditions of the middle and internal ear. The middle ear complications are of an inflammatory nature, due to the extension of diseases of the pharynx, a result of the irritation of the ammonia that is produced in the process of burning of tobacco, as well as of some of the alkaloids contained in the drug. There are nine alkaloids in tobacco, several of which are poisonous. Nicotine produces a dehydration of the tissues which irritates the nasopharynx, and the use of tobacco is one of the commonest causes of chronic nasopharyngitis. The ammonia irritates the conjunctiva and the olfactory nerve, as is shown by lachrymation and sneezing. Catarrhal auditory symptoms due to tobacco are vertigo, noises in the ears, and loss of hearing. Lack of hearing is also produced by secondary lesions of the auditory nerve. These are probably due to vasomotor changes due to nicotine, which causes vasoconstriction, resulting in anæmia of the auditory nerve, and when continued this results in loss of hearing.—*Gazetta Medica di Roma*, June 15, 1906.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., O.M., Toronto, Fellow of the British Society of Laryngology, Otology and Rhinology.

EXTERNAL OR INTERNAL OPERATION FOR SUPPURATION OF THE ACCESSORY NASAL SINUSES.

Max Halle (*Laryngoscope*, Feb., '07) writes a very conservative and well thought out article on the management of these difficult cases. The

article should be read entirely to gain all the good points it contains. He summarizes as follows:—

1. In every case of accessory sinus empyæma physiological breathing is first of all to be established.
2. In every case it should be attempted to bring about a cure by establishing a blood drainage opening into the nose.
3. In a large majority of cases, perhaps in most cases, the frontal sinus can be opened from within easily and without danger if the proposed method is followed.
4. The external operation is to be resorted to when the discharge is profuse or of long duration; also when life is endangered. The after treatment, in such cases, is to be conducted from within, unless the complete obliteration of the cavity by means of granulation is to be effected.

A NEW METHOD OF OPERATING ON TURBINAL HYPERTROPHIES.

Sidney Yaunkauer (*Laryngoscope*, Feb., '07) introduces a further method of dealing with turbinal hypertrophies. The defect, common to all the present methods, is that each one leaves an open wound which must heal by granulation. Yaunkauer advocates resection of the hypertrophied membrane and suturing the edges of the wound. He appears to have made deep intra-nasal suturing a somewhat easy performance by the introduction of a few new instruments and a special technic.

OCULAR SYMPTOMS OF NASAL ORIGIN.

Dr. Hill Hastings (*Annals Otolaryngology, and Rhinology*, Sept., 1906), draws attention to the intimate relationship between the nasal accessory sinuses and the eye.

The ocular condition, other than orbital abscesses, most frequently met with that can be traced to nasal trouble are given as follows: Oedema of the eyelids, congestion of the conjunctiva, ptosis, squint, pain in the eye, and visual disturbances. A series of cases is detailed illustrating these conditions.

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EDITORIAL.

THE ALCOHOL QUESTION.

This is a perennial topic for discussion on almost every sort of occasion, and among the most diversified bodies of people. There are the lay societies that urge prohibition as the only remedy for the drink evil. Then, again, there are those who study the subject in an abstract way and try to make out a case that all ages and races have indulged in the use of narcotics, alcohol in some form being a favorite one. There are others who view the subject, as many medical men do, from the standpoint of its use in medicine, and its abuse as a beverage, and the evil effects of the latter in the causation of disease. There are persons who regard the excessive indulgence in alcohol as the outcome of habit. There are still others who view those who are dipsomaniacs as the victims of some special form of nervous instability, or of some form of nerve storm that seeks relief in the excessive use of alcohol.

It may be well to admit at once that every case of alcoholism is not due merely to overindulgence in alcohol. There is a mighty proneness in some people to take to drink. Ducks like the water, and take to it while very young. Instances of a dissipated father dying and leaving one or more sons, mere children, to be brought up by their mother, who is most exemplary in her habits and teaching. Notwithstanding this, the sons take to drink when they grow up in many instances, showing that there is something in their very nature that craves strong drink.

It has been, therefore, argued by some that dipsomania is closely related to some phases of brain storms, as met with in epilepsy, pyromania, homicidal impulse, and so on. There is no doubt some force on this statement. On the other hand, it must be borne in mind that the habit of indulgence in alcoholic stimulants may very materially strengthen this condition, or call it into existence where it had previously been dormant. It will not do for our alienists and psychologists to place all the blame on some inherent quality of the nervous system, and minimize too much the influence of habit.

The truth must be sought for in both aspects of the question. This leads, of course, to a much wider study of the prevention of inebriety

than mere prohibition. If there is a profound obliquity in the nervous system of many excessive drinkers, some better method of treatment must be found than simple prohibition. Remove alcohol and they would betake themselves to some other narcotic.

There is a deep error in the nature of many persons, a fact that is well illustrated by the careful study of the many types of abnormal man. It is quite beyond the wit of man to say just when any given case is the outcome of vice or disease. One person will commit a murder because its performance affords him pleasure, and another will be a dipsomaniac because "the frenzy worketh in his brain."

It should be borne in mind that statistics show that a much larger percentage of the children of dissipated parents become dissipated than of those who have temperate living parents. This may be accounted for on the grounds of heredity or example; but it is more than likely that both play an important part. When to some hereditary tendency there is added the constant example of drinking it is only reasonable that the children should acquire the habit.

But the analysis of statistics dealing with large numbers go to show that the children of drunken parents are prone to manifest vagaries of the nervous system other than becoming drunkards. Many of them are indolent, mentally dull, immoral in many ways, are liable to epilepsy, to neurasthenia, and to irascible tempers. On the other hand, statistics show that the children of those who have some twist in their nervous make-up are more liable than the children of normal parents to become heavy drinkers. It is thus quite clear a two-edged sword which cuts both ways. It is a law of nature that a weakly body is more prone to disease than a strong one, and so we can infer with perfect certainty that a weakly condition of the brain and nervous system is more disposed to vicious habits than a normal one.

Drinking habits will break down the health of the individual, which must show itself on the children. There is much truth, therefore, that the long-continued abuse of alcoholic stimulants paves the way to "villain's bonds." It will not do for the scientist to refine the question so as to make the desire for drink solely dependent upon disease and none on habit.

ALCOHOL IN ITS RELATION TO DEGENERACY.

The use of stimulants in some form is world-wide, and dates from the remotest ages. Much has been said upon the effect of alcohol upon the human organism, and the influence it has had in the causation of disease, insanity, crime, and degeneracy. The induction is far too vast for any

array of figures to solve, but two things are outstanding and plain, namely, that the abuse of alcohol has done incalculable harm, and that it has been greatly abused.

In the *Journal of the American Medical Association*, Dr. Eugene S. Talbot writes as follows in the issue for February 2, 1907:—

“The influence of alcohol must first be studied, therefore, on the individual to determine its value and method of action as a cause of race deterioration. Careful medical researches have shown that alcohol produces a nervous state, closely resembling that induced by the contagions and infections, often accompanied with mental disturbance (delirium and acute types of insanity). The acute nervous state to which the term alcoholism was applied by Magnus Huss has all the essential characteristics of the nervous state due to the contagions and infections. There is, however, a greater tendency to impotence and sterility in the alcohol nervous state than in the others, and consequently a lesser influence on race deterioration. The condition, moreover, has a tendency to set into action degenerative tendencies latent in the liver and kidneys. This action of alcohol on the liver and kidneys so interferes with their functions as to produce the effect already described as resulting in the contagions and infections from their toxins. Alcohol exerts a similarly deteriorating influence on the antitoxin-forming organs (especially on the testicles, ovaries and their appendages) to that already described as exerted by the toxins of the contagions and infections. To the direct toxic effects of alcohol are added, therefore, results of imperfect liver and kidney action and defective strengthening powers from deficient antitoxin secretion.

“Like all toxic agents, alcohol interferes with the functions of the eye and ear nerves. Special weakness thus created is transmissible to the offspring. In the chronic form, alcoholism may well be compared in its effect with chronic contagions. There is, however, less tendency to infections with the microbes forming pus. There is a greater tendency to deteriorating action on the nervous system. There is in chronic alcoholism, as in syphilis, special tendency to that formation of connective tissue which destroys organs. The chronic mental disorders of chronic alcoholism resemble those of tuberculosis, except that the capricious state and exaltation are less frequent than the suspicious tendency, which is deeper, and takes the direction of delusions of poisoning and insane jealousy. The last are due to the deteriorating influence of alcohol on the generative organs.

“Alcohol may limit its action to the central nervous system, and thus produce hereditary losses of power. It causes changes in the peripheral nerves, which in the offspring find expression in spinal cord and brain disorder through extension of the morbid process. But for its deteriorating effects on the ovaries and testicles, alcohol would be a most

serious social danger, but through its action on the generative organs it tends to prevent the survival of the unfit, rather than to develop degenerates."

The above statements are ample to justify the Government in taking steps to regulate the sale of those nostrums containing high percentages of alcohol. In curtailing the evils resulting from the abuse of alcoholic beverages there must be a constant appeal to the reason rather than to the emotions.

A hysterical temperance advocate recommended to her friends a nostrum containing 50 per cent. alcohol and 1 per cent. each of morphia and cocaine.

THE PHYSIOLOGICAL EFFECTS OF ALCOHOL.

Dr. Winfield S. Hall, in the *Journal of the A. M. A.*, for February 2, 1907, discusses at length the physiological effects of alcohol on the animal body. When alcohol is taken into the system it undergoes oxidation and to this extent yields heat, but it decreases the catabolism of carbonaceous foods. Toxins and alkaloidal poisons in general are oxidized in the liver. When larger quantities of alcohol are taken than the liver can oxidize its toxic and narcotic effects are immediately experienced. All oxidation yields heat whether it is catabolism or protective oxidation. The lessened catabolism of carbonaceous and nitrogenous foods destroys or counteracts any food value arising from the oxidization of alcohol.

The following comparison between food and alcohol is most instructive:—

FOOD.

1. A certain quantity will produce a certain effect at first, and the same quantity will always produce the same effect in the healthy body.

2. The habitual use of food never induces an uncontrollable desire for it, in ever increasing amounts.

3. After its habitual use a sudden total abstinence never causes any derangement of the central nervous system.

ALCOHOL.

1. A certain quantity will produce a certain effect at first, but it requires more and more to produce the same effect when the drug is used habitually.

2. When used habitually it is likely to induce an uncontrollable desire for more, in ever increasing amounts.

3. After its habitual use a sudden total abstinence is likely to cause a serious derangement of the central nervous system.

4. Foods are oxidized, slowly in the body.

5. Foods, being useful, are stored in the body.

6. Foods are the products of constructive activity of protoplasm in the presence of abundant oxygen.

7. Foods (except meats) are formed in nature for nourishment of living organisms and are, therefore, inherently wholesome.

8. The regular ingestion of food is beneficial to the healthy body, but may be deleterious to the sick.

9. The use of food is followed by no reaction.

10. The use of food is followed by an increased activity of the muscle cells and brain cells.

11. The use of food is followed by an increase in the excretion of CO_2 .

12. The use of food may be followed by accumulation of fat, notwithstanding increased activity.

13. The use of food is followed by a rise in body temperature.

14. The use of food strengthens and steadies the muscles.

15. The use of food makes the brain more active and accurate.

4. Alcohol is oxidized rapidly in the body.

5. Alcohol, not being useful, is not stored in the body.

6. Alcohol is a product of decomposition of food in the presence of a scarcity of oxygen.

7. Alcohol is formed in nature only as an excretion. It is, therefore, in common with all excretions, inherently poisonous.

8. The regular ingestion of alcohol is deleterious to the healthy body, but may be beneficial to the sick (through its drug action).

9. The use of alcohol, in common with narcotics in general, is followed by a reaction.

10. The use of alcohol is followed by a decrease in the activity of the muscle cells and brain cells.

11. The use of alcohol is followed by a decrease in the excretion of CO_2 .

12. The use of alcohol is usually followed by an accumulation of fat through decreased activity.

13. The use of alcohol may be followed by a fall in body temperature.

14. The use of alcohol weakens and unsteadies the muscles.

15. The use of alcohol makes the brain less active and accurate.

If anything further be needed to strengthen the above the remarks of Dr. T. Alexander MacNicholl, in the same issue, would seem to answer that requirement:—

“Dividing the pupils into two classes, (a) prosperous; (b) poor, we have the following:

“(a) In this class, 32 per cent. have drinking parents; 68 per cent. have abstaining parents. (b) In this class, 85 per cent. have drinking

parents; 15 per cent. have abstaining parents. (a) Of 12,919 dullards, 9,689 had drinking parents. (b) Of 3,195 dullards, 2,175 had drinking parents."

THE USE OF ALCOHOLIC BEVERAGES.

The following brief statement on the use of alcohol in medical practice and as a beverage appeared in the *Lancet* (British) of 30th March, 1907. The names attached to the statement are so well known that they give it much weight. Here is the document:—

"In view of the statements frequently made as to present medical opinion regarding alcohol and alcoholic beverages, we, the undersigned, think it desirable to issue the following short statement on the subject—a statement which we believe represents the opinions of the leading clinical teachers as well as of the great majority of the practitioners.

"Recognizing that, in prescribing alcohol, the requirements of the individual must be the governing rule, we are convinced of the correctness of the opinion so long and generally held, that in disease alcohol is a rapid and trustworthy restorative. In many cases it may be truly described as life-preserving, owing to its power to sustain cardiac and nervous energy, while protecting the wasting nitrogenous tissues.

"As an article of diet we hold that the universal belief of civilized mankind that the moderate use of alcoholic beverages is, for adults, usually beneficial, is amply justified.

"We deplore the evils arising from the abuse of alcoholic beverages. But it is obvious that there is nothing, however, beneficial, which does not by excess become injurious."

Sir T. McCall Anderson, M.D., Regius Professor of Medicine, University of Glasgow; Sir Dyce Duckworth, M.D., LL.D., Physician to and Lecturer on Medicine, St. Bartholomew's Hospital; Sir W. R. Gowers, M.D., F.R.S., F.R.C.P., Physician to the National Hospital for the Paralyzed and Epileptic; Jonathan Hutchinson, F.R.C.S., F.R.S., Consulting Surgeon to the London Hospital; Edmund Owen, F.R.C.S., LL.D., Vice-President R.C.S., Consulting Surgeon St. Mary's Hospital; P. H. Pye-Smith, M.D., F.R.C.P., F.R.S., Consulting Physician to Guy's Hospital; W. D. Halliburton, M.D., LL.D., F.R.C.P., Professor of Physiology, King's College, London; Sir W. H. Bennett, K.C.V.O., F.R.C.S., Senior Surgeon to St. George's Hospital; Frederick T. Roberts, M.D., B.Sc., F.R.C.P., Emeritus Professor of Medicine, University College, London; Sir Thomas R. Fraser, M.D., F.R.S., Professor of Materia Medica and Clinical Medicine, Edinburgh University; James

Crichton-Browne, M.D., F.R.C.P., Inspector of Asylums, Great Britain; Robert Hutchison, M.D., F.R.C.P., Assistant Physician to the London Hospital and Hospital for Sick Children; Edgcombe Venning, F.R.C.S.; T. R. Glynn, M.D., F.R.C.P.; W. E. Dixon, M.D., and Alfred G. Barrs, F.R.C.P.

ALCOHOL AND INSANITY.

A good deal has been written upon this subject, and, as it is a very important one, we give the following from the editorial columns of the *British Medical Journal* of 30th March, 1907. Here is what the *Journal* says:—

“That alcohol drowns more than the sea and all the rivers that fall into it is an old saying and a true one; that drunkards ‘drowne their wits, seethe their braines in Ale, consume their fortunes, lose their time, weaken their temperatures, contract filthy diseases, dropsies, calentures, tremor, geſ swoln juglers, pimpled red faces, sore eyes, and heat their livers,’ we know, and also the psychologically significant fact that, as Dr. Maudsley puts it, ‘the drunken man exhibits the abstract and brief chronicle of insanity.’ There seems to be no room for doubt that alcohol does act as a cause of insanity; but as the proportion of cases of occurring insanity in which alcohol is justly attributable as an efficient factor there is considerable conflict of opinion, and the part which it plays in the production of many of the cases of alcoholic insanity is as yet largely a matter of conjecture. The two questions are intimately connected, for it seems fairly evident that, until we know more of the mode of operation of this agent in producing mental derangement, and have in consequence some means of eliminating other possible etiological factors, the first question as to the proportional damage done by intemperance can only rest on conflicting statistical evidence from which a personal bias cannot be excluded. In the midst of considerable controversy and the widest divergence of opinion we therefore welcome a very able and temperate article by Dr. F. W. Mott on the effects of alcohol on the body and mind, as shown by asylum and hospital experience in the wards and post-mortem rooms.

“Dr. Mott, who is widely known on account of his neuro-pathological researches, is also physician to Charing Cross Hospital, and is, therefore, in a position to speak with an unusual degree of authority on this question, and we take this opportunity of touching on one or two of the several important points he discusses. First, with regard to the comparative frequency of alcohol as a cause of disease in the hospital and the asylum.

In the annual reports of the Commission on Lunacy alcohol is assigned in about 23 per cent. of the male and in about 9 per cent. of the female pauper cases admitted to asylums, and Dr. Mott has found that in the medical cases admitted to Charing Cross Hospital, out of nearly 800 cases, intemperance was an efficient cause in quite a quarter of the male cases and in a very considerable number of the female cases. The alcoholic non-mental cases thus approach very closely in relative frequency to the alcoholic cases of asylums, the slight preponderance of the former being doubtless due to the situation of Charing Cross Hospital and the comparatively large proportion of its patients who are concerned directly or indirectly with the liquor traffic. A few cases of polyneuritic psychosis occurred, and in this relation Dr. Mott makes two suggestions, one of public and the other of scientific value. The first concerns the fact that polyneuritic psychosis, whether met with in a hospital or an asylum, occurs far more frequently in women than in men. Many of these cases arise in women who, without perhaps ever having been drunk and incapable, have acquired the habit of continuous secret tipping, and Dr. Mott has no doubt whatever that this habit is facilitated to an enormous extent by grocers' licenses. The other point concerns the etiology of this psychosis. This disease Dr. Mott has found so frequently associated with some other morbid factor—septic infection from a miscarriage or abortion, gonorrhœa, syphilis or tuberculosis—that the question arises how far the mental and neuritic symptoms are due to such causes and how far to the alcohol. In some cases gastritis occurs—so often associated with decaying teeth and oral sepsis that Dr. Mott is inclined to believe that the gastritis may become infective in nature, with the formation of microbial toxins and consequent damage to the tissues. This important suggestion opens up the whole question of the etiology of the chronic alcoholic psychoses. It may be recalled here that Bonhoeffer, G. Wehrung, and, in this country, Ford Robertson, have all affirmed that in Korsakow's syndrome—a clinical picture characterized by amnesia, disorientation, pseudo-reminiscence, and confabulation, with the almost invariable presence of neuritic symptoms—besides chronic alcoholism there must be a flooding of the system with other toxic substances not identical with alcohol; that is, that alcohol acts by breaking down the defences of the organism and so permitting the ingress of bacterial toxins, generally formed, according to Ford Robertson and Wehrung, in the alimentary tract. This theory is supported by the fact that Korsakow's syndrome is not, as was formerly supposed, invariably preceded by over-indulgence in alcohol, for Dr. Mott and others have seen precisely similar symptoms, and even, Dr. Mott relates, similar pathological conditions follow other intoxications—for example, lead and arsenic.

“These are very interesting facts, but a further point calls for mention. Dr. Mott for a long time past had been struck by the extreme rarity of alcoholic liver in the post-mortem room of the asylum—in fact, he can only recall one case of hobnailed liver with abundant ascites in his whole asylum experience. He therefore instituted with Dr. Candler a comparative inquiry into the clinical and post-mortem results of patients dying in Charing Cross Hospital and Claybury Asylum. The inquiry covered over 1,000 cases at each institution, with the result that definite signs of liver affection were present in 9 per cent. of the male and 4.9 per cent. of the female hospital cases, whereas in the asylum cases these signs were found in only 2.2 per cent. of the males and 1.4 per cent. of the females. These results confirmed the conclusion to which Dr. Mott had already come on *a priori* grounds—namely, ‘that, as a rule, only people with an inherently stable nervous system could drink long enough to acquire alcoholic disease of the liver.’ The obvious alternative expression of this truth would be that cases succumbing to insanity as the result of alcoholic over-indulgence, whatever be its mode of operation, have already a *locus minoris resistentiæ*, and are, in fact, in varying degree potential lunatics. The recognition of this fact not only throws light on the share of alcohol in inducing insanity, but has important bearings on practice. The perfectly stable nervous system is a rarity, but beneath the people of average neuro-psychic equilibrium there exist large numbers of individuals in whom alcohol, *even when taken in moderate doses*, brings to light, in some cases with startling rapidity and in others only after years of moderate drinking, their latent defect. The marked intolerance of alcohol exhibited by the epileptic, the imbecile and the degenerate, many of whom find their way to prison as the result of some fatal outburst following on the taking of what to another would have been an innocuous amount of liquor has been often observed, and has within recent years been proved abundantly by Aschaffenburg, Dannemann, Sommer, and others, and is well expressed by Dr. Mott when he says that what is moderate drinking in one man may be excess in another. This truth, however, still largely escapes recognition by a considerable section of the public, and does not often receive its full value in the law courts.

“As no truth, however, is without its practical application, we may refer in conclusion to certain preventive measures recommended by Dr. Mott. First of all there is, of course, the necessity for educating the public conscience to the evils caused by alcoholic abuse; then the desirability of placing all chronic inebriates, of whatever social class, who endanger their own or others’ safety under compulsory control—a matter which we hope will shortly be embodied in the law. Further, Dr. Mott recommends that all alcoholic cases admitted to hospitals and infirmaries

should be made to pay the cost of their maintenance; and lastly, that the temptation to alcoholic abuse should be removed as far as possible. Dr. Mott maintains that it should be made a statutory offence for a grocer or dealer with an off-license to supply any form of alcoholic beverage to a woman while charging it in his account under the head of groceries or other provisions. The greatest amount of good is likely to result from the education of the public conscience coupled with instruction as to the results of over-indulgence in alcohol, and its baneful effects in some persons when taken in amounts apparently harmless to others. There are everywhere signs that this process of education is going on, but although the time has long gone by when to drink to excess stamped the gentleman, and to refuse to drink marked a churlish disposition or even worse, *qui potare recusat, hostis habetur*, there is still too close a mental connexion between wine and conviviality, between business dealings and drinking. It may be that to the man with a stable nervous organization light alcoholic beverages are harmless, but to the hereditarily burdened, to the neuropathic or psychopathic, alcohol is pregnant with disaster, if such persons will drink, then, 'like Grasse-hoppers, whilst they sing over their cuppes all summer they starve in winter; and for a little vaine merriment, shall find a sorrowful reckoning in the end.' "

THOUGHTS ON SYPHILIS.

Some years ago, Sir William Gowers said there was 1 in 10 in London suffering from syphilis, or about 500,000 with the disease in that city.

Dr. Lenoir has estimated that about 15 persons in every 100 have the disease in Paris, or about 1 in every 6.

The disease has increased very much of late years in the British army, and the time lost through it is greater by a third than when there were licensed houses.

Syphilis is contracted much more frequently extragenitally than was formerly supposed. It has been stated that in some rural districts in Europe where the disease is prevalent, about 70 per cent. of the cases are contracted innocently. In these cases the children suffer most.

Syphilis causes much sickness, loss of time and suffering, but it also causes many deaths. Many premature births and deaths in early infancy are due to this disease. Then in the adult nearly all the deaths from general paresis and tabes own the same cause. There are many deaths also from diseases in the vascular system arising from syphilis. The death rate among the insured is about 20 per cent. higher among the syphilitics than among the non-syphilitics.

The disease may be so completely eliminated from the system that a second attack is possible.

It has been urged by many high authorities that instructions should be given on the subject, and the laws of spread and prevention made public. Education would, no doubt, do much good, but those who are well informed often suffer from the disease.

Early marriages have been suggested as a means of preventing syphilis. But as a decided majority of the cases occur in both males and females under twenty years of age, it is clear that this means of preventing the disease is not tenable.

Regulation seems to meet with much favor among good investigators. It may appear repugnant to many that prostitution should be recognized by law; yet it is better to do this than have the innocent often suffer. As it is quite apparent that prostitution will continue, it is better that it be regulated by law than that it should enjoy unlimited freedom.

All attempts, so far, to discover an antisyphilitic serum have failed. Sera from the monkey, the goat, the rabbit, and from cultures *in vitro*, have proven inert. An objection also is that they would require to be administered very often. The modification of the course of the disease by antisyphilitic vaccination is only in its experimental stage; but, so far, the prospects are not encouraging. Some cases in the chimpanzee have given signs of being aborted by vaccination. There is the instance of a doctor being accidentally inoculated while experimenting with monkeys, and the disease did not advance beyond a local sore, though it contained the spirochetes and was capable of infecting a monkey which in turn yielded the organisms. The type of the disease in the monkey is mild compared with that in man. The virus from the macacus may, therefore, prove a useful vaccine if a person is suspected of being infected from another person with the humanized type of the disease. The chimpanzee and the macacus do for syphilis what the cow does for small-pox,—attenuate the virus.

It has been well established that if a person has been exposed to the disease and, indeed, actually infected, the disease can be prevented entirely by mercurial inunctions. The disease in this way is aborted, or never appears. The attempt has repeatedly been made of trying to prevent the development of the diseases in the monkey after inoculation, by washing the lesion with a mercurial lotion. This has failed, but properly conducted inunction has succeeded. The best ointment is one of calomel and lanolin, 1 in 3.

Colles' law that the mother can not be infected through her syphilitic child does not always hold good. The child may be the victim of syphilis through the father and the mother escape, the spirochete not having passed into the maternal placenta. It has been observed that sometimes

the mother may contract the disease from the sores on the baby's mouth and her nipple show a true chancre.

It does not appear that the disease descends to the third generation. Persons have married with hereditary syphilis in the active and secondary stage, and have had children. These children, however, seem to have escaped infection. Inherited syphilis may show active secondary lesions at ages ranging from 20 to 30 years. Jonathan Hutchinson has examined carefully the families of eight such persons, and only once found a doubtful case of transmission to the third generation. These eight persons had inherited syphilis with active lesions when they married; and, with the doubtful instance mentioned, their children remained free.

The great problem before the civilized world at the present moment is how to lessen the ravages of syphilis. Hygiene should lead in this matter. All false notions of morality should be set aside and regulations established whereby the disease may be arrested to a great extent. There is only one way to do this, and that way is to place houses of prostitution under the protection of the law, and have them regularly inspected. This is preferable to the wholesale deaths of infants and the spread of disease broadcast among the innocent.

THE MEDICAL CURRICULUM.

In its issue of 9th March, the *Lancet* (British) in an editorial took strong exception to some features of the medical course of studies. Its contention was that there was too much biology, meaning zoology and botany, in the course of study.

We are of the opinion that the student has to give too much of his time to these subjects. This withdraws much of his time from the more fundamental subjects of anatomy and physiology. It appears to us that chemistry receives more than its due share of the student's time. No physician or surgeon to-day is a manufacturing chemist, and in the instances where they dispense their own medicines an entirely different sort of chemistry is required.

So far as biology is concerned, we agree with the British *Lancet* that a thorough knowledge of the cell should be required, but that the crayfish may be left aside.

It might be well to ask in what way a physician or surgeon can gain any assistance in his life's work from a study of the botanical classification of plants, or a dissection of a sea urchin. It may be urged that these studies are good mental gymnastics. This is no doubt true, but they are

not better than the study of human anatomy or physiology, and not one-tenth part so useful to the doctor. Human histology and physiology should receive much attention as the foundation for the later study of morbid anatomy and pathology, with which every practitioner has to do. On these subjects the student can train his powers of observation as well as by spending valuable time upon the lower orders of animal life.

There is so much work to be done in mastering the details of anatomy, physiology, and the requisite amount of chemistry, that the student's primary years should be entirely devoted to these subjects. The profession should look to the Medical Council to fix the curriculum so as to eliminate from it all that is extraneous. If the time that students are now spending upon biology and some parts of chemistry was spent upon anatomy, physiology and histology, it would be better for them.

Some time ago the *British Medical Journal* took the same position. We hope to see the medical curriculum so amended as to afford the student a measure of relief from these subjects, and set free his time for effective work on more important subjects.

A MINISTER OF HEALTH FOR ONTARIO.

On the afternoon of 28th March, a number of medical gentlemen, headed by Dr. G. A. Bingham, President of the Ontario Medical Association, interviewed Premier Whitney on the subject of a Minister of Health for the Province of Ontario. The Premier was guarded in his reply, but promised to give the subject careful consideration.

The deputation urged that a department be created over which would preside a responsible Minister. If this could not be granted, then that all subjects pertaining to the health of the Province be collected and placed under one of the present Ministers, with an efficient Deputy Minister in charge.

This is an important subject and should be considered on its merits. Let us look at the asylums, hospitals, refuges and orphanages from the standpoint of the patients treated in them, as gathered from the latest returns:—

Number treated in the asylums during year	6,711
Number treated in hospitals during year	41,950
Number treated in refuges during year.....	5,518
Number treated in orphanages during year	4,291
	<hr/>
Total number treated during the year	58,470

The above figures show that there is a large field here to be cared for, and of needs must bring to the Government of the day many responsibilities. But it may be well to look at the matter from the monetary side as well, and note how much the Province expended during the year out of Provincial funds :—

Amount expended on asylums	\$646,283
Amount expended on hospitals	110,000
Amount expended on refuges	76,243
Amount expended on orphanages	15,955

Total amount expended by Province \$848,481

The foregoing figures do not include such expenditures as might be called for on account of new buildings, etc.

Turning to the vital statistics for the Province, we find that there is a population of about 2,200,000. There are about 47,000 births, some 19,000 marriages, and approximately 30,000 deaths each year. Of the deaths about 3,000 were due to communicable or epidemic diseases, not including over 3,000 deaths from tuberculosis. This gives about 6,000 deaths that come well within the range of preventive medicine. But, again, there are very many deaths among the very young that could be prevented by a proper system of hygiene and school inspection.

When we turn to the reports of the Provincial Board of Health, we find that there are numerous questions of great importance over which it exerts a wholesome influence, such as the pollution of rivers, public nuisances, the prevention of contagious diseases, etc.

It would appear from the foregoing facts that a strong case is made out in support of the creation of a Department of Health. No greater duty can devolve upon any Government than the preservation of the health and lives of its subjects. It is much better to take care of our own citizens and guard their health than to make up for the losses in their ranks through preventable diseases by the importation of a doubtful foreign class. We have no hesitation in stating that the case is fully proven that all matters pertaining to the health and vital statistics of the Province should be in one department and under one responsible head. This is right and must come about sooner or later.

SCHOOL HYGIENE.

Of late much attention has been given to the subject of the health of school children. This is a hopeful sign of the times. There is no

time in the history of the individual when attention is of so much importance as during the formative years; for it is the period when the body may be injured for life.

Though it is quite true that persons of comparatively poor health or with weakly or deformed bodies have evinced a high degree of mentality, it nevertheless remains true that the best average mental condition will be shown by persons whose bodies approach the average standard of health and physical development.

It is for this reason that care should be taken of the health of children during their school years. Many parents are ignorant or so indifferent that a matter of so much moment to the State cannot be entrusted wholly to their hands. The citizen with a sound mind in a healthy body is of vastly more value than one who is of weakly body or unstable mind. Indeed, the latter may be a burden on his friends or the State.

In the journals coming from France, Germany, Great Britain, and the United States there are appearing many ably written original papers and editorials dealing with the subject of school inspection. It is quite startling to read these papers and note what a large percentage of the children examined give evidence of physical and mental defects. Many are found with active tuberculosis, others with various infectious diseases, while defects of hearing or sight rank among common conditions.

A feature which has been brought out is to the effect that those children who come from poor homes are smaller and weigh less at the same ages than those who are better housed and fed. A recent study of the children in Liverpool has made this quite clear. The best school gave for children at age 7 years a height of 3 ft. 11½ in., while those from a school with very poor children averaged 3 ft. 8 in. for the same age. For age 11 years the heights were 4 ft. 7½ in., and 4 ft. 1¾ in., respectively; and at age 14 the measurements were 5 ft. 1¾ in. and 4 ft. 7¼ in. The weights were for the three ages 7, 11 and 14, for the better off and poor respectively, 49 lbs. and 36 lbs., 70 lbs. and 55 lbs., and 94 lbs. and 71 lbs. This forebodes a serious handicap for the rest of life to the children of the poor. Among the poor children there was a much larger percentage of cases of defective sight, hearing and teeth, and these defects were remaining untreated.

Here is where we contend the public should step in. Inspectors are appointed to visit the schools to watch the progress made in education. How much more important to watch the state of health, and institute such changes as will bring it up to the standard where it may chance to be below it. No child with tuberculosis should attend school, nor should one with troublesome myopia until it has been corrected.

This subject may require much agitation before the reforms are brought about; but let everyone interested in the welfare of our school children keep on, and the needed changes will come. Labor and wait.

A STUDY OF CANCER CASES.

In the *Virginia Medical Semi-Monthly* for February 22nd, there is an interesting statistical study of cancer in Augusta County, Va. The writer, Dr. A. L. Tynes, gathers together much interesting information. One of the facts to which attention is directed is that there are known to be what is called cancer zones, in which the disease is very much more prevalent than in other districts. The conclusion drawn from a statistical study of cancer is that it is of parasitic etiology.

Some two or three years ago the *Lancet* (British), in an able editorial, went a long way to prove that cancer was caused by some form of organism. Among the arguments advanced were that it frequently appeared more than once in the same house, that one lip might be infected by the other, that fragments from cancer in the upper zone of the abdominal cavity would take root in the lower zone, and that the genital organs of the male have become cancerous after intercourse with a cancerous wife.

It may turn out that what has been spoken of as heredity may turn out to be infection. We can look back to the days when four or six died in a family from consumption, and it was all put down to heredity. Now, however, we know better, and teach a newer and a saner view of the causation.

Dr. Roswell Park some time ago made the statement that at the present rate of increase in ten years cancer would claim in the State of New York more victims than consumption, typhoid fever, and smallpox combined. Can anyone for a moment imagine that such an increase is due in any way to some mysterious, but sudden change in the hereditary characteristics of people living in a small area, and that too in a time so short as to affect them after most of them had been born?

We have long held and long urged that cancer studied clinically bears all of the stigmata of a parasitic affection. It prevails in certain houses and districts, it commences locally, the constitution is not affected until the disease has made some progress, there is a chronic septicæmia, there is a strong tendency to return unless removed very early, the tissues

affected break down, there is chronic fever, and in the later stage delirium.

Pathologists may reason as they will about cell rests, and all the rest of it; but the above clinical facts will not down. They are such as are met with in tubercle, syphilis, leprosy, actinomycosis, and farcy. The same set of arguments that are now doing duty against the parasitic origin of cancer were once used against a similar origin for syphilis, tuberculosis, and leprosy.

Cells existing in the body at the time of birth might die prior to the death of other tissues. There might be a sort of abiotrophy in them. This would lead to their early death and inutility; but not to the formation of neoplasms which in time break down, as in the case of cancer. It is a well-known feature of cancer that a poison is produced and sent into the blood long before the cancer is large or has begun the process of disintegration. Whence, then, the poison that is viciating the health? The most likely explanation is that some organism is at work manufacturing a toxine. In the case of cancer of the uterus the disease is much more a process of ulceration than new formation in very many instances. If the cell theory were true, it would be first a tumor growth and later on destruction, if this ever came about.

But there is another phase of this question that has always impressed us as a very weighty argument. Cancer occurs in certain parts of the body in preference to others. The stomach, the throat, the lip, the breast, the uterus, and the rectum are favorite locations. Two thoughts present themselves to the mind: These must be the principal spots for the cell rests that are supposed to cause cancer; or that cancer appears in these situations because they are the subject of so much traumatism. If we apply the knowledge we gain from other infective diseases we may throw some light upon the subject. If we bruise a part of the body an abscess may form, containing only the colon bacillus. The traumatism lowered the vitality of the part and the germ got there through the blood stream. In another case the hip is injured and it becomes the seat of tubercular trouble, the bacilli finding their way to the joint by means of the circulation. So if a person is syphilitic and bruises a bone, it is likely to be the location of a marked syphilitic lesion. This reasoning may be a clue to why injury is followed by cancer. The traumatism prepares the way for the cancer organism. The rest of the story is easy. That we have not found the germ is no argument against this view of the disease. All germs are of recent discovery, and there are germ diseases for which we have not yet found the organism.

VARIATIONS IN BLOOD PRESSURE.

It should be borne in mind that the vascular system is not a mere system of tubes through which the blood is pumped by the heart. It is a system of elastic channels under the control of the nervous system, through many centres, and the vascular dilatation is as much an active process as contraction of the vessels. The elasticity of the vessel walls enables the heart to do its work without undergoing sudden strain, as would be the case were their walls rigid. Then, again, this elasticity completes the onward motion of the blood, adding their kinetism to the heart's potentialism.

Tension may be normal, too high, or too low. Too high a tension may result from an extra dose of CO_2 in the blood acting upon the vesicular mechanism so as to send more blood to the respiratory organs. There is another form of normal high tension such as is met with in exercise. This may be so great as to strain the heart and do much harm, especially in those who have lived a sedentary life and betake themselves to a good deal of exercise. There is a chronic form of high tension to which hard brain workers are subject, such as bankers, lawyers, and doctors. This high tension continued for a long time does harm to the nutrition of the body tissues, and also that of the vessel walls.

This long continued high tension leads to cardiac changes. If the heart is equal to the extra work its muscle undergoes hypertrophy, and its sounds remain regular and normal, with the exception of accentuation. If the heart is weak, there is sure to be dilatation sooner or later. The mitral valves may now fail to close the opening and the blood regurgitates with each systole. The nutrition of the heart muscle also suffers. To all this may be added some renal changes as a part of these high arterial tension cases.

It is well to consider very carefully the whole make-up of the case before ordering drugs for the purpose of reducing this tension. It may be that the high tension is intended by nature to send the blood through the resistant vessels to the various organs of the blood, and through those of the heart itself to nourish its own muscular fibres. To interfere too readily with this condition of high tension may work much harm to the patient. The effort must be directed towards the cause of the high tension, rather than to the high tension itself.

Unduly low tension is generally met with in the course of some acute disease, or as the result of an accident. When it is chronic it is caused by an enfeebled state of the heart itself. One chronic state of low tension is due to a relaxed state of the arterioles, and is found in exophthalmic

goitre. Low tension is met with in persons recovering from severe illnesses, in neurasthenia, and diseases of the suprarenal glands. One theory urges that an insufficient supply of adrenalin in the blood causes hypotension.

The most serious form of hypotension is that met with during an acute illness. Here it may point to a speedily fatal issue. Strychnine and atropine, as vascular stimulants, may be useful. Hypotension may be met with in severe toxæmia, and when the heart has been unduly stimulated, especially with strychnine. In some cases low tension is a condition of safety to the patient, and attempts at forcing the heart and raising the tension may lead to an expenditure of energy the patient cannot afford to make at that juncture. In other words, the utmost care is necessary not to urge the heart to perform more work than it is capable of safely doing, or than the state of the patient requires.

LORD LISTER.

This grand old man has recently celebrated his eightieth birthday, as full of honors as of years. We wish for him many years yet to enjoy the supreme pleasure of knowing how much good he has done for mankind. Among the great men in medicine—and they are many—Lord Lister's name will ever have a place among the first. Down through the ages to come his name will be spoken along with those of Hippocrates, Paré, Harvey, Boerhaave, Hunter, Morton, Semmelweiss. No greater honor than this is possible for any man to have.

THE CANADIAN MEDICAL ASSOCIATION.

Dr. McPhedran, President, and Dr. Elliott, Secretary, of the Canadian Medical Association, have issued an appeal to the profession of Canada to attend the meeting of the Association to be held in Montreal on the 11th, 12th, and 13th of September of this year. We hope there will be a large meeting. This is the National Medical Association and should meet with the enthusiastic support of the entire profession of Canada.

PERSONAL AND NEWS ITEMS.

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ONTARIO.

The General Hospital in Stratford is going to erect an addition to cost \$20,000.

The Health Association of Hamilton, taking charge of the sanatorium for consumptives, has the sum of \$29,000 on hand.

Dr. James L. Biggar, of Tillsonburg, intends going to Edmonton to commence practice there.

The Canadian Practitioner and Review discussed the attitude of the Toronto Street Railway towards doctors who are called in to attend emergency cases. The conduct of the company is very unfair.

A large number of the graduates of Trinity Medical College held a reunion in Toronto a short time ago. Dr. Geikie addressed the gathering. His remarks will be found in another part of this issue.

Drs. Fred Grasett, J. A. Temple, Allen Baines, H. A. Bruce, W. H. B. Aikins, all of Toronto, have either gone or will shortly go to Europe for a holiday.

The friends of Dr. Eadie, of Toronto, much regret his severe illness and the cause of it. All will unite in an earnest wish for his speedy recovery.

The Canadian Nurse for April is as bright and attractive as ever. It should find a large subscription list among Canadian nurses. It certainly merits support from the class for whose benefit it is being conducted.

The Imperial Hotel, Brantford, was quarantined because of two cases of smallpox there. Dr. Pearson, Medical Health Officer, took most prompt and vigorous steps and everything possible was done to check the menace.

Child labor is a coming issue in Ontario. This subject will bear thorough discussion; but one thing is clear, the law should protect those children whose parents or guardians will not do so. Child labor is the truest form of race suicide, for it means ignorance and poor development.

Haldimand County has now a Medical Society. The officers are: Hon. President, Dr. Harrison; Vice-President, Dr. Kerr; Treasurer, Dr. Jacques; Recording Secretary, Dr. Maw; Corresponding Secretary, Dr. Arrell.

Dr. G. R. McDonald, of Sarnia, met with a severe accident a few weeks ago. He was thrown out of his buggy and had both bones of his right leg broken a little above the ankle. He was taken to the Sarnia General Hospital, where his injuries were attended to.

The many friends of Dr. F. Glynn Ellis, of London, will be pleased to learn that he has received the important position of resident pathologist to the Hospital of the State Insane Asylum at Mt. Pleasant, Iowa. He entered on his duties the first of March. There are at present 1,075 patients in this institution.

Dr. Roberts, Medical Health Officer of Hamilton, and the officials of his department, have been unusually active inspecting lodging houses, chiefly those occupied by the foreign population. It is surprising, they say, the amount of overcrowding and lack of cleanliness in most of these places. Some of them are described as absolutely filthy and disgusting.

The Toronto Hospital for Incurables has made application for a grant to enable it to provide additional accommodation. There is at present a long waiting list of applicants for admission for whom there is no room. Controller Dr. Harrison favored a grant of \$50,000. The matter was left over for a time to be taken up with the request of other hospitals for grants.

Three hospitals in Toronto, namely, the Toronto Western, Grace, and St. Michael's, have sent in letters to the Council of Toronto, asking for a grant of \$200,000. These hospitals claim that they are doing 58 per cent. of the general hospital work of the city and are entitled to the above, as the city gave the General Hospital \$200,000, which does 42 per cent. of the hospital work.

The Board of Health of London had some interesting business on hand at a recent meeting. It appears that physicians do not report their contagious cases, and Dr. Hutchinson stated that it was impossible to obtain reports of infectious cases. He had done his best and had treated all alike, but there was a general neglect of this requirement. A single smallpox patient had cost \$184 for attendance and isolation expenses.

Medical Health Officer Dr. Van Buskirk, of St. Thomas, informed the committee that when he had a smallpox case to look after for the city, as in the recent case, the business in his office fell off entirely and he was therefore a heavy loser financially. He had visited the hospital frequently and had looked after the case closely. He thought he should receive some consideration and it was decided he should render a bill at the next meeting of an amount he considered reasonable.

Changes in the medical staff of the Muskoka Cottage Sanatorium became necessary by the resignation of Dr. J. H. Elliott, physician in charge. Dr. Dobbie, for some time in charge of the hospital at Weston, will assume the post. Dr. Elliott will spend the summer in foreign study and then practice as a consulting physician on tuberculosis in Toronto. Dr. W. J. Dobbie, the new physician in charge, is well qualified for his new responsibilities.

On the invitation of the trustees of the Toronto Free Hospital for Consumptives, at Weston, a number of the members of the Ontario Legislature visited the institution. They were well pleased with the work that is being done. A resolution was passed by the visiting members to the effect that a grant should be made to the institution. About \$50,000 has been expended in buildings and equipments, and a further sum of \$30,000 is being expended on additional accommodation.

At a recent meeting of the Toronto Teachers' Association, Mr. A. E. Winship, of Boston, gave a very practical address. Among other things he pointed out that the medical inspection of the public schools in Boston had reduced scarlet fever to one-fifth, diphtheria to one-third, and measles to a like proportion. This had been the means of saving many lives, had prevented much sickness, and had greatly lessened the outlay on hospital maintenance. In one hospital alone this saving amounted to \$10,000. The total cost to city of the medical inspection was only \$10,000 a year.

An expenditure of \$150,000 for hospital purposes and in the public health interests is almost certain to be made by the city of London and neighborhood during the coming summer. The importance of London as a hospital centre will then be unexcelled in the Dominion of Canada. This city's magnificent hospitals are already known from one end of the country to the other. The proposed expenditures are made up as follows: Isolation Hospital, \$75,000; Hospital for Consumptives, 20,000, and Hygienic Institute, \$50,000.

At a meeting of the Niagara Falls General Hospital Trust the following members were present: Dr. Thompson, James Wilson, Dr. F. W. E. Wilson, J. D. Dickson, A. Fraser, W. B. Reilly, J. H. Stuart and Col. Cruikshank. It was decided to set apart a room for maternity purposes. Architect E. D. Pitt presented a statement of amounts due contractors, which were referred to the Finance Committee to examine and check. The advisability of providing a system of separate ward cabinets to contain drugs for external application was referred to the Ladies' Furnishing Committee to take up the matter. The secretary was instructed to communicate with Dr. Bruce Smith and Judge Bandon, Stratford, to obtain necessary information as to necessary expenditure for establishing a sanitarium here for consumptives.

The Canadian Society of the Superintendents of Training Schools for Nurses was organized at a meeting on March 30 in the Sick Children's Hospital residence. The meeting was attended by superintendents from all over the Dominion, and telegrams from Vancouver, Halifax, and even Newfoundland, expressed great sympathy with the movement. Miss Snively, of the Toronto General Hospital, was chairwoman, and the delegates unanimously voted in favor of the proposed organization. A pro-

visional constitution was passed upon, and the officers elected. They will be as follows: Miss Snively, Toronto General Hospital, President; Miss Livingston, Montreal General Hospital, First Vice-President; Miss MacFarlane, Vancouver General Hospital, Second Vice-President; Miss Brent, Hospital for Sick Children, Toronto, Secretary; Miss Meiklejohn, Stanley Institute, Ottawa, Treasurer. The Council will consist of Mesdames MacDonald (Halifax), Wilson (Winnipeg), McIsaac (Edmonton), Molong (Quebec), Patton (Toronto), Sharp (Woodstock), Stanley (Lansdowne), Green (Belleville), Scott (Kingston), Chesley (Ottawa).

QUEBEC.

It is proposed to raise \$500,000 to complete the Notre Dame Hospital in Montreal.

The Jews of Montreal are anxious to secure a hospital of their own. The name proposed is The Mount Sinai.

The Protestant Hospital for the Insane at Verdun, Que., treated last year 513 patients, admitted 151, discharged 110, and had 31 deaths.

For the year 1906, the Hôtel Dieu, Montreal, showed that 3,112 were admitted, 224 had died, there had been 1,638 operations, and 73,489 days' stay of patients in the institution.

The Royal Victoria Hospital admitted during January 319 patients; there were discharged 272, and 18 died. In the outdoor department 2,310 cases were treated.

For January, in the Montreal General Hospital, there were 20 deaths, 287 admissions, and 261 discharged. The average for the month was 209 patients. The outdoor department treated 4,306 cases.

The Montreal General Hospital building is to be demolished and a magnificent new hospital erected on the same site at a cost of about \$500,000. This decision was finally reached a short time ago by the Board of Governors of the institution.

The Alexandra Hospital for Contagious Diseases, Montreal, is doing good work. During the past year there were admitted 293 patients, of whom 222 were cured, 3 relieved, 15 died, and 53 remained at the end of the year. In 158 cases of diphtheria there were 12 deaths, one death in 74 cases of scarlet fever, and one in 42 cases of measles. The average daily stay was 22, and the daily cost was \$1.24.

The Montreal General Hospital, in its eighty-fifth annual report, showed that 3,458 patients had been treated in the wards, or a daily average of 201. There were 254 deaths. The average daily cost was \$1.54. In the outdoor department 46,982 patients were treated. The income was

\$102,318 and the expenditure \$113,187, showing a deficit of \$10,869. Donations for \$15,500 had been made to the endowment, increasing it to \$98,000. The subscriptions to the Alexander fund amount to \$211,859, of which \$96,050 has been paid in. Dr. F. G. Finley in his report mentions the death of nineteen life governors during the year.

The sanatorium which Dr. H. D. Kemp has conducted at Ste. Agathe for tuberculous patients has been converted into a retreat for persons requiring a rest. This change became necessary as the authorities at Ste. Agathe had placed upon the sanatorium such a tax as rendered it impossible of successful operation. This arose from a strong local feeling against the presence of consumptive patients in the place.

Dr. Amedée Marien, professor of histology at Laval University, has been appointed head surgeon of the Hotel Dieu Hospital in the place of the late Sir William Hingston, M.D. Dr. Marien, who has been connected with the medical staff of the Hotel Dieu for the past six years, studied surgery in Paris for a considerable time, and was a contributor to the treatise on gynæcology published by Professor Leguen in 1898. He is president of the Société Médicale de Montreal, a director of the Union Médicale du Canada, and corresponding member of the Société Anatomique de Paris.

Speaking of the action of the Quebec Legislature regarding the five-year course of medical study, Dr. Roddick remarked that "the defeat of an amendment in the Quebec Legislature to increase the number of years required for the medical course in this Province from four years to five was a disappointment to the medical profession, not only in this Province but throughout Canada. The amendment was supported by the majority of medical men in the House, and should have become law. He hoped the Legislative Council would still correct the mistake made in the Lower House, and reverse the legislation. All arrangements practically have been made for a five years' course at McGill University, which will begin at the coming session."

MARITIME PROVINCES.

Newfoundland has one doctor to every 2,419 people. No province in Canada can show such a large number of persons to one physician.

The hospital at Halifax for the detention and treatment of trachoma has been completed and put in use by the Government. This will be a most useful institution.

The report on the hospitals, asylums, and sanatoria for the Province of Nova Scotia is just to hand. Dr. George L. Sinclair is to be congratulated on the work he is doing and the excellent report he has prepared.

The report of the Hotel Dieu at Tracadie, N.B., shows that 123 patients were admitted during the year and 1,012 were treated in the out-door department.

The Hospital Commissioners of St. John, N.B., decided to notify the doctors throughout the Province that a scale of fees exists for all those who enter as patients except paupers. The commissioners also adopted plans for the Owen Jones operating room.

For the Victorian Order of Nurses of Sydney, N.S., Miss M. E. Duncan reports as follows for February: Patients nursed, 9; new cases, 9; medical cases, 3; obstetrical cases, 2; gynæcological cases, 3; operations, 1; night calls, 2; paying patients, 5; non-paying patients, 4; visits made, 43; and fees collected, \$2.50.

From Charlottetown, P.E.I., comes the news that there has been a serious outbreak of smallpox in the Dromore and Auburn districts. Vigorous steps have been taken by the authorities to control the disease and prevent its spread. Dr. Montizambert, of Ottawa, has issued a special order in connection with the situation.

At a meeting of the Board of Health of St. John, N.B., Dr. Lewin was appointed as a health official to inspect all persons who had been working in the lumber camps and are now returning to Nova Scotia *via* the Prince Rupert. This was done at the request of the Digby Board of Health, who desire certificates from the local board as to the freedom from smallpox or other infectious diseases of the men going to that town from the lumber camps. If necessary the men will be vaccinated.

At the semi-annual meeting of the trustees of St. Joseph's Hospital, Glace Bay, N.S., a full report of hospital work done, financial statements were presented and approved for publication. The work done at the hospital has greatly increased during the year and expenditures, of course, as well. The trustees were well pleased with results and tendered Mr. McDonald a vote of thanks for his gratuitous work as treasurer of the institution. The work of Miss Janet Cameron, superintendent of the Hospital, was referred to in flattering terms, and she was granted unsolicited a three months' leave of absence with facilities to visit leading hospitals in Canada and the United States.

The report of the St. John Public Hospital was presented to the Legislature Wednesday by the Premier. It showed that 1,186 patients were treated during the year. Of this number 750 were discharged as cured, 1,232 as showing improvement, and 12 as incurable. Ninety-five died and 80 are still under treatment; 446 were males and 740 females. 428 were married. The number of operations performed was 262. Of the patients 499 were residents of St. John city and county, 251 came from points in New Brunswick outside of St. John and 436 from beyond

the bounds of the Province. The total number of days spent by the patients in the hospital was 31,903, the average number of days 26.9. The daily cost of the support of each patient, and the interest, was \$1.23. In the outdoor department there were 56 operations and 1,482 persons sought consultations. The receipts for the year were \$52,823.22. This includes the balance carried forward last year and the \$4,000 returned by the municipal council to replace money taken from the Owen-Jones fund. The expenditures were \$43,131.

BRITISH COLUMBIA.

The Vancouver General Hospital will have an addition to its equipment to cost \$20,000.

The Dominion Government has given 400 acres of land in aid of the sanatorium for tuberculosis.

The British Columbia Hospital for the Insane at New Westminster last year treated 150 patients. There were discharged 79 cases.

Dr. F. W. Morris, of Victoria, B.C., was granted during the past week, through the agency of Rowland Brittain, patent attorney, Vancouver, a Canadian patent on an improved process for the manufacture of carbonate of lead, or hydrated carbonate of lead, the white lead of commerce, from metallic lead. This invention is an important one, as it is on entirely new lines, and is expected to revolutionize the white lead manufacturing industry.

Upon the recommendation of Hon. Richard McBride, Premier of British Columbia, His Honor the Lieutenant-Governor appointed Henry Esson Young, M.D., member-elect for the constituency of Atlin, and its former representative in the Legislative Assembly, to the office of Provincial Secretary, vice Hon. William Manson, resigned. The appointment of Dr. Young to the office of Provincial Secretary and Minister of Education will be viewed with satisfaction everywhere throughout the Province.

MANITOBA.

Dr. H. J. Watson of Winnipeg, recently passed through a severe illness. He underwent an operation, but is recovering.

Dr. Corbett, Medical Health Officer for Winnipeg, is in Italy and his place is being filled during his absence by Dr. Burns.

The Manitoba Medical College has been established for 24 years, and has graduated about 400 medical men. The Alumni Association held its annual meeting recently, which was a very enthusiastic affair.

The number of patients treated in the Winnipeg General Hospital in one month recently was 657. This shows the growth characteristic of the West.

OBITUARY.

W. H. DRUMMOND, M.D.

Death has silenced the voice and laid aside the pen of Dr. W. H. Drummond, the poet of the French-Canadian habitants. The son of an officer in the Royal Irish Constabulary, he was born at Currawn House, County Leitrim, Ireland, in 1854. He was educated at Bishop's College, Lennoxville, where he graduated in medicine in 1884. He practised his profession in Montreal for over twenty years, and had a connection with Bishop's Medical College, Montreal, until it united with McGill Medical Department, with which he then became identified.

On April 2nd, while looking after the interests of a mining property in Cobalt, he was seized with an attack of apoplexy, and died on 6th April, 1907. He never regained consciousness from the first. His widow was the daughter of Dr. O. C. Harvey, of Jamaica, W.I., to whom he was married in 1894.

He took an active part in several clubs for the preservation of fish and game, and in this capacity rendered a useful service to the country.

He was fond of travel and often enjoyed a lengthy holiday. He frequently gave readings in public of his poems. In this respect he was most happy, and always had large and appreciative audiences to hear his rendition of his own compositions. A short time before his death he was the guest of the Canadian Club of Toronto, and met with a most enthusiastic reception. Those who have heard him reading his dialect poems will recall his fine physique, his kindly face, and his melodious voice.

Dr. Drummond is now known wherever the English language is spoken. His poetry is simple in form, but, like that of Burns and Kipling, comes from the heart and goes to the heart. Certain classes speak through these poets, and they speak for all time. But, apart from this directness of sympathy, there is a splendid vein of humor in all his poems. His poems are an exalted style of sermon, blending pathos, humor and morality with a remarkably beautiful form of descriptive word painting.

Irish by birth and descent, he lived much among the French habitants, and became the great exponent of their moods and manners. It is a very

fine tribute to his personal character and the spirit of his writings that he became an idol among the people of whom he so often sang. By means of his poems he has done more to make the simple virtues and good qualities of the French-Canadian habitants known to the rest of Canada and the Empire than all our historians and critics combined. This is not the first instance in history where the songs of a people have made them better known than their laws, or their commerce, and have been as powerful as armies in the field.

Dr. Drummond possessed the marvellous power of illustrating his teachings by an appeal to the simple incidents in the habitants' life. His poem, "The Last Portage," brings this out touchingly:—

" I'm sleepin' las' night w'en I dream a dream.
 An' a wonderful wan it seem,
 For I'm off on de road I was never see
 Too long an' hard for a man lak me,
 So ole he can only wait de call,
 Is sooner or later come to all.

" An' off in front of me as I go,
 Light as a dreef of de fallin' snow,
 Who is dat leetle boy dancin' dere?
 Can see hees w'ite dress an' curly hair,
 An' almos' touch heem so near to me,
 In an' out dere among de tree.

" An' den I'm hearin' a voice is say,
 'Come along, fader, don't mind de way,
 De bos on de camp he sen' for you,
 So your leetle boy's going to guide you troo.
 It's easy for me, for the road I know,
 'Cos I travel it many long year ago.'

" An' I foller it on, an' wance in a w'ile
 He turn again wit de baby smile,
 An' say, 'Dear fader, I'm here, you see,
 We're bote togedder, jes' you an' me;
 Very dark to you, but to me it's light;
 De road we travel so far to-night.' "

So, too, Dr. Drummond has passed the last portage! The Canadian heart bids him bood-bye, but he has left with us an imperishable legacy

of verse, *Actis ævum implet, non segnibus annis*. As "The Cotter's Saturday Night" has done more to perpetuate Burns' memory than the finest monument the generosity and the skill of man could erect, so, in like manner, "The Habitant," "The Voyageur," and "Johnny Courteau" will prove an ever-green memorial of Canada's own Drummond.

JOHN E. MARSH, M.D.

Dr. John E. Marsh, quarantine officer at St. John, N.B., died suddenly on April 3rd, at Partridge Island, the quarantine station. He had in the morning examined the passengers of two big immigrant steamers, and, while sitting on the wharf, was stricken with paralysis, dying about two hours later. He had been port physician for a number of years, was a graduate of Bellevue, New York, about 50 years old, and leaves a wife and four children.

DAVID McINTOSH JOHNSON, M.D.

Dr. Johnson died at his home, Tatamagouche, N.S., a short time ago, from an attack of la grippe. He graduated in 1875 from the Halifax Medical College. He was successful in building up a large practice. A few years ago he was appointed postmaster of Tatamagouche. He was a highly esteemed member of the medical profession, and a much valued citizen. He leaves a widow and five children to mourn his loss.

WILLIAM LANE, M.D.

Dr. Lane was a Victoria graduate of 1861. He practised in St. Catharines, Ont., Lockport, N.Y., and in New York city. He died on 14th March, of heart failure.

DR. ERNST VON BERGMANN.

Professor von Bergmann, the famous surgeon, died at Wiesbaden, Germany, 25th March. He was operated upon the day before for appendicitis. He was born at Royen, Livonia, Dec. 16, 1836, and studied

medicine at the Universities of Dorpat, Vienna and Berlin. During the Austrian-Prussian war of 1866 Prof. von Bergmann was placed at the head of the military hospital at Koeniginhoff, Bohemia, and during the Franco-Prussian war he directed the military hospitals at Manneheim and at Carlsruhe. He was appointed professor of surgery at Dorpat in 1875 and remained there until the outbreak of the Turko-Russian war, when he was attached to the Russian army of the Danube as consulting surgeon. In 1873 the professor became chief surgeon of the hospital at Wurtzburg and was called in 1882 to succeed Prof. von Langenbeck in the chair of surgery at the University of Berlin and in the direction of the surgical clinic of the city.

Prof. von Bergmann was a hereditary member of the Prussian House of Lords and was the author of numerous works on surgery. The professor taught Emperor William to use the laryngoscope, and in May last was summoned to Constantinople to attend the Sultan's daughter, Sultana Ayisheh. He presided at a special meeting of the Berlin Medical Association July last, called to discuss the treatment of appendicitis, and in August of the same year was summoned to attend the Sultan of Turkey. The professor also treated the late Shah of Persia early during the present year, for which he is said to have received a fee of \$22,000.

JOHN JAMES BLACKLOCK, M.D.

Dr. Blacklock died at Morrisburg, in his 84th year. He graduated from McGill in 1851. He was the son of Dr. Ambrose Blacklock, of the Royal Navy, and was born at Williamstown, Glengarry. He was a coroner for Stormont, Dundas and Glengarry for forty years.

A. T. DUNN, M.D.

Dr. Dunn died at an advanced age at his home in Augusta, Grenville County, Ontario, on 16th January. He was a graduate of Queen's. For some years he has been unable to practice owing to ill health.

JAMES PRIMROSE, M.D.

Dr. Primrose died of cancer in his 61st year at Bridgetown, N.S. He was a very successful practitioner and a highly esteemed citizen.

ANDREW HARKNESS, M.D.

Dr. Harkness was a graduate of McGill. He had practised at Lancaster, Ontario, where he died of pneumonia in his 62nd year, on 6th February.

SAMUEL FAIRWEATHER WILSON, M.D.

Dr. Wilson was well known in Montreal, where he died on the 29th January, in his 51st year, leaving a widow and a daughter. He had practised in Sussex and St. John, N.B.

S. P. RICHARDSON, M.D.

The death occurred, 26th March, 1907, at his residence in Eglinton, of Dr. Samuel Prescott Richardson, Medical Health Officer of the town of North Toronto. He had been unwell for about two years, but had continued his practice up to a recent date. About twelve years ago his wife died, and one son, Mr. Norman R. Richardson, of Deer Park, survives. John Richardson, ex-M.P. for East York, is a cousin.

For nearly twenty-five years the late Dr. Richardson had practised in North Toronto. Prior to that he was in York Mills and Scarboro'. Deceased was very well known throughout the southern part of the county. For a time he had been a physician at the Toronto Asylum, and had also served as alderman in North Toronto. He was in his 65th year. The funeral was private.

JOHN C. HOWE, M.D.

Dr. Howe died at his home in Quebec City on 15th February. He was a graduate of Laval and had practised in Quebec for about 25 years. He was Medical Inspector of Immigration for that city. He died of heart disease.

ALEXANDER McINTOSH, M.D.

Dr. McIntosh died in his seventy-fifth year at his home in Antigonish, N.S. He had retired some years before his death from active practice, but acted as Judge of Probate for the County of Antigonish to the time of his death.

BOOK REVIEWS.

INSANITY CURED BY A NEW TREATMENT.

Details of Twenty-one Cases, by C. W. Suckling, M.D., Lond., Birmingham. Cornish Brothers, 37 New Street, Birmingham, 1907. Price 2s. net.

This is a very interesting pamphlet of 30 pages, and containing a careful history of 21 cases of insanity cured by the method described. These patients were all victims of prolapse of the kidney, or nephroptosis, on one or both sides. In speaking of the cause of the insanity in these cases, Dr. Suckling states that it is due to toxæmia. The ureter is kinked and this leads to the retention of poisons. The operation described by Augustin H. Goelet, of New York, is recommended. It is stated that "there is no mortality, no shock, and no fever, and 99 per cent. of the cases, at least, are cured." The author also states: "The insanity due to Bright's disease is of course well recognized. The insanity due to dropped kidney is curable, and will in the future also be well recognized." He quotes from Dr. Goelet thus: "There can be no excuse for permitting the patient to live thus over a mine which may explode at any time." We can commend this brochure. It will well repay a careful study.

PSYCHOPATHOLOGY APPLIED TO MEDICINE.

Introductory Studies, by David W. Wells, M.D., Lecturer in Mental Psychology, and Assistant in Ophthalmology, Boston University Medical School; Ophthalmic Surgeon, Massachusetts Homœopathic Hospital, Boston; Oculist, Newton (Mass.) Hospital. F. A. Davis Company, Medical Publishers, 1914 Cherry Street, Philadelphia, Pa. Price \$1.50.

The present essay has developed as a result of several years' lecturing to medical students, and is based on a practical knowledge of their needs.

The leading features of the book are:—

1. A clear statement of the important facts of medical psychology, such as Reason and Instinct, Habit, the Subconscious, the Evolution of the Special Senses, and the elucidation of many practical problems of the Sense of Sight, among which is a detailed consideration of the Inverted Retinal Image. This material occupies the first few chapters.

2. Hypnotism (its history, methods of induction, and theories concerning it) is treated in three chapters. This is a valuable resumé of the present status of the subject, together with the account of considerable

original experimentation. Its value and place in the practice of medicine are carefully considered.

3. The great subject of mental healing in its many forms occupies the three remaining chapters. An attempt is made to find the underlying therapeutic principle, which is so generally obscured by the false notions and extravagant claims of the various sects.

The book concludes with a critical examination of the prevalence of a psychic element in all forms of modern medical methods.

A book of 1,000 pages might easily have been made of the material presented, but such "padding" would have spoiled the author's avowed purpose, namely, to present a readable and trustworthy introduction to the subject.

We can recommend this little book as well calculated to impart a useful knowledge of this subject.

TEXT-BOOK OF PSYCHIATRY.

A Psychological Study of Insanity, for Practitioners and Students. By Dr. E. Mendel, A. O. Professor in the University of Berlin. Authorized translation. Edited and enlarged by William C. Krauss, M.D., Buffalo, N. Y., President Board of Managers Buffalo State Hospital for Insane; Medical Superintendent Providence Retreat for Insane; Neurologist to Buffalo General, Erie County, German, Emergency Hospitals, etc.; Member of the American Neurological Association. 311 pages. Crown octavo. Extra cloth. \$2.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

As one would expect, this is a thoroughly scientific treatise on mental disorders. The first part of the work deals with general psychiatry and takes up the principles on normal and abnormal mental processes. Part two discusses the special forms of mental derangement under the heading of special psychiatry. We have perused this work with much care and profit, and wish to express the pleasure derived from reading its pages. We can commend this work in very high terms. It is really a most satisfying book.

MALARIAL PROPHYLAXIS.

A Paper contributed by R. Howard, M.D., B. Ch., for the "Cragg's Research Prize, 1906." Under the auspices of the London School of Tropical Medicine. London: E. G. Berryman and Sons, Blackheath Road, S. E., 1907.

This is a most interesting pamphlet and throws much light upon the whole problem of ague. The most interesting part is that which deals

with prophylaxis. In a word this is summed up as destructive of the anophelina, prevention of infection by destroying the parasites in man and preventing the mosquito from biting infected persons, protecting persons from infected mosquitoes, and the use of quinine as a preventive measure. Much has been done for some infected areas. We congratulate Dr. Howard on his work.

THE ABDOMINAL AND PELVIC BRAIN.

By Byron Robinson, B.S., M.D., Chicago, Illinois, author of *Practical Intestinal Surgery, etc., etc.* Frank S. Betz, Hammond, Ind., U. S. 700 pages 8vo.

This is a work of much originality both of work and method. Dr. Robinson has made the anatomy of the abdominal and pelvic organs as interesting as a fairy tale. He has shown in a very clear manner how the various viscera are linked together through the nervous system, and what a wonderful influence the abdominal nervous system has upon the entire body. The work is very richly illustrated with Dr. Robinson's own drawings. Every page of the book is of a most interesting and fascinating character. The way the relationships of the sympathetic nervous system is explained, and its share in causing many reflex conditions, throws a new light upon the subject. Much is said about abdominal pain and the close connection between the organs. The author is to be congratulated upon the results of his labors. Such books add substantially to the world's knowledge, and are of the kind that are destined to live. For the publishers we may say that they have done their part well. In appearance the book can take its place on any shelf and with any rivals.

INTERNATIONAL CLINICS.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Obstetrics, etc. Edited by W. T. Longcope, M.D. Vol. I, Seventeenth Series, 1907. Philadelphia and London: J. B. Lippincott Company. Price \$2.25.

In this volume there are four articles on treatment, three on medicine, four on surgery, one on gynecology, one on ophthalmology, one on laryngology, and a careful review of medical progress for 1906. The book is well illustrated. The articles are all of a very high order of merit and are well calculated to be of the utmost service to the practitioner.

We can recommend this volume and the whole series in very cordial terms. The publishers have set a high aim for themselves and have lived up to it.

TICS AND THEIR TREATMENT.

By Henry Meigs and E. Feindel, with Preface by Professor Bressaud. Translated and Edited, with a Critical Appendix, by S. A. K. Wilson, M.A., M.B., B.Sc., Resident Medical Officer, National Hospital for the Paralyzed and Epileptic, Queen Square, London. London: Sydney Appleton.

The more one reads this book the more one becomes interested in it. The authors treat the subject in a very wide way. They take up tic and spasm, tic and motor reactions, tic and the will, tic and habit, tic and idea, tics and speech, the mental conditions, the etiology of tics, symptoms, varieties of tics, tics and other diseases, diagnosis, prognosis, treatment, etc. The book is full of the most useful information on this very obscure subject. The authors have gone into the subject in a most thoroughgoing manner. Professor Bressaud furnishes an interesting preface. The translator, Dr. Wilson, has done his part well and has rendered the original into excellent English. We again state that we have enjoyed the perusal of this book very much and commend it highly on its merits.

THE MUSCLES OF THE EYE.

By Lucien Howe, M.A., M.D., Professor of Ophthalmology, University of Buffalo; Member of the R. C. S., England; Member of the Ophthalmologische Gesellschaft, etc. In two vols. Volume I, Anatomy and Physiology, including Instruments for Testing and Methods of Measurement. Illustrated. G. P. Putnam's Sons, New York and London, The Knickerbocker Press, 1907. Each volume \$4.25. Two volumes ordered before 1st July, \$7.50 net.

Dr. Howe must have spent a vast amount of time and research upon this volume. He has given the profession, especially that branch of it dealing with diseases of the eye, a very valuable work. The book is made up on the original type. Throughout its pages there are many suggestions of a most interesting and useful character. The publishers have produced a very handsome work. The paper, binding, type, illustrations, etc., are all in very fine form. We can state that it is such a work as one may take and carefully study and then safely follow its teachings. To specialists in ophthalmology, we should regard the work as indispensable.

MISCELLANEOUS.

THE TWENTY-SEVENTH ANNUAL MEETING OF THE ONTARIO
MEDICAL ASSOCIATION, 28TH, 29TH AND 30TH MAY.

OFFICERS.

President—Geo. A. Bingham, Toronto.

Vice-Presidents—Ingersoll Olmsted, Hamilton; E. B. Echlin, Ottawa; A. Gillespie, Lindsay; Hadley Williams, London.

General Secretary—Charles P. Lusk, 99 Bloor street west, Toronto.

Assistant Secretary—Samuel Johnston, 169 Carlton street, Toronto.

Treasurer—Frederick Fenton, 75 Bloor street east, Toronto.

Committee on Papers and Business—D. J. G. Wishart (Chairman), H. B. Anderson, J. A. Amyot, R. D. Rudolf, J. S. Hart, T. F. McMahan, F. N. G. Starr, Andrew Gordon, Toronto; Ingersoll Olmsted, Hamilton; J. C. Connell, Kingston; N. W. Woods, Bayfield; A. F. Tufford, St. Thomas; W. I. Bradley, Ottawa; Angus Graham, London; C. J. H. Chipman, Port Arthur; Alex. Taylor, Goderich; J. R. Arthur, Collingwood.

Section in Medicine—T. F. McMahan, Chairman; Goldwin Howland, Secretary.

Section in Surgery—F. N. G. Starr, Chairman; E. Stanley Ryerson, Secretary.

Committee on Arrangements—H. J. Hamilton (Chairman), J. F. W. Ross, B. L. Riordan, Allen Baines, W. H. B. Aikins, A. A. Macdonald, F. W. Marlow, J. O. Orr and Wallace Scott, Toronto.

APPEAL FROM OFFICERS.

The twenty-seventh annual meeting of the Ontario Medical Association will be held in the Medical Buildings, Queen's Park, on the 28th, 29th, and 30th of May next. There are in the Association approximately 800 enrolled members, and an annual attendance of 250, which is less than one-fourth what the active membership should be with 2,400 practitioners in the Province.

We want your interested attendance, for we believe the organization can be made a much more potent agency for good in the Province than it is at the present time, both for the profession and for the public, whose welfare is after all the paramount reason for its existence.

There are questions of wide interest affecting you as a practitioner and as a citizen, which will come before the Association this year. Ques-

tions relating to the public health, to medico-legal administration, and concerning the welfare of the physicians of the Province, will merit your attention.

The meeting will be distinguished by the presence of Dr. Mazyck P. Ravenel, so long associated with the Phipps Institute of Philadelphia, and Dr. Geo. W. Crile, of Cleveland, one of the eminent surgeons of the United States. The committee also have invited two gentlemen who will attend the meeting of the American Medical Association, namely, Dr. William Milligan, of Manchester, the Otologist, and Professor Gustave Killian, of Freiburg, Germany.

Later you will find a programme of the meeting as prepared to date, and its interest is at once apparent.

The membership fee is \$2.00, the only restriction being that your name must come before the Credential Committee for acceptance, endorsed by two members of the Association; any regular practitioner in the Province in good standing, being eligible.

In view of the fact that a wide and concerted movement is under way to enrol the members of the profession in the Dominion as a strong organization with affiliations extending to every provincial, county and city society, it is of special moment that you become a member of the Association this year, and thus participate in creating what must result in a new status for Canadian medicine.

The meeting will consist of sessions, in the mornings devoted to sectional work, and, as will be seen, the programme is under way, the sections of Medicine and Surgery being well filled in. Other sections will be formed as the necessary papers are secured. The afternoons will be given up to papers of general interest, and the addresses in Medicine and Surgery. The evenings to entertainment alone. On the first evening there will be a smoking concert, to which all members are invited, and on the second a dinner at one of the large hotels, at which a distinguished guest, whose name will be announced later, will speak. Tickets for the dinner can be secured at the time of registration, \$2.00 each. Any member not coming to the city until the second day of the meeting must let the secretary of the committee, Dr. S. Johnston, 169 Carlton street, know not later than noon, May 28th, if he intends to be present at the dinner.

RAILWAY ARRANGEMENTS.

The committee are securing the regular convention rates upon the lines of the Eastern Canadian Passenger Association from points east of and including Port Arthur. Ask your railway agent for a standard cer-

tificate as a member of the Ontario Medical Association, and buy a full single first class fare ticket to Toronto. On arrival hand the certificate to the Secretary. The Passenger Association will have a special agent at the buildings at noon, May 29th and 30th, to supervise the certificates, to cover the cost of which a fee of 25 cents will be charged. If 50 members, bearing certificates, are present who have paid 50 cents or more for their tickets to Toronto, you will be returned for one-third the lowest regular first class fare on presenting your certificate, duly signed and vided. If 300 are present you will be returned free; but if less than 50 two-thirds will have to be paid. Let each member coming to the city take the time to secure a standard certificate, and thus help those coming from a greater distance to make sure of their reduced fares.

PROPOSED PROGRAMME.

(The final order of papers will be announced in the daily press.)

TUESDAY, MAY 28.—MORNING SESSION.

Medical Section.

1. Leucotytosis.—D. A. Graham, Toronto General Hospital.
2. Paper, a Resumé of the Development of Clinical Psychology.—J. G. Fitzgerald, Toronto Asylum.
3. Perforation of the Gall Bladder in Typhoid Fever.—E. Brandon, North Bay.
4. Feeding of Typhoid Patients.—J. A. Oille, Byng Inlet, and George E. Smith, Toronto.
5. The Care of the Degenerate with Suggestions as to the Prevention of the Propagation of the Species.—R. W. Bruce Smith, Toronto.

Surgical Section.

Clinic at the Hospital for Sick Children.—Cases will be presented by surgeons on the Staff.

TUESDAY AFTERNOON.—GENERAL SESSION.

Symposium—The Profession in Relation to the Public.

1. "The Medico-Legal Aspects."—G. Silverthorn, Toronto. Discussion to be led by Hugh McCallum, London, and two others, names to be announced later.
2. "The Public Health Aspects."—J. W. S. McCullough, Alliston. Discussion to be led by C. A. Hodgetts, Toronto; R. Raikes, Midland; and W. R. Hall, Chatham.

3. "Ideals for Asylum Work in Ontario."—C. K. Clarke, Toronto. Discussion to be led by N. H. Beemer, Mimico; J. Russell, Hamilton; T. J. W. Burgess, Montreal, and W. N. Barnhart, New York.

4. "The Infection of Drinking Water."—J. A. Amyot, Toronto. Discussion to be led by T. A. Starkey, Montreal, and W. T. Connell, Kingston.

EVENING SESSION.

To be devoted to entertainment. A smoking concert will be given in St. George's Hall, to which all members are invited.

WEDNESDAY, MAY 29.—MORNING SESSION.

Medical Section.

1. Pathology, Etiology and Treatment of Neurasthenia.—S. H. McCoy, St. Catharines.

2. Modern Methods of Anæsthesia.—S. Johnston, Toronto.

3. Allopathic Doses of Drugs.—T. O. T. Smellie, Fort William.

4. Desirability of Establishing an Institution to which Inebriates may be Committed by Legal Process.—Edward Ryan, Kingston. Discussion to be led by W. C. Barber, Kingston, and A. T. Hobbs, Guelph.

Surgical Section.

1. Symposium on the Treatment of Fractures :

(a) "Fractures of the Skull."—D. E. Mundell, Kingston.

(b) "Fractures near the Elbow."

(c) "Fractures near the Wrist and Ankle."—A. W. Stinson, Brighton.

(d) "Fractures of the Femur."—W. E. Gallie, Toronto.

2. Report of a Case of Tetanus with Cure by Amputation after Three Months' Treatment.—T. W. H. Young, Peterboro'.

3. Paper, Title to be sent.—A. E. McColl, Belleville.

4. Closure of the Incision in Abdominal Section.—N. A. Powell, Toronto.

WEDNESDAY AFTERNOON.—GENERAL SESSION.

1. Presidential Address: "The Operative Treatment of Goitre"—a Second Report.—G. A. Bingham, Toronto.

2. Address in Surgery: "Clinical and Experimental Observations on the Direct Transfusion of Blood."—Geo. W. Crile, Cleveland.

EVENING SESSION.

Annual Dinner, the particulars of which will be announced later.

THURSDAY, MAY 30.—MORNING SESSION.

Medical Section.

1. Alcohol and Life Insurance.—T. F. McMahon, Toronto.
2. Serous Hæmorrhages.—G. W. Ross, London, England.
3. X-Ray in Medical Diagnosis.—S. Cummings, Hamilton.
4. Early Manifestations of Acute Mental Disease.—D. Campbell Meyers, Deer Park.
5. Necessity for Separate Isolation Hospitals for Diphtheria, Scarlet Fever, and Minor Infectious Diseases.—Discussion to be led by Walter F. Langrill, Hamilton General Hospital, and J. N. E. Brown, Toronto General Hospital.

Surgical Section.

1. The Bier Treatment.—S. H. Westman, Toronto.
2. Intestinal Obstruction.—Ingersoll Olmsted, Hamilton.
3. Mastoiditis with its Complications.—Gilbert Royce, Ottawa.
4. Paper, Title later.—A. Primrose, Toronto.
5. Diagnosis of Malignant Tumors. (a) Clinical Aspect.—William Hackney, Ottawa; (b) Pathological Aspect—E. Stanley Ryerson, Toronto.

THURSDAY AFTERNOON.—GENERAL SESSION.

1. Address in Medicine: "Methods of Infection in Pulmonary Tuberculosis"—Mazyck P. Ravenel, Philadelphia.
2. Immune Therapy in Tuberculosis.—A. J. Richer, St. Agathe, Quebec. Discussion to be led by J. H. Elliott, Gravenhurst, and R. J. Dwyer, Toronto.

STANDING COMMITTEES.

On Credentials.—C. J. O. C. Hastings, Toronto; Ingersoll Olmsted, Hamilton; W. O. Boyd, Bobcaygeon; W. T. Connell, Kingston; Murray McFarlane, Toronto.

On Public Health.—R. J. Trimble, Queenston; R. N. Fraser, Thamesville; C. J. Hodgetts, Toronto; D. H. Arnott, London.

On Publication.—John Ferguson, Toronto; E. E. King, John Hunter, Graham Chambers, and D. J. G. Wishart, Toronto.

On By-Laws.—W. R. Walters, East Toronto; A. H. Wright, Toronto; Alex. Taylor, Goderich; W. J. Charlton, Weston; W. T. Parke, Woodstock; T. D. Meikle, Mt. Forest.

On Ethics.—B. L. Riordan, Toronto; Wm. Philp, Hamilton; H. T. Machell, Toronto; H. A. McCallum, London; Geo. T. McKeough, Chatham; John Caven and H. J. Hamilton, Toronto.

Advisory.—Daniel Clark, Toronto; J. H. Richardson, Toronto; J. A. Temple, Toronto; W. H. Moorhouse, London; R. A. Reeve, Toronto; R. W. Bruce Smith, Brockville; F. Le M. Grasett, Toronto; Wm. Britton, Toronto; W. J. Gibson, Belleville; A. H. Wright, Toronto; Angus McKinnon, Guelph; N. A. Powell, Toronto; J. C. Mitchell, Enniskillen; J. F. W. Ross, Toronto, and Wm. Burt, Paris.

TEMPORARY COMMITTEES.

On Audit.—Geo. H. Carveth, H. E. Clutterbuck, and Wallace Scott, Toronto.

On Necrology.—John Hunter, Toronto; W. Tovell, Ayr; H. B. Small, Ottawa; Forrest F. Bell, Windsor.

On Hospital Provision for the Treatment of Acute Nervous and Mental Cases.—Campbell Meyers, Deer Park; the Presidents of the Ontario Medical Association, President and Secretary of the Provincial Board of Health, Presidents of the Toronto Medical, Pathological and Clinical Societies, the City Health Officer of Toronto, and I. H. Cameron, A. McPhedran, J. F. W. Ross, R. J. Dwyer, W. P. Caven, N. A. Powell, R. W. Bruce Smith, Wm. Britton, H. J. Hamilton, A. A. Macdonald, R. D. Rudolph, W. H. Pepler.

PROPOSED BILL RE PROPRIETARY AND PATENT MEDICINES.

The following is the text of the bill introduced into the Federal Parliament by Hon. Senator Templeman:—

AN ACT RESPECTING PROPRIETARY AND PATENT MEDICINES.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as the Patent Medicine Act.
2. In this Act, unless the context otherwise requires,—
 - (a) "Minister" means the Minister of Inland Revenue or any person duly authorized to act in his stead, or any other head of a Department charged with the administration of this Act;

- (b) "Medicine" means and includes every artificial remedy or prescription manufactured wholesale for the internal or external use of man or animal, the name, composition or definition of which is not to be found in the British Pharmacopœia, the Codex Medicamentarius of France, the Pharmacopœia of the United States, or any foreign pharmacopœia approved by the Minister, or any pharmacopœia adopted by any properly constituted pharmaceutical association approved by the Minister;
- (c) "Affidavit includes a solemn affirmation or declaration made in accordance with the law of Canada;
- (d) "Officer" means any officer of Inland Revenue or any person authorized under this Act or the Aduiteration Act to procure samples of articles of food, drugs, agricultural fertilizers or medicines and to submit them for analysis.

1. Every manufacturer or importer of medicines and every agent of any such manufacturer or importer shall, before offering any medicine for sale, transmit to the Minister two samples, carriage paid, in original or full trade packages with seals unbroken, of such medicine so manufactured, imported or held for sale by him, plainly labelled with the name and address of the manufacturer and the name of the medicine, and accompanied by an application for registration and an affidavit stating whether the medicine does or does not contain alcohol, and, if so, the percentage thereof, or, if it contains any of the poisons set out in the schedule hereto, specifying such poisons and the percentages thereof, and stating that such packages contain a fair average sample of the medicine referred to; and the Minister shall cause one of such samples to be analyzed and compared as to ingredients with the statement in the affidavit made, and the other sample shall be preserved by the Minister for the purpose of registration and comparison with any sample of the same medicine which may be subsequently obtained by an officer from any person having it in his possession or offering it for sale.

2. With every sample so transmitted, the manufacturer, importer or agent shall remit a fee of dollars, and a like fee shall thereafter be paid upon the first day of April in every year, failing which the certificate or license shall lapse.

3. If, after analysis, the sample is found, in respect to character and percentage of alcohol and poisons, to conform substantially to the statement made in the affidavit required by subsection 1 of this section, and such percentages of alcohol and poisons are not deemed to be excessive, the Minister may cause a certificate or license to be issued, specifying the number and date thereof and the date of registration of the medicine.

4. The affidavit required by this section may be taken before any magistrate, justice of the peace, or commissioner for taking affidavits for use in any court of the province or British possession in which such affidavit is taken, or, in the case of a foreign country, before a British consul or vice-consul.

5. Any officer shall, when required to do so by any regulation made in that behalf by the Minister, act as an inspector of proprietary and patent medicines and shall procure and submit samples thereof for the purpose of comparison or analysis.

6. Every sample so obtained by an officer shall be transmitted to the Minister for examination, analysis and comparison with the corresponding standard sample in the possession of the Minister.

7. All medicine shall be put up in packages or bottles, and every one of these, intended for sale or distribution in Canada, shall have the name and number under which it is registered, together with the manufacturer's name and address, placed upon it, which information shall be in conspicuous characters forming an inseparable part of the general label.

8. Each package or bottle shall, as soon as filled, have attached thereto an Inland Revenue stamp for an amount of duty varying according to the retail price of the medicine and container, as follows:—

25 cents and under	cents.
Over 25 cents and not exceeding 50 cents	“
Over 50 cents and not exceeding \$1.00	“
Over \$1.00	“

9. Six months after the coming into force of this Act such retail price must be plainly marked on each such package or bottle.

10. Except as herein otherwise provided, the stamps upon medicines manufactured in Canada shall be attached to the packages or bottles before the medicines leave the premises of the manufacturer. The stamps upon medicines imported shall be attached before they leave the custody of the proper customs house officers.

4. In case the result of an analysis shows that the medicine does not conform to the statement supplied by the manufacturer, compounder, proprietor or importer for sale in Canada, or is, in the opinion of the Minister, dangerous to health or life in the doses prescribed, or is for other reasons improper or unfit for sale, the Minister shall cause notice to be given to the manufacturer, compounder, proprietor or importer for sale in Canada of such medicine, or to his agent or representative in Canada or in any province of Canada, of the result of such analysis, and shall name a time and place at which the said manufacturer, compounder, pro-

prietor or importer, or such agent or representative may be heard before the Minister by counsel or in person.

5. After such hearing, or in case the party so notified does not appear, the Minister may, according to the facts, declare that the medicine analyzed is in fact an alcoholic beverage in which the medication is insufficient to bring the preparation properly within the description of legitimate medicine, or that it contains alcohol in excess of the amount needed as a solvent and preservative, or that it contains any of the poisons mentioned in the schedule to this Act in such a quantity as renders the use of such medicine, in the doses prescribed, dangerous to health or life, or that it contains cocaine or any of its salts, or that it is, on other grounds, improper and unfit for sale; and the Minister may thereupon order that the medicine in question shall not be sold unless the formula of ingredients is revised in accordance with the directions of the Minister, or unless the formula is legibly printed upon the label, or may prohibit the manufacture, compounding, importation or sale, as the case may be, of the medicine in Canada.

6. The Governor-in-Council may appoint officers or analysts for the purpose of carrying out the provisions of this Act, and they shall hold office during pleasure and shall perform such duties as are assigned to them under regulations of the Governor-in-Council.

2. The Governor-in-Council may cause such remuneration to be paid to such officers and analysts as he deems proper, and such remuneration, whether by fees or salary, or partly in one way and partly in the other, shall be paid to them out of any sum voted by Parliament for the purpose.

7. Where the chief place of business or head office of any person, firm or corporation within the meaning of this Act is elsewhere than in Canada, such person, firm or corporation shall file with the Minister the name of a person or corporation in, or having its head office in, Canada, as the agent or representative of such person, firm or corporation for all the purposes of this Act; and any notice to, or communication or dealing with such agent or representative by the Minister shall be effectual to all intents and purposes under this Act.

2. In default of such filing the Minister may take any proceedings or action under this Act *ex parte* and without any notice to, or communication with, such person, firm or corporation.

8. No medicine shall be sold or offered or exposed for sale unless a sample of it has been transmitted to the Minister, and all the provisions of this Act with respect to it have been complied with.

2. No medicine shall be sold, or offered or exposed for sale, unless it is of the same composition as the standard sample bearing the same name and number sent in for registration and preservation to the Minister.

3. No medicine shall be sold, or offered or exposed for sale, unless the package or bottle containing it has attached thereto the Inland Revenue stamp required by this Act.

9. Except as herein otherwise provided, all medicines in the possession of manufacturers, importers or vendors when this Act comes into force shall be stamped with the Inland Revenue stamp provided for the purpose, and every manufacturer, importer or vendor shall pay therefor the fees fixed by this Act.

10. Every person who is not known as a wholesale manufacturer or importer in the usual acceptation of the term, but who makes or imports proprietary or patent medicines for sale direct to consumers, or who sells them or disposes thereof to other vendors, shall, so far as these preparations are concerned, come under the provisions of this Act.

11. The Minister may order any officer to obtain samples of any medicine, and the manner of obtaining and treating such samples shall be as provided by Departmental regulations.

12. No person, firm or corporation shall distribute or cause to be distributed from door to door any sample of a proprietary or patent medicine.

13. Every person who sells, or offers or exposes for sale, any medicine not bearing the Inland Revenue stamp required by this Act, or who fails to observe any provision of this Act for which a specific penalty has not been provided, shall for a first offence incur in each case a penalty not exceeding fifty dollars and costs, and for each subsequent offence a penalty not exceeding one hundred dollars and costs, and his certificate or license may be cancelled: Provided that, in the case of vendors by retail, the above penalty, as respects the stamping of medicines, shall not apply to such goods found in their possession during the thirty days immediately following the coming into force of this Act.

14. Every person who unlawfully uses, or forges or alters, or uses, knowing it to be forged or altered, any manufacturer's label or certificate required under this Act, is guilty of an offence, and liable to a penalty not exceeding five hundred dollars and not less than one hundred dollars, and to imprisonment, with or without hard labour, for any term not exceeding twelve months and not less than three months.

15. No manufacturer, importer or vendor shall, in any advertisement or in any other manner, assert or indicate that the certificate or license issued by the Minister passes upon the merits of any medicine, and no reference to such certificate or license, other than by this Act especially provided, shall be made in any advertisement, upon any label on the package or bottle in which such medicine is contained, or in any other manner.

2. Every person who violates the provisions of this section shall, for a first offence, incur a penalty of fifty dollars and costs, and for any subsequent offence a penalty not exceeding five hundred dollars and not less than one hundred dollars and costs, and the certificate or license shall be cancelled.

16. Every penalty or forfeiture incurred for any offence against this Act, or any regulation thereunder, may be recovered in the name of His Majesty in a summary manner, with costs, under the provisions of part XV. of the Criminal Code.

17. Any term of imprisonment for an offence against the provisions of this Act, whether in conjunction with a pecuniary penalty or not, may be adjudged and ordered,—

(a) By the Exchequer Court of Canada, or any court of record having jurisdiction in the premises; or

(b) If such term of imprisonment does not exceed twelve months, exclusive of any term of imprisonment adjudged or ordered for non-payment of any pecuniary penalty, whether the offence in respect of which the liability to imprisonment has been incurred is declared by this Act to be an indictable offence or not, in a summary manner under the provisions of part XV. of the Criminal Code, by a judge of a county court, or by a police or stipendiary magistrate, or any two justices of the peace having jurisdiction in the place where the cause of prosecution arises, or wherein the defendant is served with process.

18. The Governor in Council may make such regulations for giving effect to any of the provisions of this Act and declaring the true intent thereof, in any case of doubt, as to him seems meet, and may also add to or remove from the schedule to this Act any poisons or potent drugs, as from time to time he deems expedient.

19. All regulations made under this Act, whether made by the Governor in Council or the Department of Inland Revenue, shall have the force of law, and any violation of any such regulation shall subject the person in the said regulation mentioned to such penalty or forfeiture as is, by the said regulation, imposed for such violation.

20. This Act shall come into force upon such day as the Governor-General by proclamation directs.

List of poisons or potent drugs requiring declaration of their presence in accordance with the provisions of section 3 of this Act: Acetani-
lide, aconite and its preparations, alcohol and all liquids containing it, arsenic and preparations containing it, atropine, belladonna and its preparations, cantharides, carbolic acid, chloral hydrate, chloroform, cocaine and its preparations, conia and compounds thereof, corrosive

sublimate, digitaline, ergot, hellebore, hyoscyamin and its preparations, Indian hemp, morphine and its preparations, nux vomica, opium,—its preparations and derivatives, phenacetine, prussic acid, savin and preparations thereof, strychnine and its preparations, sulphonal, tartrate of antimony, and veratria.

CANADIAN HOSPITAL ASSOCIATION.

The Canadian Hospital Association was organized at a well-attended meeting held in the reception-room of the Parliament Buildings on 1st April. The attendance, mostly of superintendents of hospitals, was gratifying and quite representative. Constitution and by-laws were adopted, a number of interesting addresses delivered, and the following officers elected: President, Miss Louisa Brent, Hospital for Sick Children, Toronto; Vice-Presidents, First, Dr. C. K. Clarke, Toronto Asylum for the Insane; Second, Dr. McIntyre, Kingston General Hospital; Third, Mr. W. Kenney, Royal Victoria Hospital, Halifax, for the Maritime Provinces; Fourth, Mr. H. E. Webster, Royal Victoria Hospital, Montreal; Fifth, Mr. A. L. Cosgrave, Winnipeg General Hospital, for Manitoba and the West; Secretary, Dr. J. N. E. Brown, Toronto General Hospital; Treasurer, Miss J. Patton, Grace Hospital, Toronto.

As a preliminary Dr. McIntyre, Kingston, was elected Chairman, and Dr. J. N. E. Brown, Toronto, Secretary of the meeting.

Dr. R. R. Ross of the Buffalo General Hospital, President of the American Hospital Association, delivered a short address, in which he outlined some of the important work carried on by that organization, and gave some useful suggestions as to the formation of a society here. During the course of his remarks he said that the American Association would probably hold next year's annual convention in Canada.

Dr. Bruce Smith, Provincial Inspector of Hospitals and Charities, read a paper, in which he dealt with some problems of hospital life and work. He emphasized in his preliminary words the growth of hospital work and usefulness in Ontario, pointing out that last year 41,950 patients were treated in the hospitals of this Province, and that the total annual expenditure for maintenance, including capital account, had reached the aggregate of \$1,228,289. Dr. Smith urged among other things the adoption of a uniform hospital register, up-to-date methods of accounting, true economy as distinguished from parsimony, and increasing efforts to make the hospital an institution with an educational aim, as well as a place for the healing of sick bodies.

The work in asylums for the insane was the subject of a paper read by Dr. Ryan, Superintendent of the Rockwood Hospital for the Insane at Kingston. Diagnosis, classification of patients, and other like matters were dealt with.

Hon. Messrs. Foy, Hanna, and Beck briefly addressed the meeting, expressing the hope that the organization to be formed would meet with success. The Provincial Secretary alluded to the increase in the Provincial grant to the hospitals. This year the aggregate is \$130,000, instead of \$110,000. The reason for the increase is the new basis of distribution—namely, a flat rate of 20 cents per day for each non-paying patient. Formerly the sum of \$110,000 was divided among all the hospitals on the per capita basis, and the increase in the number of institutions and the class of the patients mentioned had reduced the per capita to about seventeen cents.

The election of officers and the adoption of the constitution and by-laws followed. In the evening those present from outside points were the guests of the Toronto superintendents at a dinner served in the buildings.

In the evening a question drawer was opened, and a variety of topics introduced for discussion, in which much interest was manifested by those present. The high character of the papers and discussions made it quite clear that the newly formed association is likely to prove of much service to the best interests of the public charities of Canada. It is well known that a similar organization has existed for some years in the United States.

MEDICAL PREPARATIONS, ETC.

DERANGED UTERINE FUNCTION.

JAMES A. BLACK, M.D., Morganza, Pa.

It is safe to say that to the average physician, who is confronted almost daily with the ordinary cases of suppressed and deranged uterine function, no other class of cases is so uniformly disappointing in results and yields so sparing a return for the care and time devoted to their conduct.

Patients suffering from disorders of this nature are usually drawn from the middle walk of life, and, by reason of the pressure of household duties or the performance of the daily tasks incidental to their vocation, are entirely unable, in the slightest degree, to assist, by proper rest or procedure, the action of the administered remedy.

Many of these patients, too, suffer in silence for months, and even when forced by the extremity of their sufferings to the physician, shrink from relating a complete history of their condition and absolutely refuse to submit to an examination. Authoritative medical teaching and experience unite in forcing upon the attendant a most pessimistic view of his efforts in behalf of these sufferers under such conditions.

It is in this class of practice, where almost everything depends upon the remedy alone, that a peculiarly aggravating condition of affairs exists. A very limited list of remedies of demonstrated value is presented for selection, and I believe I am not wide of the mark in saying that, in the hands of most practitioners, no remedy or combination of remedies hitherto in general use has been productive of anything but disappointment.

Some time ago my attention was drawn to Ergoapiol (Smith) as a combination of value in the treatment of a great variety of uterine disorders. Its exhibition in several cases in my hands yielded such happy results that I have used it repeatedly in a considerable variety of conditions, and with such uniformly good results that I am confirmed in the opinion that its introduction to the profession marks an era in modern therapeutics. In the treatment of irregular menstruation and attendant conditions I have found it superior to any other emmenagogue with which I am familiar, in the following particulars:—

1. It is prompt and certain in its action.
2. It is not nauseating and is not rejected by delicate stomachs.
3. It is absolutely innocuous.
4. It occasions no unpleasant after-effects.
5. It is convenient to dispense and administer.

The following clinical notes will afford a general idea of its action in a variety of cases:—

Case 1. Mrs. — came to me presenting the following symptoms incident to a delayed menstruation: Persistent headache of a neuralgic character; dull, aching pain in limbs and lumbar region; cramp-like pains in abdomen, and considerable nausea. The menstrual period was overdue seven days, but as yet there was no appearance of flow. Her periods had always been occasions of intense suffering, but had never before been delayed. I began the use of Ergoapiol (Smith), with some misgiving, owing to the irritable condition of the stomach. One capsule every three hours was administered without any aggravation of the gastric distress. In twenty hours a normal menstruation was well under way; the flow was slightly increased over that observed on former occasions. The pains had subsided. Ergoapiol (Smith) was administered, one capsule three times a day, during the menstrual period, which terminated in five days. The patient was instructed to

return for a quantity of the remedy several days before the next menstrual period. She did so, and following directions, took one capsule three times a day for three days before expected menstruation. She subsequently reported that during the period—lasting five days—there had been practically no pain, and the amount of flow was, as far as she could judge, normal.

Case 2. Miss —, aged thirty, has been a sufferer for years with dysmenorrhœa. For about three years had suffered with leucorrhœa, particularly annoying after each menstrual period. Had undergone treatment at different times for the leucorrhœa and dysmenorrhœa, but had never experienced permanent benefit. She had been obliged to spend the couple of days of each period in bed. She consulted me about one week before her period. Examination revealed a purulent discharge oozing from os cervix and a rather large uterus. There was no displacement. She was put upon Ergoapiol (Smith), one capsule three times a day. The onset occurred one day earlier than expected and was attended with considerable pain. The patient was, however, able to attend to her usual duties, a state of affairs such as had not been experienced for some years. At the onset of the flow Ergoapiol (Smith) was administered, one capsule every two hours. The effect was astonishing. In eight hours the pains had well-nigh subsided and there was practically no discomfort, except some pain in back.

Case 3. Miss —, aged twenty-one, had suffered for two years with irregular and painful menstruation. Had commenced to menstruate when sixteen, menses being very scanty, but regular and accompanied with but slight degree of suffering. Was never of a very robust physique, but in the main healthy. When about nineteen, considerable nervous trouble was inaugurated by grieving over a great bereavement, and the menses became more and more painful. The anguish became such a horror to her that she frequently resorted to morphine, partly to allay pain and partly to procure sleep. Fortunately she had not, as yet, contracted the habit, but the tendency was undoubtedly in that direction. When first consulted by her, examination was not granted. Menses appearing shortly afterward, was called upon to afford relief. Flow was very scanty and clotted. There were sleeplessness, terrific headache, pain in back, constipation, etc. Ergoapiol (Smith) was administered, one capsule every three hours. Flow was considerably increased, there was a gradual lessening of all the suffering, and almost complete relief in twelve hours. This young woman has been placed upon Ergoapiol (Smith), one capsule twice daily for one week preceding appearance of menses, and has passed through several periods with very little suffering. An examination made recently showed a retroversion and very sensitive cervix. A properly

applied supporter will doubtless work considerable benefit in her case, but it cannot be disputed that the comparatively easy menstruations occurring recently, in spite of the displacement, were due entirely to Ergoapiol.

Case 4. Miss —, aged eighteen, had always been regular in menstruating. Could get no history of any previous disorder within patient's knowledge. Contracted a heavy cold about time of menstrual epoch, and was much alarmed by non-appearance of flow. Discomfort was not marked. Ergoapiol (Smith), one capsule three times a day, was prescribed. Reported later that flow was established in twenty-four hours after treatment was commenced. The delay in this case was about four days.

Case 5. Mrs. — consulted me, giving the following history: Three months previously had had a profuse uterine hæmorrhage occurring about the time of menstrual period. As she had for a number of years menstruated only at intervals of about six or seven weeks, the fact that menstruation has been suspended for six weeks before the date of trouble was not especially significant. The hæmorrhage, which was at no time alarming, had continued for several days. Since that time there had been an almost constant wasting and at times a considerable flow. Her condition was practically invalid. Examination revealed a gaping os, a cervix exceedingly tender and abraded, and a large uterus. Before resorting to curettement it seemed advisable to try other measures. Ergoapiol (Smith), one capsule every three hours, was prescribed. In about twenty-four hours there was a decided increase in the discharge, which consisted of clots and considerable debris. There were some pains of a cramp-like nature. The discharge began to grow less in about four days and ceased entirely in one week. There was a marked improvement in general condition. Local treatment entirely removed the tenderness and abraded condition of cervix. Ergoapiol (Smith) was administered several days before next menstrual period and resulted in a very satisfactory period. In this case it appears to me the remedy saved the patient the ordeal of curettement, acting as a prompt uterine stimulant. Her condition locally and generally has since steadily improved.

ANÆMIA AND ITS RELATION TO CATARRHAL INFLAMMATION.

No disease is more common than chronic inflammation of the mucous membranes. Doubtless many causes contribute to the prevalence of this

malady which spares neither the young nor the old, the rich nor the poor, the high nor the low. Prominent in its etiology, however, are sudden climatic changes, the breathing of bad or dust laden air, bad hygiene in personal habits, and bad sanitary surroundings. These factors all singly or collectively tend to lower the vitality of the whole human organism, and as a consequence the cells throughout the body perform their various functions imperfectly, or not at all. The quality of the blood becomes very much lowered, with the result that tissues that have important work to perform do not receive sufficient nourishment and so falter from actual incapacity. The red blood cells are reduced in numbers and the hæmoglobin is likewise diminished. Because of the blood poverty the digestive process is arrested, nutritive material is neither digested nor absorbed, and a general state of inanition ensues. It is not surprising under these circumstances, therefore, that chronic inflammation of the mucous membranes is produced. These highly organized structures with very important duties to perform naturally suffer from insufficient nutritional support, and the phenomena of catarrh follow as a logical result. Perversion and degeneration of the cells in turn takes place, and more or less permanent changes are produced in the identity and function of the tissues.

Appropriate treatment should consist primarily in correcting or eliminating all contributing factors of a bad hygienic or insanitary character. The individual should be placed under the most favorable conditions possible and every effort made to readjust the personal regime. Local conditions of the nose, throat, the vagina, or any other part, should be made as nearly normal as possible by suitable local applications or necessary operative procedures. Then attention should be directed immediately to improving the quality of the blood and thus increase the general vitality. For this purpose vigorous tonics and hæmatics are desirable, and Pepto-Mangan (Gude) will be found especially useful. Through the agency of this eligible preparation, the blood is rapidly improved, the organs and tissues become properly nourished and accordingly resume their different functions. Digestion and assimilation are stimulated and restored to normal activity, and the various cells and organs start up just as would a factory after a period of idleness. In fact Pepto-Mangan (Gude) supplies the necessary elements that are needed to establish the harmonious working of the whole organism. When the result is achieved, the catarrhal condition is decreased to a minimum and distressing symptoms are banished, a consummation that is highly gratifying to every afflicted patient and every earnest practitioner.