



A Non-Poisonous, Unirritating Antiseptic Solution

LISTERINE

Agreeable and satisfactory alike to the Physician, Surgeon, Nurse and Patient. Listerine has a wide field of usefulness, and its unvarying quality assures like results under like conditions.

As a wash and dressing for wounds.

As a deodorizing, antiseptic lotion.

As a gargle, spray or douche.

As a mouth-wash-dentifrice.

Operative or accidental wounds heal rapidly under a Listerine dressing, as its action does not interfere with the natural reparative processes.

The freedom of Listerine from possibility of poisonous effect is a distinct advantage, and especially so when the preparation is prescribed for employment in the home.

# LAMBERT PHARMACAL COMPANY

Twenty-first and Locust Streets St. Louis, Mo., U.S.A.

66 Gerrard Street East, Toronto, Ont.

# The Canada Lancet

JOHN FERGUSON M.A., M.D., AND W. EWART FERGUSON, M.B., EDITORS

VOL. LV.

TORONTO, SEPTEMBER, 1920.

No

ADELAIDE STREET WEST

TORONTO, ONT.

# INDEX TO CONTENTS

EDITORIAL	
CURRENT MEDICAL LITERATURE	7
PERSONAL AND NEWS ITEMS	19
OBITUARY W. H. Ellis—J. H. Comfort—J. A. Merrick—R. W. Large—J. F. Campbell— J. J. Harty—James Hutton.	23
BOOK REVIEWS	26,
ACADEMY OF MEDICINE, TORONTO	28
MISCELLANEOUS Many Mental Defectives—Relief Officer Busy—Vaccination Order and Ship- ping—Cancer Deaths in Toronto—Health Department Saves Children—Nurses Took Serum—Canadian Doctors Sought for South Africa—Artificial Pneu- mothorax—Toronto's Health—Medical Meeting at Cobourg.	42
MEDICAL PREPARATIONS The Therapy of Adrenalin.	48

200-206

THE GANADA LANGET,

# FROM PUBERTY TO MENOPAUSE

HROUGH this period most women suffer from uterine neurosis, and as Godell so aptly describes it.

"the intangible, imponderable, invisible pelvic pains of neurotic women."

istration of HAYDEN'S VI-BURNUM COMPOUND, presenting its well-known antispasmodic and

pregnancy call for the admin-

calmative action as a preventive

Anticipated

orrhea, the exhausting effects of Menorrhagia, and the nervous symptoms of early

and as a treatment in neurosis. It should be given

monthly attacks of Dysmen- | in teaspoonful doses, three times a day, administered in hot water. Literature, formula and samples upon request.

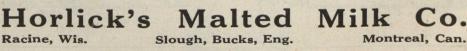
NEW YORK PHARMACEUTICAL COMPANY **BEDFORD SPRINGS, BEDFORD, MASS.** 

# SPECIFY HORLICK'S MALTED MILK

Horlick's is the standard. It is the Original product. Our special process insures results that cannot be duplicated by imitators.

Its quality and reliability are such that the medical profession has endorsed its use for over one-third century as one of the most satisfactory infant-foods next to mother's milk, and as a most efficient builder for nursing mothers, invalids, convalescents, and the aged.

LITERATURE AND ANALYSIS UPON REQUEST





# Standard Touring Car

Has every refinement you would demand of a high-priced car:

One-man top with snap-on curtain fasteners, glass windows in back.

Sloping, double ventilating windshield.

Demountable rims.

Tire carrier.

Non-skid rear tires.

Leather door grips.

Horn button mounted on top of steering column.

Seating space re-arranged to give maximum riding comfort,

Headlights equipped with approved non-glare lens.

Electric starting and lighting equipment furnished, if desired, at additional cost

Ford Motor Company of Canada, Limited Ford, Ontario

TONIC FOOD BEVERAGE

# **DIET IN DISEASE**

IN acute disease, where the digestive functions are impaired and excessive nitrogenous metabolism necessitate easily assimilated nourishment, "Ovaltine" will be found of great value.

"Ovaltine" is composed of a highly concentrated extract of the vitalising and building-up properties contained in Malt, Milk and Eggs, and presents the essential elements of diet in well-balanced proportions. It forms a natural anabiotic for administration in debilitated conditions where tissue waste has to be restored with a minimum of digestive strain.

> SUPPLIED BY ALL DRUGGISTS. SPECIALLY LOW PRICES ARE QUOTED TO HOSPITALS AND KINDRED INSTITUTIONS ON DIRECT APPLICATION TO TORONTO OFFICE.

FRONT STREET EAST (Main 4707).

**TORONTO:** 

27.



# WORLD'S FINEST RAW MATERIAL

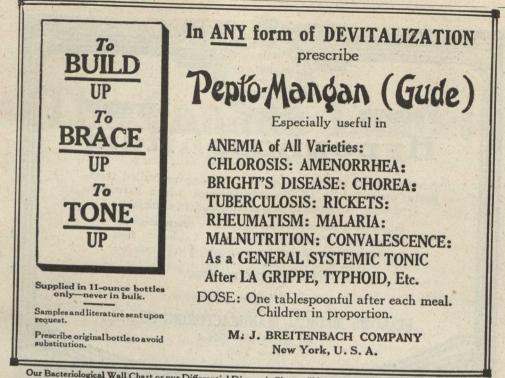
THE selection of the proper raw materials for the manufacture of Nujol is made possible by the world-wide connection of the Standard Oil Company (New Jersey).

The expert chemists of the Nujol Laboratories of the Standard Oil Company (New Jersey) have been able to produce absolutely pure Liquid Petrolatum of every viscosity from a water-like fluid to a jelly.

The viscosity of Nujol was determined after exhaustive research and clinical test and is in strict accord with the opinions of leading medical authorities.

Sample and literature based on the writings of Sir Arbuthnot Lane and other eminent authorities will be sent gratis. Mail coupon below

Nujol Laboratories, Standard Oil Co.(New Please send me booklets marked. () "A Surgical Assistant" () "In General Practice"	Jersey), 50 Broadway, Roon 274 New York. ( ) "In Women and Children" ( ) Also Sample



Our Bacteriological Wall Chart or our Differential Diagnosis Chart will be sent to any Physician upon request. LEEMING MILES CO., MONTREAL, CANADA, AGENTS



We can make special forms exactly duplicating any hand.

Can put name on any gloves so that it will not sterilize off.

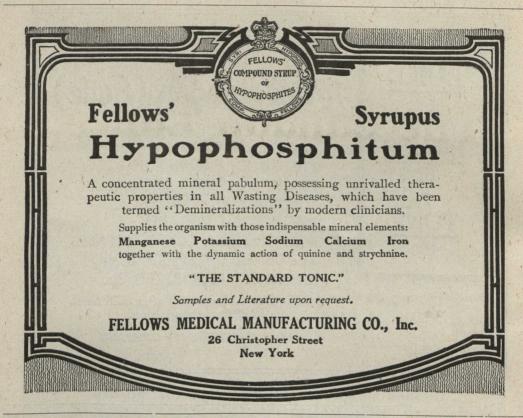
Insure to your own use the gloves you pay for.



Specialists in the manufacture of SEAMLESS RUBBER GOODS of every description.

The only Makers of SEAMLESS RUBBER GLOVES lin Canada.

Sterling Rubber Company Limited Guelph, Ontario



# Face Fallacy with Fact

Repetition and reiteration of erroneous conclusions arrived at without logical deduction and study of actual facts, circulate fallacies which often handicap and hinder the physician in his efforts to do the best thing for his patients.

#### IT IS A FACT

that Borden's Eagle Brand constitutes, when properly diluted and given, an adequate, properly-balanced, safe and satisfactory food for infants from birth up to one year of age. This has been incontrovertibly established by the records and results of our Baby Welfare Department and experience of physicians and nurses all over the world.

#### IT IS A FALLACY

that condensed milk is dangerously deficient in fat. That its sugar content is excessive and unsafe. That its use predisposes to rickets or malnutrition. That it should not be used for infant feeding. To face such fallacies with facts, in the interest of the medical profession, mothers and children, will be the object and accomplishment of subsequent advertisements in this space.

See this space in October number.



viii

# **The Canada Lancet**

VOL. LV

# TORONTO, SEPTEMBER, 1920 No. 1

## EDITORIAL

# THE GLOVER CANCER TREATMENT

We refrain from using the term "cure", as we have no instance reported to us of cure having been effected. Quite recently we were informed through the lay press (the source of all our information so far) that the Mulock residence on Jarvis street, Toronto, had been fitted up for the reception and treatment of cancer patients. We also learned from the lay press that this residence had been purchased by Mr. Peter Griffin, who is called a "theatrical magnate."

We also learned from the lay press that Dr. T. J. Glover had treated a large number of cancer patients at his new offices at 538 Jarvis street.

We have seen no report of the cases, so far treated, in any medical journal, nor do we know of any statement before any medical body by those who have had an opportunity of observing the cases that have been treated. We do feel that the time is more than due when some definite information should be given the medical profession.

It would be a matter for profound regret if the treatment should become commercialized into a money making scheme, even though it should prove a perfect cure. The grandest of traditions of the medical profession is that its members hold back no information from the rest of the profession. We urge that this be not now broken.

If the treatment possesses real merit, the preparation of the serumshould be on a large scale so that all who are afflicted might have a chance to secure the same. This can be best accomplished by some public body having charge of its production. This condition is imperatively demanded. If, on the other hand, the treatment is a failure, this fact cannot be made known too soon. The sufferers from this disease should be delivered from false hopes at once. This is also imperative

for several reasons, such as the prevention of exploiting these unfortunate people, and because valuable time may be lost that ought to be used for some other treatment.

If the treatment lies between these extremes, that is, possesses some ameliorating qualities, but in only a limited number of cases really affects a cure, the fact should be made known, in order that the true limitations of the treatment be set forth.

This is a serious matter. The whole profession stands in some danger of becoming smirched unless proper publicity be forthcoming. We learned from the lay press that Dr. A. J. Amyot, of Ottawa, came to Toronto to look into the treatment, but, so far, have not heard what conclusions he arrived at. It is high time that he gave the medical profession the benefit of his observations.

We make bold to call upon the Toronto Academy of Medicine to take action in this matter and insist upon a full and complete statement on the methods of the preparation of the serum, and the results of its use. One of the great functions of the Academy of Medicine is to give due consideration to a medical subject of such public interest as the treatment of so important a disease as cancer. Dr. Glover ought to give a full statement to some learned body.

### FAITH HEALING

Some months ago Mr. James Moore Hickson visited Toronto under the auspices of certain prominent Anglicans, and gave an exhibition of his methods for two days in St. James Cathedral. Since then we have requested those who have knowledge of the cases so treated to give the public the names of those who have been cured and the real nature of the illness from which they were relieved.

If cures were effected, it should be a great pleasure to those who were instrumental in bringing Mr. Hickson to make a statement to this effect. It is not well that serious matters of this sort be trifled with. If any were cured of real disease, it would go a long way to establish faith, if such could be shown. If no definite word is forthcoming the great public will begin to look upon the whole affair with extreme doubt, and much harm must follow.

We have on a former occasion suggested that a committee be appointed of elergymen and doctors to investigate the cases of those upon whom Mr. Hickson laid hands, and report on the exact nature of their ailments, real or imaginary, and their present condition, and to give

### EDITORIAL.

special attention to any that are said to have been improved or cured, so as to determine the exact nature of their trouble.

All this is required in the interest of truth. In this regard no one should be more willing to co-operate than those who had anything to do with the bringing of Mr. Hickson to Toronto. Truth cannot suffer by investigation. Mr. Hickson himself should urge this course.

# DOCTORS AND LIQUOR ORDERS

In the first place we state what we know to be true when we declare that the medical profession of Ontario is a sober and temperate body of men; and have done much for the real advancement of the cause of temperance. The Legislature of Ontario put on the statute books an act closing bars and withdrawing club licenses, and placed upon the medical profession the responsibility of issuing orders for liquor when such were required for medicinal purposes. This was done without consulting the medical profession.

Further, the act gathered all the liquor into seven shops, called dispensaries. The word "dispensary", and the whole trend of the act make it quite clear that all forms of liquor containing alcohol are regarded as drugs or medicines. Every doctor who is duly licensed has a perfect right to prescribe such drugs or medicines as he may deem to be in the interests of his patients for the proper relief of pain or cure of disease. This is the doctor's inherent right.

The Ontario Temperance Act takes all alcoholic liquors and puts them into a special class. This we contend is unfair. As the law now stands people come to doctors for orders for liquor when there may be very little siling them; bat it is no easy task for the doctor to decide between such cases and those of real need In this way liquor may be granted when it could be done without, and on the other hand it may often be refused when it should have been prescribed.

Some way must be found whereby the people can obtain liquor other than by prescriptions from doctors. It must ever remain with the doctor to inform his patients when they may or may not use liquor; but the government must find some other way than the present one whereby the people may secure it when required. We have on several occasions suggested a system of issuing permits to the people. It is a very easy matter for a doctor to give offence and lose patients by appearing to be strict in his interpretation of the law. We have good reason for believing that much harm has arisen in this way.

But a very nasty feature of the act is that it keeps the medical profession in a sort of chronic apprehension or fear. Some doctors may not issue as many prescriptions as they really feel their patients should have from this feeling of fear. A very few have commercialized the right to order liquor; but the vast majority have stinted themselves in the number of orders. This is a very unwholesome state of affairs, and demands the immediate attention of the Legislature.

Then, again, seven dispensaries for a province with a population of 2,800,000 people is a huge joke. The law says that all alcoholic liquors are to be regarded as medicines, and, yet, the law provides for only seven places for its sale!

A certain doctor made the statement that fifty orders a month should be enough. This sort of talk is downright folly. Fifty might be too many for one doctor and entirely inadequate for another. If the Legislature will not find a proper remedy for the present situation, then in our opinion the medical profession to a man should refuse to issue a single order, claiming their right to order liquor as a drug under the authority of their licenses and not under the authority of any special act.

Scores and scores of times doctors have persons call at their offices for liquor orders; and after giving some attention to these persons, are forced to refuse their requests. Time is wasted and offence given. Lawyers are not thus compelled to listen to people's tales about legal matters, to be forced to state that they have no cause for action, and, therefore, receive no fee. The condition is well nigh intolerable.

Advocates of temperance and prohibition, among them prominent ministers of the gospel, either in their zeal or from their ignorance will tell the people that no form of alcohol has any medicinal value. This of course, is absolutely false—wines, malt liquors, and spirits in the hands of the skilled physician are very valuable therapeutic agents.

Then these people will go the length of saying that no where in the Old or New Testaments are liquors containing alcohol mentioned as beverages. This is again absolutely false. They are frequently so mentioned, but their abuse severely condemned. Further, in both Old and New Testaments there are passages referring to their use as medicines.

But some of them go further and declare that the wine of the Bible is an unfermented fluid. This is pitiably false. Any Hebrew scholar will tell you that in the Old Testament both wine and strong drink are mentioned, and both contained alcohol. A Greek scholar will tell you that in the New Testament the word for wine does mean the fer-

#### EDITURIAL.

mented liquor. When grape juice is referred to another word than that for wine is used. A good cause does not require the aid of misrepresentation.

One thing must stand out clearly, namely, that the medical profession must not permit laymen or laywomen, however well intentioned, to dictate when alcoholic stimulants should be used, or to give the people to understand that they have no medicinal value. Should such be allowed then better to cease practice.

### THE CURE OF LEPROSY

The following very remarkable statement comes from high authority in Washington:

Successful experiments upon 58 persons suffering from leprosy lead officials of the United States Public Health Service to believe they have at last found a cure for that ancient and dread disease. Everyone of the 58 has recovered to such an extent as to warrant his release on parole, and after a year not one has shown the smallest symptom of recurrence.

Announcement of this fact in the journal of the Missouri Medical Association was confirmed by Dr. Claude Lavindar, of the Washington Public Health Service.

"The starting point for this study was the observation that now and then the course of the disease (leprosy) appeared to be favorably influenced by treatment with chaulmoogra oil," says an official representative. "The treatment, however, was attended with many difficulties and could not be carried out in all cases.

"At this point the United States Public Health Service enlisted the co-operation of Prof. L. E. Dean, head of the chemical department of the College of Hawaii, and president of that institution, suggesting that attempts be made either to isolate the active constituent of this drug or to devise means for making its continued administration feasible.

"The latter has been accomplished by preparing what is known as an 'ethyl ester' from the chaulmoogra oil. The treatment has been carried on at the leprosy investigation station at Kalihi, Hawaii, the work being directed by Dr. J. T. McDonald, director of the station.

"Following a course of treatment extending over about a year, 58 lepers were paroled in October, 1919. Up to now they have remained free from disease.

"While chaulmoogra oil has long been a specific for leprosy, it never achieved the results now reliably claimed for it until Dr. Dean prepared the solution known as 'ethyl ester' from the chaulmoogra tree," said Dr. Lavindar in Washington.

"One difficulty now lies in obtaining this rare oil in adequate quantities. The chaulmoogra tree is a native of India. To obtain a sufficient number of trees the Federal Government is sending Prof. Joseph F. Rock, of the department of Agriculture to Burmah. He will bring back seeds and slips, which will be set out in Government nuseries in Hawaii and elsewhere."

This may mark a real advance in the treatment of a very much dreaded disease. Preventive measures have succeeded in reducing the number of leprosy cases, yet there are many sufferers at the present day. It would appear that a decided step has been made. Such an achievement goes to show that other germs will yield when the proper agents have been discovered.

### THE TREATMENT OF CANCER

From a number of students of the cancer problem comes assurances that the administration of potassium salts is very valuable. Among them may be mentioned Dr. Bulkley, Dr. Robinson and Dr. Bell.

Dr. Robinson speaks very highly of the curative power of potassium nitrate. It would appear that the cases reported by these distinguished gentlemen are too numerous to admit of being explained on the ground of error in diagnosis, or in conclusions as to the helpfulness of the treatment.

As the treatment is simple and safe it should be accorded a wide trial and the results reported.

# DR. GLOVER'S CANCER TREATMENT

Since writing the editorial in this issue on Dr. Glover's treatment for cancer, it has been announced that he going to submit information to the Toronto Academy of Medicine at an early date. We are glad to learn this and express our approval of this course. We have already stated that if the treatment should prove valuable Dr. Glover should be properly rewarded.

# CURRENT MEDICAL LITERATURE

## PRINCIPLES OF PERIPHERAL NERVE SURGERY.

Dean Lewis, Chicago (Journal A. M. A., July 10, 1920), discusses regeneration after division; the harmful effects of scar tissue; the necessity of preserving the nerve pattern; the importance of early suture; end-to-end suture; cable transplants and recovery of function. Following suture, nerves recover function in a fairly definite order as regards time. The musculocutaneous nerve in the arm recovers rapidly and completely. The musculospiral nerve recovers early. Distinct return of motor power in the supinator longus and radial extensors of the wrist is frequently observed within five and a half months after suture. Seventy per cent. of the cases of musculospiral suture present very definite evidences of recovery when followed for some time. Favorable results are obtained after suture at almost any level. The internal popliteal (tibial portion of the sciatic) comes next in order of frequency and rapidity of recovery. A longer time is required for recovery than after suture of the musculospiral. Thirty-three per cent. or slightly more recover fair function after six months. At the end of nine months, 66 per cent. may present definite evidences of return of function. The median nerve repairs fairly rapidly and comes next in order. Contractures of the thumb and index fingers with accompanying joint changes will seriously interfere with complete restoration of function and prolong disability. In Lewis' experience the external popliteal recovers most slowly after suture. Even those patients on whom the suture is performed low down recover slowly. A large percentage do, however, recover after some time. In one case of external popliteal suture, return of function (motor) was fairly complete at the end of six months. Careful and assiduous after-treatment is necessary. There should be the closest co-operation between the physiotherapist and the surgeon. Nerve injuries occurring in civil practice should be operated on earlier than they are. Time is lost waiting for evidences of return of function; secondary changes occurring during this time in the nerve may render the operation difficult, often unsatisfactory, and the changes which occur in the muscles and joints may increase and prolong the disability. Early exploration after nerve injuries with loss of function of the muscles supplied by the nerve affected is advisable, for the condition of the nerve (anatomic division or physiologic interruption) can be determined and steps taken to promote an early return of function. Results in nerve surgery grow progressively worse with delay.

### AN IMPROVED TECHNIC FOR THE REMOVAL OF THE GALLBLADDER

The open method of cholecystectomy is preferred by Moses Behrend, Philadelphia (Journal A. M. A., July 24, 1920). An oblique incision is made in the epigastric region to the right of the median line. The handle of the knife is used to separate the fibers of the rectus muscle; the posterior sheath and the peritoneum are incised. A pair of Deaver's retractors raise the abdominal wall opposite the operator and two or three large pads are placed over the stomach and intestine. The position of the retractors is then changed so that they rest on the sponges, thereby pulling the stomach and intestine out of the way and making taut the gastrohepatic and gastrocolic omenta. Simultaneously the left hand grasps the liver and gallbladder, making traction on the gastrohepatic and gastrocolic omenta in the opposite direction. The right free border of the gastrohepatic omentum is then opened, and the ducts and blood vessels are exposed to view. The cystic duct is always separated from its bed before its ligation; the insertion of the cystic duct into the common duct is noted, and it is ligated close to the common duct. after it is caught with the cystic duct forceps. The proper curve of these forceps is of the greatest importance in expediting the completion of the operation. The cystic artery is always ligated close to the gallbladder. Any variations from the normal can be at once detected by this open method of operating. As soon as the cystic duct is severed, the gallbladder is stripped from its bed. The bed is then sutured, and a small caliber drainage tube is always placed at the site of operation. The tube is left two or three days for the purpose of taking care of any leakage that may occur from the slipping of a ligature. The gallbladder is generally removed from below upward.

### RENAL GLYCOSURIA.

In the case reported by James Edgar Paullin, Atlanta, Ga (Journal A. M. A., July 24, 1920), this disease was discovered during the course of a routine physical examination. When the patient was first seen, four years previously, it was thought that he had so-called renal diabetes, although at that time this opinion was held without having sufficient proof that such was the case; since then, however, laboratory investigations have confirmed the clinical diagnosis. The patient made many attempts to enter various officers' training camps during the recent war, but he was always rejected because of the presence of sugar in the urine. The methods used in determining the presence of glucose in this patient

### CURRENT MEDICAL LITERATURE.

were the copper reduction tests, fermentation test, the formation of osazone crystals with phenylhydrazin, and the determination of the melting point of the crystals. The percentage of urinary sugar was determined with the polariscope and Benedict's quantititave method. Blood sugar determinations were made by the Lewis-Benedict method and Epstein's method. The author believes it is fairly well established that there is a condition in which the kidney is abnormally permeable to glucose. The exact nature, cause and the factors determining this permeability are little understood. Many of the cases show many points of resemblance to phlorizin glycosuria. Among the reported cases there are varying degrees of renal permeability to glucose; whether these are early or late stages in the progress of the disease or the result of a greater or less pathologic condition of the kidney is yet to be determined. Few of the patients have been observed for a sufficient length of time to determine definitely whether they develop a true diabetes mellitus or not, although it would seem that such does not occur and the existence of the condition is not incompatible with a normal existence. In the case reported, during the four years of observation, there had been no demonstrable progress of the disease.

# SURGERY OF CANCER OF LARGE INTESTINE.

In the absence of a palpable tumor Arthur Dean Bevan, Chicago (Journal A. M. A., July 31, 1920), is convinced that the roentgen ray is absolutely essential to determine by the presence of a filling defect the location of the neoplasm, and it is of great importance in the subsequent management of the case, in determining the shape and location of the abdominal incision. In the overwhelming majority of the cases careful roentgen-ray examination, fluoroscopic and plate, give definite and absolute evidence of the existence and location of the carcinoma of the colon. In severe cases of carcinoma, at the hepatic and splenic flexures the overlapping of the shadows of the barium in the bowel makes it impossible to see any filling defect, and even in fluoroscopic examination it may be difficult to demonstrate any abnormality. Cases of this kind, however, are the exception and not the rule. Bevan is also convinced of the great value of preliminary colostomy in the presence of obstruction. The operation is usually performed under local anesthesia. In the technic of removing carcinoma, the importance of three basic principles is emphasized. 1. All of these cases can be best handled through four different incisions, namely, a muscle-splitting incision like an appendix incision on the right side; a similar one on the left; a large S-shaped incision on the right side,

and a similar one on the left. 2. It is essential in the removal of any portion of the large intestine from the cecum to the rectosigmoid to mobilize very fully that section of the bowel which is involved in the process and in the operative procedure. 3. The third basic principle is the importance of a side-to-side anastomosis in big bowel surgery. The mortality is about one-half as great in properly performed side-toside anastomoses as in properly performed end-to-end anastomoses of the large bowel. A three-step operation in the presence of obstruction is preferred by Bevan to the Mikulicz operation. It secures immediate relief from the obstruction, it enables us to make a much more radical operation of resection of the carcinoma than does the Mikulicz, and it is much more satisfactory to the patient than the Mikulicz plan. It consists in: (1) establishing a colostomy; (2) resecting the tumor, and (3) closing the artificial anus.

# THE TREATMENT OF SEPTIC PERITONITIS.

F. J. Stewart, says (in British Medical Journal), the indications in the treatment of septic peritonitis are to remove the cause; to provide drainage; to make good the loss of fluid, and to prevent or treat intestinal paralysis. He points out wherein the use of tubes and gauze drains have been ineffectual, and suggests a method of employing continuous irriga-This method is as follows: After the bulk of pus has been mopped tion. up with gauze sponges, several Carrel tubes are passed into the abdomen in different directions, one or more being carried down to the bottom of the pelvis. A large-bore rubber drainage tube is also carried down to the bottom of the pelvis and fixed to the lower part of the abdominal incision by a fishing gut suture. The upper part of the incision is partly closed, then lightly packed with gauze, which surrounds the tubes, and a large dressing applied. The patient is then placed in the Fowler position. with a bedpan beneath him, large wool pads intervening. Warm saline solution is permitted to drip continuously at about the rate of a drop a second. At this rate the amount of fluid run in twenty-four hours is about nine pints, which appears to be a sufficient quantity. The irrigation is continued from three to six days, according to the condition of the patient, when all the tubes are removed except one Carrel tube, which is allowed to remain for a few days longer. With this treatment no case up to the present time has shown any marked degree of intestinal paralysis. Medical Record.

## CURRENT MEDICAL LITERATURE.

# AN ATTENUATED TUBERCLE VACCINE.

Nathan Raw, after treating over 3,000 cases of tuberculosis in hospitals with tuberculins from various sources, has come to the conclusion that the best results are obtained by treating human infections with bovine tuberculin and bovine infections with human tuberculin, since these two types of bacilli seem to be antagonistic to each other. He states that a pure culture of human pulmonary tuberculosis given him by Professor Koch, in 1905; one of bovine tuberculosis given him by Professor Calmette, and one of avian tuberculosis given him by Professor Bang of Copenhagen in 1905, have been subcultured every month since 1905 without any intermission, and to-day they grow true to type, quite normally, though not so luxuriantly. Tuberculin prepared with these attenuated strains has given very satisfactory results and leads the writer to suggest that tuberculin should be prepared from attenuated and non-virulent cultures of bacilli; that it should be freshly prepared and used within a week; that it should be given in graduated and increasing doses at intervals of seven days; that acute reactions are unnecessary; that not less than twelve injections should be given at intervals of one week, though many more may often be required. The most favorable cases for treatment are local lesions, though early cases of pulmonary tuberculosis may be prevented from spreading to other parts of the lungs.-Medical Record.

# SEROTHERAPY OF TYPHOID FEVER.

A true serotherapy of typhoid fever, not to be confounded with a vaccine or proteinic therapy, is making headway in France according to an article by Rodet and Bonnamour in La Presse Médicale for January 31, 1920, xxviii, 9. Originally begun in 1907, it has slowly undergone an evolution until it may be accepted as a dependable resource. The authors have already published a series of 127 cases and since then the total has been increased to 240. The gross mortality in the first series was 11 per cent., but in a certain number of cases death was plainly due to some factor which could not have been reached by a specific serum. Just as in diphtheria and tetanus we deduct these septic cases and others due to associated affections, so in typhoid fever we may take the same liberty and this will reduce the death rate to 5 per cent. from the typhoid bacillus or its toxin. Unfortunately the second series of cases was vitiated because coinciding in part with the influenza pandemic, and the mortality instead of being lower as was anticipated was considerably higher. The total mortality for the two series from the specific cause went as high as 11 per cent. In the second series typhoid and grippe cases were sometimes

confounded and hence the typhoid patients did not receive the best treatment, and in other cases there was probably a symbiosis as shown by the fact that typhoid subjects had complications which rather suggested influenza. The authors, therefore, were tempted not to publish the second series, but decided to give it for what it might be worth. But they believe in the future of the serum because it modifies the temperature curve in a specific manner and attenuates the toxic phenomena so markedly that in some cases one may speak of a veritable detoxication. Again the serum gives results at any stage of the disease and not merely at the outset. The serum is so bland that no disturbances have been seen and hence there are no contraindications.—*Medical Record*.

# SIGNIFICANCE OF THE DIFFERENT TYPES OF PNEUMONIA FOLLOWING INFLUENZA

In a study of the pulmonary lesions following influenza, the impression was gained by B. S. Kline, New York (Journal A. M. A., May 8. 1920), that an associated pulmonary edema is a factor of great importance in determining the rapid extension of the inflammation throughout the lung, and that in the absence of this edema, the lesion remains localized about the bronchial branches. The observations recorded in this paper were made during the epidemic of influenza in the American Expeditionary Forces' hospital center at Bazoilles, Vosges, France, between September 2nd and December 27th, 1918. About 200 patients died there with pneumonia following influenza, and of these, 154 came to necropsy. In all cases there was a tracheitis and bronchitis. The most striking lesion, however, was observed in the lungs. In the vast majority (86 per cent.), the consolidation was widespread, involving three or more lobes; in one half of the cases all five lobes were affected. The pulmonary consolidation in these vases varied in character; discrete lesions in some cases contracted sharply with confluent consolidation in others. The discrete lesions was peribronchial and peribronchiolar: the confluent lesions were coalescing lobular in type. A considerable number of the cases showed both discrete and confluent consolidation. In peribronchial and peribronchiolar pneumonia the lung was quantitatively much less involved than in the other types, and this may explain the longer average duration of the disease and the smaller percentage of fatal cases of discrete pneumonia, as compared with the confluent pneumonias. A description of the pulmonary lesions is given.

### CURRENT MEDICAL LITERATURE.

### THE "PSYCHOSES" PROPER

This class of the functional diseases is purely psychogenetic, i.e., they are generated (from within or without) by impressions upon the sensatory apparatus. These arouse and associate themselves with the stored-up impressions of other stimuli to form a psychological unit known as "idea," whether accompanied by emotion or not.

I cannot too often repeat that the diagnosis of hysteria should never be made by exclusion, but always, if possible, by its genesis, and if that is not possible, by the form of the syndrome exhibited,—by which is meant the inconsistency of the symptoms shown with those of the topographic arrangement or physiological groupings, characteristic of organic or functional disease arising in the body, as against their consistency with functional groupings comprised under the psychological rubric, "association of ideals."

The reverse error of diagnosing something else when the symptoms are exclusively hysterical is also quite frequent. The error is very common in regard to paralysis.

Knowledge of psychopathology is, of course, the remedy. This knowledge becomes dangerous when it leads to ignoring physical conditions in a case which is also hysterical. It must be remembered that the most frequent of all the suggestions of bodily disease is bodily disease itself. The removal of a hysterical fixed idea concerning the health is not enough in a patient when some physical condition also exists.

The principle the patient is made to grasp is that fear and shame of those fears prevented him or her from facing and examining them, which is the essential preliminary to the understanding which would make them disappear.

Suggestive therapeutics, so much vaunted by some, I consider grave neurological error. Psychotherapy should be a constructive growth, built on analysis, and not a mere imposing of behavior on the patient through side-trakening his atention by electricity, hypnosis, joint manipulation or religion.

Electricity is frequently applied to patients with what is loosely called functional nervous disease. The procedure of the physician who does this has no better standing than that of the unqualified practitioner, whose existence we deplore. He forgets, if he ever knew, that the inadequacy of a patient's response to environment by means of his nervous system may originate from a bodily disorder that treatment of which has nothing at all to do with the nervous system. The apparent relief may even be due to suggestion.

Other typical examples of erroneous belief in empirical remedies and desire to neutralize symptoms are offered by the notion that an excitable person should have bromides to meet the symptoms of excitability by a depressant; or that one feeling below par should be given stimulants usually strychnine—although a moment's reflection should show the absurdity of treatment by purely spinal excitant an inadequacy of the higher neurones in a patient with lower neurone reflexes already exaggerated.

Finally, a serious neurological error is sending a patient to a sanatorium for nervous diseases without knowing the class of treatment to be given. A proper diagnosis should first be made. This will often obviate the procedure of sending the patient to an institution, and the stigma which may accrue.

The following example, one of many, illustrates:

1. The avoidance of judging by superficial symptoms.

2. The looking beyond mere physical expressions of disorder.

3. The appreciation of the psychogenetic nature of vascular disturbances.

4. The method of persuasion.

5. The possibilities of ambulant treatment as against institutional.

6. The efficacy of methods which have nothing of the artificial, obscure and do not depend upon dogmatic pseudoscientific shibboleths of more than doubtful veracity.—Tom A. Williams in *Charlotte Med. Jour.* 

# SLEEPLESSNESS IN INFANTS.

One of the signs of perfect health in an infant is quiet, undisturbed sleep. Anything which disturbs the health or general routine of an infant may cause sleeplessness. Natural sleep is an essential requirement of a healthy child. Drowsiness, however, is oftentimes a symptom of brain disturbance, and should be distinguished from natural sleep.

Infants in perfect health, almost invariably, sleep with their forearms flexed, and the backs of the hands resting on the pillow near the shoulders. An early sign of ill-health, in such children, is frequently an alteration in this position during sleep, and a resumption of this habit is always considered a good prognosis.

In seeking the reason for sleeplessness, we should look for the original cause.

The most common cause of sleeplessness in infants is improper food or improper feeding, and is often associated with colic. Other causes may be irritation of the skin from the clothing, or a soiled diaper; cold hands or feet; or, sometimes, lack of fresh air.

The mother, however, may insist that none of these things have occurred. Habit also plays an important part in infants. In older children, mouth breathing, associated with adenoids, should be taken into consideration.

The crying out of children in the night may be associated with pain or be caused by nightmare. As a rule, the former is distinguished by the sharpness of the cry. When this occurs, we should think of earache, ulcerated mouth, the cutting of teeth, scurvy, or syphilis. In older children, these night pains may be the earlier manifestation of Pott's disease, or tuberculosis of a joint or bone. Nightmare is usually due to indiscretions in diet; and the cry, in these cases, in one of fear rather than of pain, and is usually followed by a period of sleeplessness. If, however, the child awakes from a peaceful sleep with this cry, as if he had seen visions, and falls asleep again, without recognition of the persons around him, this may be the beginning of some more serious nervous trouble, and may be even the forerunner of epilepsy or insanity.

Treatment: Since sleeplessness, in most cases, is a sign that the child is not in perfect health, treatment should be directed toward elimination of the causes. Consequently, the giving of soothing syrups or soporific remedies should not be countenanced, except in a very acute disease, where we have pain, such as the early stages of pneumonia or pleurisy.

The character of the diet, how and when the child is fed, and a general survey of the stools, should be a routine procedure. Incomplete or irregular stools, or abnormalities in the stools, can be corrected by the use of calomel, rhubard and soda, or castor oil. Laxol castor oil, being sweet as honey, is gratefully taken by little ones. One of the best sedatives is a hot water bottle, which, however, must be well covered and so placed as not to be uncomfortable. A warm bath, or a warm sponging, just before going to bed, is also an excellent sleep-producer.—*Pharmacat Advance*.

### INTRATHORACIC HODGKIN'S DISEASE.

H. Wessler and C. M. Greene, New York (*Journal A. M. A.*, Feb. 14, 1920), sayss that the limitations of the ordinary physical examination become apparent when we take account of the means at our disposal for the recognition of intrathoraic Hodgin's disease. He has accordingly utilized the roentgen ray more generally in the study of twenty-five cases of Hodgin's disease in order to determine the frequency of intrathoraic involvement, and especially to learn whether

the roentgenogram affords characteristics helpful for the diagnosis of doubtful cases. In the first place, he says, the intrathoracic changes were found with great frequency; and in the twenty-five cases reported, distinct enlargement of intrathoracic nodes of other lymphatic tissue was shown by the roentgenogram. He classifies these changes under four types: (1) mediastinal tumor, (2) the infilrative type, (3) isolated nodules or metastases in the lung, and (4) discrete nodes at the roots of the lungs. The enlargement of the paratracheal nodes is a rather rare intrathoracic phenomenon. It occurred, however, in more than 50 per cent. of their cases, and may appear early in the disease. The authors thus sum up their conclusions: "1. A large percentage of the cases of Hodgkin's disease have demonstrable intrathoracic lymphomas. 2. Although the roentgenogram in some cases presents nothing characteristic, in a considerable number a distinction from other forms of new growth of glandular enlargement can be made. 3. There is a frequent and unique enlargement of the right paratracheal group of nodes which occurs rarely in other diseases. 4. In doubtful or atypical cases sof Hodgkin's diease, the roentgen-ray examination of the chest may help to establish the diagnosis.

## THE EARLY SIGNS OF TABES

Burton Peter Thom (New York Medical Journal) reminds one that tabes. like its congener, paresis, is an insidious disease. It is therefore most difficult to diagnose at the onset, but it is at this period when the damage done is still slight that it offers the best, if not the only, opportunity for arrest. One of the first of the premonitory symptoms of tabes is impotence. Another early symptom is slowness in emptying the bladder. Failing vision, which cannot be helped by glasses, or the gradual or sudden appearance of scotoma, central, homonymous or heteronymous, should always cause suspicion of beginning tabes. An orhthalmic examination should be made at once to determine the presence of choked disc, although there may be considerable choking of the disc without impairment of vision. Smallness of the pupils-spinal myosis-may precede the classic Argyll-Robertson pupils for a considerable period, and this condition of the eyes should always arouse suspicion. Diplopia or double vision is sometimes encountered in early tabes, as well as the slow and painless development of paralysis of the external muscles of the eye. A symptom which is highly suggestive of beginning tabes is loss of bone conductivity as exemplified by Egger's test with the tuning fork. It is not infrequently the very first symptom

## COMMENT MEDICAL LITENATURE.

of the disease. Sudden deafness is also a sign of beginning tabes. Sudden or gradual loss of hearing in a middle aged man where no other cause can be assigned should cause a suspicion of tabes. The so-called lightning pains which are present in the early as well as the later stages of the disease are very often mistaken for rheumatism or sciatica. The character of the pains is significant. the pains of tabes are described as agonizing flashes which come and go with the rapidity of lightning. The pains of tabes are not definite in so far as any particular nerve distribution is concerned. When they leave, the skin over where the pains have been is sore and tender to the touch for some time after. Spots of purpura not infrequently follow these attacks where the pains have been. Sometimes there is a herpetiform eruption not unlike that observed in shingles. Loss of patellar reflex is one of the early signs of tabes, but the writer calls attention to the fact that the first reflex to be lost is that of the tendo achillis, or the ankle reflex. The various socalled crises are sometimes present in the beginning of the disease. Perforating ulcers of the soles of the feet, likewise, may be a premonitory sign. All forms of cardiopathies are to be noted, aortic lesions predominating. Any individual in whom tabes is suspected should have a Wasserman test of the blood and of the spinal fluid. A cell count and the globulin reaction and the reducing power for Fehling's solution should also be ascertained of the spinal fluid. Salvarsan intravenously and intraspinally in this early stage will arrest and in not a few instances cure the disease.-Medical Record, 11 Sept. 1920.

# THALAMIC SYNDROME IN CEREBRAL ARTERIOSCLEROSIS

Teixera Mendez (*Brazil Medico*) relates the following ease: A woman, aged 63, 15 years before had begun to show symptoms comprising hot hands (which led her to plunge the members into cold water) and a marked sense of heaviness and debility, so that work became impossibile. The symptoms persisted despite all treatment, but apparently there was no marked change for the worse. The sensations became distinctly worse on the right side. The author found a woman well nourished, who walked with a gait suggesting hemiplegia. There was marked arteriosclerosis of the radials. Endocrinic disturbances were not in evidence save that the affection seems to have begun about the menopause. Neurological examination was largely negative. There were no symptoms referable to the cortex. The Babinski reflex and its variants were absent, the patellar and Achilles reflexes were exaggerated. The diagnosis of

arteriosclerosis and thalamic syndrome was justified by the following: Age of patient, habit of wine drinking, slow evolution of the disease, initial disturbance of sensations of heat and weight, inability to work, insomnia, cardiovascular symptoms, hemiparetic and hemiataxic gait, spontaneous pains worse on the paralyzed side, disturbances of deep sensibility and of stereognosis. The picture differs in some respects from that outlined by Déjérine and others, as there were no choreoathetotic movements, no hemianopsia, etc., but enough symptoms were present to establish the diagnosis. The picture is by no means constant, for either sensory or motor phenomena may predominate greatly, while in other cases we may speak of a mixed type. Various authors also speak of a pure syndrome, a mixed syndrome, and a status thalamicus.— *Medical Record*, 11 Sept. 1920.

# GENTIAN VIOLET IN TREATMENT OF PURULENT ARTHRITIS

According to John W. Churchman, New York (Journal A. M. A., Aug. 28, 1920), the conclusion that pyogenic arthritis, due to Staphylococcus aureus or to pneumococcus, may be cured by the use of gentian violet lavage, and staining is warranted by the facts. It is also clear that normal mobility may be thus retained. Whether the joint in this type of infection should ever be opened, unless the infection has become largely extra-articular, seems more than doubtful. The evidence for these statements, while slender in quantity, is of such quality as to justify them. In one case cited, every control that could be desired was present. There was a granulating wound and a comminuted fracture of the patella. The joint fluid on the admission of the patient was positive bacteriologically. After lavage and staining, the joint fluid ceased to be purulent and became sterile, and clinical symptoms subsided. Inspection of the joint surface at operation demonstrated a normal synovial membrane, and cultures from the point were negative. Healing of the sutured patella and of the skin occurred just as if bacteria had never been present, and normal knee motions were retained. Concerning the gonorrheal cases, somewhat more cautious statements must be made. And yet, making due allowance for the mild character of the cases treated (they were, of course, not selected cases), and for the fact that complete bacteriologic proof of cure could not always be obtained, the satisfactory clinical course warrants the brief that lavage and staining offer a method of controlling this disease. Such bacteriologic evidence as it has been possible to obtain strengthen this conviction. Churchman dis-

18

#### PERSONAL AND NEWS ITEMS.

cusses the effect of gentian violet on tissue cells, the fate of the dye in the animal body, applications of selective bacteriolstatic practical bacteriology, the effect of gentian violet or toxins, enzymes and ultramicroscopic infections, and shows that a selective action on closely related bacterial strains exists. In order to determine whether organisms stained with gentian violet were really killed or only injured so that they would not grow on ordinary mediums, the stained organisms were injected into animals. The animals survived. When *B. anthracis* was used, different results were obtained. The control animals all died within forty-eight hours. In the animals receiving stained organisms, life was prolonged, and occasionally the animal survived.

## PERSONAL AND NEWS ITEMS

Toronto is now declared to be free from smallpox. The epidemic of last fall and winter cost the city about \$150,000. It would be good thing to pick all the anti-vaccinationists and levy the cost upon them.

Capt. F. G. Wallbridge, M.D., who recently located in Belleville, Ont., has been appointed medical officer of the Argyle Light Infantry there. He served overseas in ambulance work and for a time in the British army.

Recently there was a death from the drinking of wood alcohol. This product can be easily procured and is most dangerous. Pure alcohol is very hard to procure and costs \$22 a gallon. There should be some restrictions on the sale of wood alcohol.

Dr. A. Grant Fleming, Toronto's new Deputy Medical Officer of Health, will take up his duties here some time in October, Dr. Hastings, M.O.H., having consented to him remaining in his present position in the Federal service until a successor can be secured. Dr. Hastings considers it fortunate that it has been possible to engage Dr. Fleming, and he spoke highly to-day of the latter's ability in laboratory work and in organization and administration. His work overseas greatly impressed Dr. Amyot, Dominion Bacteriologist.

Surgeon-General Hugh S. Cumming, of the United States Public Health Service, has instructed officials at all American ports to take every precaution against Bubonic plague infection. This warning followed receipt of a report from former Surgeon-General Victor Blue that the plague has broken out in Paris.

Dr. Hastings' report shows that for August there was some improvement over the other months of the year in regard to acute communicable diseases in Toronto, but that it was still behind August of last year. Of the 36 cases of typhoid fever reported in Toronto, 20 originated outside the city. There were 7 cases of smallpox, 51 of measles, 83 of scarlet fever, 84 of whooping cough and 107 of diphtheria.

The late Dr. Joseph Anderson, of Hamilton, deceased on May 7th, left an estate of \$51,610. A will dated November 15th, 1919, directs that a niece, Susan Anderson, Toronto, will receive \$2,500; Alice Anderson, a sister-in-law, of Buffalo, \$5,000, and the daughters of Ed. C. Marshall as follows: Ida Marshall, \$2,000; Estelle and Marjory Marshall, \$500 each, and all the residue of the estate to Elizabeth Lou Marshall.

The City Council of Toronto decided to pay \$125,000 to the trustees of the Toronto General Hospital, as was in the estimates, to be paid contingent on the hospital wiping out its debt. It was reported to the board that, with private subscriptions, the proceeds of the sale of the old General Hospital property and the amount promised by the city, the debt would be liquidated. The city gets one half of any amount in excess of \$125,000 which the Gerrard street property realizes.

Although there are approximately 2,500 men contributing to the maintenance of the Cobalt Mines Hospital, that institution was without a single patient in the last week of July, according to the monthly report. This is the first time in the history of the hospital that such a freedom from accident or illness has occurred. For the whole month the average number of men in the hospital as patients was but four daily.

That medical science was aware there would be a second influenza epidemic in 1918 and that steps were taken to guard the soldiers against it, with signal success, by means of a special method of inoculation, was the statement to-day of Sir Kenneth Goadby, prominent London bacteriologist, on his way through Montreal to Boston where he is to lecture on latent infection.

The Ontario Board of Health has fixed on the price at which they will sell Salvarsan to the provinces outside of Ontario. The license the Government has does not permit them to sell the cure for venereal diseases to anyone inside the province, and they can only sell it to outside provinces on condition it is to be used for free treatment. The price the province is charging to other provinces is about 25 to 30 cents less than similar cures sold by wholesale druggists.

Dr. L. J. Austin, of the London (England) Hospital, has arrived in Kingston to commence his duties as professor of surgery in Queen's Medi-

20

cal College. Dr. Austin was taken prisoner by the Germans early in the war, but was later released and worked with a Britsh army hospital afterwards.

The Spadina Military Mospital, Toronto, is about to be closed, and the 1,300 or so patients transferred to the Orthopaedic Hospital. It is in connection with the plan of centralization.

After two years service on the staff of the Faculty of Medicine, University of Toronto, in the capacity of Professor of Physiology, Prof. J. J. R. MacLeod, M.B., Ch.B., D.P.H., has now been appointed to the new position of associate dean by the University Board of Governors.

Mrs. Annie Louise Clark and Norman S. Clark, widow and son, share equally under the will made July 5 last by Dr. Calvin Worcester Day Clark, of the I.O.F., who died July 14, leaving \$8,950 insurance, of which \$7,950 is payable to his widow, \$201 cash, \$2,250 in Victory Bonds, \$400 in household goods and personal effects, 1 Share Masonic Temple Corporation, \$25; 50 Victoria Skating and Curling Association, \$75; an auto, \$300; an equity of \$500 in real estate in Essex, and the testator's home at 121 Bernard avenue, valued at \$8,000.

A Canadian who has made good in London is Lieut.-Col. (Dr.) George W. Badgerow, C.M.G., F.R.C.S., who was in Toronto on a short visit to his father and mother, Mr. and Mrs. A. H. Badgerow, 106 Bedford road. A Harley street specialist, Dr. Badgerow, has established a large practice in ear and throat work, no easy task for a Canadian in the severely competitive London field. Educated at Upper Canada and Toronto University, Dr. Badgerow went on to Edinburgh for post-graduate work, and then decided to practice in the Old Country. Joining C.A.M.C. early in the war, Dr. Badgerow, who is dean of the Throat and Ear Hospital, Golden Square, London, received his captaincy, and became consulting surgeon to the Canadian military hospitals at Cliveden, Bushey, etc., and the Ontario Military Hospital at Orpington, also to the South African Military Hospital, Richmond Park, doing in addition to this, much free work for officers and privates, who consulted him privately. Dr. Badgerow married Miss Maud Oxley, of England, who did not accompany her husband to Canada this year. They have two children.

Canada's bill of health was never in better shape than at the present time, according to Dr. D. A. Clark, Director of Public Health for the Dominion. This is due in a very large measure to the fact that there is practically no immigration from Central Europe, where health con-

ditions are still pitiable. The Health Department has taken special precautions to watch immigration from Central Europe and also getting reports constantly on the health conditions there. Poland and other centres of disorder are still suffering from the three great plagues, cholera, typhus and bubonic plague, but certificates of health are necessary before any person can leave any European port for this side of the Atlantic.

Judge Denton, of Toronto, recently decided that the Toronto General Hospital must reimburse John Gumina to the extent of \$461 which had disappeared between the time the man was injured by a fall from a building and his discharge from the hospital. The jury had decided that Gumina had the money when taken to the hospital and that those in charge did not make a proper search to see if Gumina had anything of value in his clothes. The hospital authorities had denied negligence and adopted the view that even if the money had been taken by an orderly they could not be held liable.

That the knowledge of infection gained during the war will result in the saving of as many lives as were lost in the recent great conflict was the statement made yesterday by Sir Kenneth Welson Goadby, who was visiting Dr. A. J. McDonagh, 37 Prince Arthur Avenue, Toronto. Sir Kenneth is one of the most prominent of British physicians, and in addition to being official medical referee for the County of London, is a foremost authority on many branches of the medical profession. Another statement was that medicine has progressed more than surgery as a result of the war. He pointed out that war surgery was for wounds obtained in war, and were altogether different from wounds received in industrial, agricultural and other branches of peaceful life, and therefore once the war was over the knowledge gained therein, in surgery, was of little value in times of peace. Medicine, however, is little changed in times of war and peace, and the observations made during the years of the war were of permanent value.

Representatives of the medical profession from the electoral district east of Yonge Street, Toronto, registered an emphatic protest against the proposed increase in telephone rates by the Bell Telephone Company. At a meeting of the association at the Academy of Medicine, recently, a resolution was framed to be forwarded to the Medical Council, setting forth their position. It states that the proposed change to the message rate basis would be a grave injustice to the medical profession and that all doctors should pay a flat rate for the use of their telephones. Exception was taken to the method by which the Bell Company calculates its revenue requirements, and the claim made that, were the company re-

#### OBITUARY.

organized on a basis similar to that of the Consumers' Gas Company, the increase in revenue necessary to secure an adequate return on the capital actually invested, would be much smaller than the increase at present asked for.

Dr. Edmund E. King has been nominated as candidate for the Medical Council for the electoral district east of Yonge street, Toronto.

# OBITUARY

## WILLIAM HODGSON ELLIS, M.B., LL.D.

The death of Dr. William Hodgson Ellis, former Dean of the Faculty of Applied Science at the University of Toronto, at Lake Joseph, Muskoka, on Monday, 23rd August, 1920, caused deep mourning in University circles. Dr. Ellis enjoyed the highest regard of his colleagues, and news of his death came as a severe shock to them.

Dr. Ellis, who was in his 75th year, was born at Bakewell, Derbyhsire, England, and was the son of an English physician of note, and a grandson of the Rev. William Ellis, the famed missionary to Madagascar. He came to Canada at an early age, and attended Toronto University, from which he received his B.A. degree in 1867 and his M.A. in 1868. Pursuing his medical studies at the same time, he went to England, and in 1871 obtained the diploma of Licentiate of the Royal College of Physicians, with the distinction of F.S.C., F.I.C. and F.R.S.C.

He was appointed to the chair of chemistry in Trinity Medical School, and became lecturer of chemistry in Toronto S.P.S. In 1887 Dr. Ellis resigned his connection with Trinity for the professorship of applied chemistry in the S.P.S., of which he became Dean in 1914. The Dominion Government made him Public Analyst for Toronto, while in 1895 the University elected him a senator.

Dr. Ellis early in life joined the University Corps of the Queen's Own and served as a captain with this regiment in the Fenian Raid of 1866. He participated in the battle of Ridgeway.

He received the degree of LL.D. from McGill University. He was twice president of the Canadian Institute and in 1906 was president of the Chemical Industrial Society. Last year he was elected a member of the Engineering Institute of Canada.

Besides his widow, two sons, Major (Dr.) Arthur Ellis, C.A.M.C., who had a distinguished career in France, and Capt. Harold Ellis, C.E.F., secretary to the Minister of Militia, and Mrs. Crooks, wife of Alex. D. Crooks, a Toronto barrister, survive him.

Eloquent tributes to their late colleague were paid by Professors H. E. T. Haultain and Pelham Edgar. The former described Dr. Ellis as "a truly great man in his generation, though hidden from the public in his academic environment." Prof. Haultain added: "Perhaps his most outstanding characteristic was the love he inspired in his associates and his students. No other professor in the University had so many students pass through his hands. He began lecturing in 1876 and lectured to students in the faculties of Applied Science, Medicine and Arts.

"He was essentially a gentle and quiet man, but showed great strength and decision in times of difficulty. He was truly a cultured man of the best type. As a speaker he was much sought after in intellectual circles, both for his dignity and his humor. In a lighter vein he was a poet of no mean order. He was clever with his pencil.

"In the complexion of academic organization and academic procedure no man was better posted, and in many academic controversies his was a steadying influence of great importance. During his regime as dean of the Faculty of Applied Science and Engineering it was under his influence and guiding hand that there was established a School of Engineering Research, which already gives evidence of great usefulness.

"He shunned notoriety and publicity, but was a very genuine leader of far-reaching influence, nevertheless. He retired from academic life a year ago, but continued to take a deep interest in academic affairs. In his detached position, with loving and trusting friends in each faculty, he would have continued to be a great and beneficent influence if his life had been spared."

"He was the kindliest of men," declared Prof. Edgar, "and held in higher esteem, I think, than anyone, for his many worthy services, kindly nature and efficiency. He certainly was a marked and outstanding figure at the University."

Many of the large number of friends and colleagues of the late Dr. W. H. Ellis, who attended his funeral at St. James' Cathedral, came from distant summer vacation points to pay tribute to the memory of a man who had contributed so much to the life of Toronto University. The formal funeral service was conducted by Canon Plumptre, of St. James' Cathedral, assisted by Rev. F. J. Moore. Sir Robert Falconer, president of the University of Toronto, read the lesson. Interment took place at St. James' Cemetery. In addition to the formal service, a private service was conducted yesterday morning by Canon Plumptre at Dr. Ellis' late residence, 86 Woodlawn Avenue.

### OBITUARY.

The honorary pall-bearers were: Sir Robert Falconer, Dr. A. Primrose, dean of the Faculty of Medicine; Dr. R. D. Rudolf, Brig.-Gen. C. H. Mitchell, dean of the Faculty of Applied Science and Engineering; Sir Frederick Stupart and Professor James Mavor.

### JOHN H. COMFORT, M.D.

Dr. John Henry Comfort, the dean of the medical profession in St. Catharines district, died on 6th September, at the age of ninety-three, from general breaking up of the system. He was born at Niagara-onthe-Lake and spent nearly all of the past century in that town and St. Catharines. He had a very large practice at one time, but dropped it years ago when he was appointed Police Magistrate of St. Catharines. He held the position up to a dozen years ago, when failing health compelled him to give up the position. Since then he had lived retired at Port Dalhousie, his principal occupation being fishing for sport. He was an authority on fishing and made his last catch of perch off the piers only a few weeks ago. His wife died some years ago. He was a genial, kindly man, loved by hundreds whom he had helped.

### JOHN A. MERRICK, M.D.

The death took place at Merrickville, 10th September, of Dr. John A. Merrick, for many years a well-known medical practitioner of Merrickville. He had been residing in Brockville since his retirement, with his son, John Merrick, and daughter, Mrs. T. H. Berny, and this week went to his former home village on a visit and while there was suddenly stricken. He was born at Merrickville 83 years ago, a member of the original Merrick family, the founders of the village. Deceased graduated from McGill University in 1870 and practiced in North Gower before going to Merrickville. His widow, three sons and two daughters survive.

### R. W. LARGE, M.D.

Rev. Dr. S. D. Chown, general superintendent of the Methodist Church received a telegram, 27th August, from Prince Rupert, announcing the death of Rev. R. W. Large, M.D., medical superintendent of the Methodist Port Simpson, B.C., hospital. He had been ill for some time.

Dr. Large was a graduate of Toronto University and Victoria College, and was a son of the late Rev. Richard Large, a member of the Toronto conference. When the call came twenty-two years ago Dr. Large went to British Columbia, working among the Indians.

"No better man could have been secured for this work," said Dr. Chown.

### JOHN F. CAMPBELL, M.D.

Dr. Campbell died in Chicago on 13th July, aged 56. He was born in Toronto and educated in the Toronto School of Medicine, obtaining the degree of M.D. from the University of Toronto in 1886. He located in Chicago and practised as an eye specialist.

### J. J. HARTY, M.D.

Dr. Harty graduated as M.D. from Queen's but did not follow his profession long, as he engaged in business, and was for a time president of the Canada Locomotive Company. He was a son of the late Hon. William Harty, of Kingston. Dr. Harty died in London, England, in the latter part of May. As a business man he was well known in Kingston and much esteemed.

### JAMES HUTTON, M.D.

Dr. J. Hutton graduated from Victoria in 1863. He was one of the oldest practitioners in Ontario. He died at Forest on 2nd July, where he had lived and practised for many years.

## BOOK REVIEWS

### HUMAN PARASITOLOGY.

Human Parasitology, with notes on Bacteriology, Mycology, Laboratory Diagnosis, Hematology and Serology, by Damaso Rivas, M.D., Ph.D., Assistant Professor of Parasitology and Assistant Director of the course in Tropical Medicine, University of Pennsylvania, Octavo Volume of 715 pages with 422 illustrations and 18 plates most of whch are in colors. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$8.00 net. Canadian Agents: The J. F. Hartz Co., Limited, Toronto.

This is a new book of over 700 pages and deals with a very important subject. The author very properly points in his preface that very great changes have come over the whole field of medical education. Fifty years ago medicine was an art, while to-day it is dominated by the scientific spirit. There is a carefully prepared history of parasitology. This is followed by sections on Protozoa, Metazoa, Vegetable Parasites, and an appendix. There are a number of features that tend to make this a very valuable work, namely, the paper and illustrations are the best, the typography is clear, the binding is attractive, to each chapter

#### BOOK REVIEWS.

there is a very copious reference to the literature on the subject, and the style of composition is clear. We can recommend this volume to any one requiring a trustworthy volume on Parasitology. The nature of the diseases set up by the presence of the various organisms is well handled, a fact that adds much to usefulness of the book to the general practitioner. It would be a boon to the medical professionn if such a work as this were to find a place in every library.

## ADVANCED LESSONS IN PRACTICAL PHYSIOLOGY.

Advanced Lessons in Practical Physiology, for Students and Practitioners of Medicine, by Russell Burton-Opitz, M.D., Ph.D., Associate Professor of Physiology, Columbia University, New York City. Octavo of 238 pages with 123 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$4.00 net. Canadian Agents: The J. F. Hartz Co., Limited.

Professor Burton-Opitz is recognized as an outstanding authority on physiology. It is but a few weeks ago that we had the privilege of reviewing his large work on physiology. The present work deals with practical methods in the study of physiology, and is of the utmost value to the laboratory man. The illustrations are numerous and very beautiful and helpful. The text is clear. It would be very difficult to find anything better in the art of book making. Blank leaves are inserted every few pages to enable the student to make notes.

### THE DUODENAL TUBE.

The Duodenal Tube and its Possibilities, by Max Einhorn, M.D., Professor of Medicine at the New York Post graduate Medical School; Visiting Physician to the Lenox Hill Hospital, New York City. Octavo of 122 pages with 51 illustrations. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, \$2.50 net. Canadian Agents: The J. F. Hartz Co., Limited, Toronto, Ont.

Recently a good deal of attention has been devoted to the study of the duodenum and its contents by the passing through the mouth into it a tube. This book sets forth the sort of apparatus required, the methods of using them, and the results to be secured. This is especially a work for the physician, and we feel sure that it will prove most valuable in the hands of those who master its contents and learn how to use the tube. The illustrations are excellent. We can speak in the highest terms of this volume.

# ACADEMY OF MEDICINE, TORONTO THIRTEENTH ANNUAL MEETING

#### REPORT OF COUNCIL

The year just ended has been a very successful one, and marks the return of our Fellows who served overseas, and the release from service of those who gave full time service in Canada. It is hoped that their return to practice will be marked by an increased clientele, and that those of us who had to remain at home will, in every way possible, see that they do not suffer from the great professional sacrifice they made.

Our membership has very materially increased, 83 having been elected during the year and 11 being removed from all causes, leaving a net gain of 72, which shows the very excellent work accomplished by the Membership Committee. The Academy will be making no mistake in continuing this very active Committee.

The toll by death has been large, 7 passed away during the year. I will not enumerate them as that has been already done by the proper officers.

The meetings of the Academy have been of a very high order and the attendance rather above the average.

The number and order in which the meetings were held, according to instructions given at the last Annual Meeting, has not been as successful as was hoped for, but the Programme Committee may be able to make arrangements during the coming year that will overcome some of the difficulties and give a greater number of meetings to the more prominent sections without impairing the value of the more special sections.

The finances of the Academy are in a very excellent condition, and the very energetic work of your Honorary Treasurer is shown by the few Fellows who are in arrears and the great care with which he has supervised your expenditures.

The Honorary Secretary has been most assiduous in his very close attention to the work, and only one who has attempted such work can appreciate how much time has to be spent to meet all the demands for his services.

The Librarian and Secretary have been most painstaking and attentive and as far as possible relieved the officers of the Academy in every way possible.

#### ACADEMY OF MEDICINE

There are a few matters to which the Fellows may, with advantage, direct their attention to correct conditions as now existing. The prescription druggist is going out of style. Large corporations are getting control of Drug Stores, adopting many methods that are quite foreign to the good old-fashioned prescription druggist, and cut-rate and cheapening all the time appears to be the trend of the times. While fewer drugs are prescribed to-day than ever before, those few must be of the highest quality and dispensed in the most accurate manner if results are to be obtained. Yet this is not the case, and we are the ones responsible to see that what we write in the prescription is dispensed, and if we find a druggist not following close to the written prescription, or the result obtained by the prescription given not having the result that we expect, we make enquiry why. I could mention many instances to illustrate, but one will suffice-Salicylate of Soda, unless we specify natural, it is most probable that the synthetic product will be dispensed. This may be considered an omission of the Doctor, but unless the synthetic is designated the dispenser should use the only true Salicylate. The cost of natural is about seven times that of the synthetic, and the results obtained are not to be compared. I could go on but will not take up your time.

The nursing question is still full of unsolved problems. The cost to the patient is a very important matter, and whenever possible we should help our patient to our utmost. Seventy-five per cent. of cases can easily be entrusted to the semi-trained nurse and in more than that proportion one nurse is all the patient requires.

The hospital is another matter that must be carefully thought out. The private ward case, with two nurses is a luxury that only the newly rich can afford. To treat these cases in the home is very often an impossibility, but to transfer them to hospital with such an increased expenditure is away beyond the means of the middle or salaried class. How can this matter be met?

Before closing, I desire to say that it is felt by us all that the Academy buildings are entirely inadequate for our needs. As you are aware, plans were drawn and arrangements partially made to build in 1914, but the war intervened and we had greater matters to occupy our minds. Then when the war is over and we look about for means to proceed, we find the cost of 1920 increased over three times that of 1914. But the problem must be faced and your Committee will have to look about and see how the end can be accomplished.

I thank the Fellows for their very generous support during the year and bespeak for my successor as generous and hearty support as I have had.

(Signed) EDMUND E. KING, President.

# REPORT OF THE BOARD OF TRUSTEES

May 4th, 1920.

The first meeting for the year of the Board of Trustees was held in September, at which Dr. H. B. Anderson was elected Chairman and Dr. John Ferguson, Secretary.

During the past year several important matters have been dealt with. The Bovell Fund to the amount of \$200.00 (made up of Dr. Anderson's cheque for \$100.00 and \$100.00 refunded by the Library at Washington) has been restored to the amount received from the late Sir William Osler of the \$500.00 originally subscribed. It was the intention of the Board to prepare a complete statement of this Fund, showing the books that have been purchased, and then communicate with Sir William Osler making the condition of the Fund known to him. This now being impossible, your Trustees recommend that the Executors of the Osler Estate be written to.

In November the Board purchased Victory Bonds amounting to \$1,200, which amount included cash on hand, Wishart subscription of \$200.00, Bovell Fund of \$200.00 and Osler subscription to the Historical Fund of \$100.00. One bond for \$1,000.00 fully registered was bought and two \$100.00 Coupon Bearer Bonds.

The Insurance upon the Academy building and contents became due March 1st, and a meeting of the Board was called to consider this important matter. It was thought advisable to increase the amount of insurance from \$29,000.00 to \$38,000,00, placing an additional \$5,000.00 on the main building and additions; an additional \$2,000.00 on the books and periodicals in the main building; and an additional \$2,000.00 on the books and periodicals in the stack house.

During the year our expenditures were: \$100.00 to the University of Toronto for ground rent, and \$75.00 to the Royal Ontario Museum for a show case.

Your Trustees have had under consideration the question of the British Medical Association Debenture for \$1,000.00 maturing in 1922, and it was

#### ACADEMY OF MEDICINE

agreed that immediate steps must be taken if the Academy is to receive the amount of the principal when it falls due. Efforts are being made to secure the minutes of the British Medical Association in Toronto, bearing upon the debenture.

The following statement of funds and subscriptions should be of interest:

Ferguson Rare Book Fund	\$200	00	\$14 50
Bovell Fund (restored)	200	00	
Wishart subscription for Medical Museum	200	00	13 56
Osler subscription to Historical Fund	100	00	3 50

Alan Brown subscription for Pediatric Section, \$100.00, of which \$46.50 has been expended.

The financial statement showing receipts and expenditures during the year, also the statement of assets and liabilities are attached herewith.

All of which is respectfully submitted.

H. B. ANDERSON,

Chairman.

Financial statement for the year ending March 31st, 1920. RECEIPTS:

	То	Balance in bank, March 31st, 1919	\$ 594	16
	"	Quarterly Dividend on Can. Perm. stock	90	00
	"	Int. (half-yearly) on B.M.A. debenture	25	00
(a)	"	" " Ont. Gov. debenture	3	00
	"	" " \$1,000 Victory Bond	27	50
	"	Half-yearly interest on bank balance	11	26
	"	Quarterly dividend on Can. Perm. stock	90	00
(b)	66	Dr. H. B. Anderson	100	00
(a)	"	Int. (half-yearly) on \$100 Victory Bond	2	75
	66	Quarterly dividend on Can. Perm. stock	90	00
	"	Int. (half-yearly) on B.M.A. debenture	25	00
(a)	"	" " \$100 Victory Bond	2	75
(a)	"	" " Ont. Gov. debenture	3	00
(b)	"	Academy of Medicine (current account)	100	00
(c)	.66	" " (special savings acct	. 200	00
	"	Int. (half-yearly) on \$1,000 Victory Bond	27	50
	"	Half-yearly interest on bank balance	10	65
	"	Quarterly dividend on Can. Perm. stock	90	00

\$1,492 57

#### 

			\$1,375 00
"	Palance at Credit	March 31st, 1920	117 57
	Dalance at Cicult	the ball and mail in the	

\$1,492 57

#### ASSETS

Dermanent Stock, par value \$10.00		
360 shares of Canada Permanent Stock, par value \$10.00 per share. Present market value per share \$17.70 \$	6,372	00
per share. Present market investment of British		
per share. Present mariner Canada Permanent Debenture from investment of British	1,000	00
Medical Association funds	2,300	
Dominion of Canada Victory Bonds	2,300	00
2-\$1,000 Bonds		
3-4100 Bonds	100	00
Province of Ontario Debenture	100	
Cash in Bank, March 31st, 1920	117	57
Cash in Bank, March 5150, 1020 The	6,845	87
No. 13 Queen's Park—renewed lease	0	
No. 13 Queen's Faix Frenchings to March 31st, 1920, Improvements and Furnishings to March 31st, 1920,	8,597	78
timeted at	0,004	10
Distance Paintings and Engravings, March 31st, 1920, In-		
sured at	3,000	00
Books and Periodicals to March 31st, 1920, estimated at	32,000	00 (
Books and Periodicals to March 21st 1919 to April 1st.		
Books and Periodicals from March 31st, 1919 to April 1st,	1,500	00 0
1920, estimated at	2,00	
	\$61 83	3 22
Total	φ01,00	0 44
LIABILITIES - None.		

Audited and found correct,	H. B. ANDERSON,
E. J. WHITE, Auditor.	Chairman of Board.

(a) Interest on Ferguson Fund, Principal \$200.00.

(b) Bovell Fund (restored).

(c) Wishart Fund.

#### ACADEMY OF MEDICINE

# ANNUAL REPORT OF THE LIBRARY COMMITTEE

#### May 4th, 1920.

In submitting the Thirteenth Report of the Library Committee, it is a great pleasure to be able once more to record a year of much progress. Many volumes have been added to our collection of books. It will be admitted by all that the growth of the library is a most essential feature in the life and development of the Academy. Our books form one of our chief assets, and constitutes the centre of gravity around which many of our actions turn, and that shall ever be one of the sentiments that remain with us when much that is done in the scientific and business aspects of our work has faded into obscurity. Whatever else may be forgotten the thought of our great collection of books shall ever abide with us.

The work of cataloguing and accessioning has been considerably impded through the illness of our Librarian, Miss Charlton. It is gratifying to be able to state that Miss Charlton's health is much improved, and, as a consequence, the work that is in arrears will be speedily brought up to date.

The binding of our reports and journals has also fallen much behind. This was caused by the war, which had the double effect of lessening our income and rendering it unsafe to send our volumes for binding to Chivers in England. At the present time we have 132 volumes across the ocean being bound.

The total number of accessioned volumes in our Library now number 10,548, the growth for the current year being 500 volumes accessioned; 570 catalogued; and 700 classified. There were 210 individual donors. During the year there were received from all sources 1,655 volumes, 3,200 numbers of various journals, and 450 pamphlets.

The following are the donors of 20 volumes or over: Drs. W. H. B. Aikins, Geoffrey Boyd, H. A. Bruce, John Ferguson, J. W. S. McCullough, A. F. McKenzie, Estate of the late Dr. Malloch, Dr. W. H. Pepler, R. A. Reeve Fund, Esate of the late Dr. Stevenson, Dr. G. E. Wilson and Dr. D. J. Gibb Wishart. The number of volumes of journals they presented will be found in the appended list.

John Florio, who is credited with having taught Shakespeare Latin, French and Italian, and who translated into English Montaigne's Essays, wrote in praise of books in these words:

Since honor from the honorer proceeds,

How well do they deserve, that memorize And leave in Books for all posterities The names of worthies and their virtuous deeds; When all their glory else, like water-weeds

Without their element presently dies,

And all their greatness quite forgotten lies, And when and how they flourished no man heeds, How poor remembrances are statues, tombs,

And other monuments that men erect To princes, which remain in closed rooms Where but a few behold them, in respect Of Books, that to the universal eye

Show how they lived; the other where they lie!

Let us emulate the love for books which good Florio possessed. The Library Committee desires to acknowledge the splendid work done by Miss Charlton, the Librarian; and the many helps received. from the Assistant Secretary, Miss Runciman.

JOHN FERGUSON, Chairman.

ANNUAL REPORT OF THE LIBRARIAN FOR 1920-21

Mr. President:

I have the honour to present to you in accordance with the ordinances and By-Laws of the Academy, the annual report of the Library for the year ending April, 1920.

The report of the Library shows a continuous increase in books, periodicals and pamphlets. The year just closed is a noted one in the history of the Library as our statistics show an increase in the use of the books and periodicals. There were 1,660 Readers, an increase over the previous year of 509. Books and periodicals taken out, 500 over previous year. This does not include the works consulted in

Received during the year from all sources 1,655 volumes; 3,200 the Library. numbers of various periodicals; 450 pamphlets. The individual "donors" for the year ending April 27, 1920, number 210. Each gift

The work of classifying, cataloguing and shelf-listing the books has is acknowledged. been carried on as well as a great deal of reference work for the Fellows.

### ACADEMY OF MEDICINE

Number	of	volumes		and the second design of the second se	500
"	"	"	catalogued		570
	"	"	classified		700

This year we were able to have room for our valuable duplicates. The two rooms upstairs are fast getting filled. In many cases Readers have been supplied with second and even third copies from this source. We also supplied the Western University, Hospital for Sick Children and the University of Toronto with sets of periodicals they needed, as well as the University of Illinois, College of Physicians, Philadelphia and Presbyterian Missions.

The Library is indebted for large gifts of books, periodicals and pamphlets to the following:

Dr. W. H. B. Aikins, Dr. Geoffrey Boyd, Dr. Alan Brown, Dr. H. A. Bruce Dr. G. G. Copeland, Dr. George Elliott, Dr. J. H. Elliott, Dr. John Ferguson, Dr. C. H. Hair, Dr. J. M. MacCallum, Dr. J. W. S. McCullough Dr. A. F. McKenzie Estate of the late Dr. Malloch (561 volumes) Dr. W. H. Pepler Dr. N. A. Powell R. A. Reeve Fund Dr. H. C. Scadding Estate of the late Dr. Stevenson (250 volumes) Dr. G. E. Wilson Dr. D. J. Gibb Wishart

Individual gifts have been noted on the calendar each month.

Seven framed portraits have been added this year to our valuable collection.

Summary of the Library Funds will be found in the Trustees' Report. I feel that the Council should be notified that within a few years the Stack House will have to be enlarged, and again I wish to draw their attention to the fact that the Stack is not fire-proof.

New publications added this year to the Library:

Great Britain-Medical Research Committee.

Great Britain-Board of General Education.

Great Britain-Medical Science Abstracts and Reviews.

Neurological Institute of N. Y .- A complete set of their Trans.

Presbyterian Hospital, N.Y.-A complete set of their Reprints.

United States-Dept. of Labour, Medical Reprints.

United States-War Surgery.

Obstetrical Society of London.

Guys Hospital.

Chicago Medical Record.

American College of Surgeons.

American Urological Association.

Association of Life Insurance Presidents.

Washington University.

New York Obstetrical Society.

Ontario College of Physicians and Surgeons.

Dr. H. B. Anderson has most generously contributed \$100 to the Library to be used for rare works and also for completing some of our files.

### MARGARET CHARLTON, Librarian.

#### REPORT OF THE PUBLICATION COMMITTEE

May 4th, 1920.

During the past year the Publication Committee has held 11 meetings, with an average attendance of 5 members.

Your Committee deeply regret the removal by death of their esteemed Chairman, Dr. H. J. Hamilton, who died, February 5th, 1920. One of the many valuable services rendered by Dr. Hamilton to the Academy was his untiring efforts to make possible the publication of our first volume of Transactions, and your Committee feel sure that all the Fellows will concede that the first volume is a very credible production to the Academy.

This volume of Transactions was presented to the Academy at the Stated Meeting in November, and as was then announced each Fellow reading a paper has been presented with a copy. Your Committee feels that the continuance of the publication of Transactions is of vital importance to the Academy, and we would like to draw attention to the following facts:

The number of papers read before the Academy and Sections has been 68; of these 25 were allotted by request to various Journals 6 were left to be distributed by the Committee; and 3 were not published by request of the authors. This leaves 34 that have not yet been handed in, and your Committee wishes to strongly urge the necessity of every reader of a paper handing in to the Secretary of the Publication Committee at an early date a completed and correct copy of his paper.

If we are to continue publishing a credible volume of Transactions the Fellows will have to realize that it is imperative that their papers be carefully prepared and that they be in shape to hand over to the Publication Committee immediately after they have been read. It is to be regretted that some of our most valuable addresses have been delivered extemporaneously and that valuable discussions have taken place without any record whatever being in the hands of your Committee. We would urge that some arrangement be made by which this valuable material may be correctly reported and handed over for publication.

Even in the midst of the "high cost of living" the Publication Committee was able to present to the Academy fifty volumes of Transactions for \$17.50. At this low cost your Committee was anxious to place at the disposal of the Academy some three hundred copies of Transactions this year, and in anticipation of this the Fellows were asked to supply three hundred reprints.

Now that the Fellows have practically all returned from overseas, your Committee recommends that a full list of names of those Fellows who did military service during the Great War be published in this volume of Transactions, and also that if possible suitable photographs of those who made the supreme sacrifice be included. So far as your Committee is aware there is no official corrected list of those who served in the various branches of the army, and we feel that this would at least be a record to which Fellows could refer.

Your Committee begs to recommend that the Annual Reports as follows—President's Report of Council, Trustees, Honorary Secretary, Honorary Treasurer (condensed). Publication Committee, Library Committee, Historical Committee—be published again this year in the local journals and that reprints be secured to be included in the Second Volume of Transactions. Also, that if the Academy considers it advisable additional reprints of the Annual Reports be ordered, so that a copy may be sent to each Fellow, as was done last year.

All of which is respectfully submitted.

ROBERT T. NOBLE, Secretary.

#### REPORT OF THE HISTORICAL COMMITTEE

### April 23rd, 1920.

I have the honour to report that the Historical Committee is able to report some progress during the past year. A number of gifts from various members of the Academy have been received. These included books of historical interest, photographs and engravings. Others have been promised and a couple of items have been recommended for purchase.

The form of codicil for will, calling attention to Fellows of the desirability of remembering the Academy in their wills has been drawn up and published.

It has been decided to make a collection of the photographs of all the Presidents of the Ontario Medical Association and of the Academy of Medicine.

On behalf of the Committee,

(signed) GEO. D. PORTER,

Chairman.

#### ANNUAL REPORT OF THE HONORARY SECRETARY.

#### April 23rd, 1920.

It is most gratifying to me in presenting my Report as Honorary Secretary to draw your attention to the large increase in the Fellowship of the Academy, which has taken place during the last year. This is largely accounted for by the re-establishment of men in civil practice after the war. There are still, however, many physicians who have recently located in Toronto who should become Fellows of the Academy, and it is to be hoped that our Committee on Membership will continue their good work and induce all who are worthy to apply for Fellowship. The number of Resident Fellow, May 1st, 1919, was 462; during the year 81 were elected and 2 transferred from Non-Resident Roll. We lost by death 4 Resident Fellows; by resignation 3; by transfer to Non-Resident Roll 1; 2 have not returned to practice in Toronto since their return from overseas; and 1 whose election is incomplete, leaving the present Resident Fellowship 534.

Our Non Resident Fellows, May 1st, 1919, were 40; 3 were elected during the year; 1 was transferred from Resident Roll; 2 were transferred to Resident Roll; and 1 was removed by death, leaving the number of Non Resident Fellows 41. Of our 5 Life Fellows, 1 was removed by death in the person of Dr. R. A. Stevenson. Of our 4 Honorary Fellows we have lost 1 in the death of Sir William Osler. During the year 2 Associate Fellows were elected. Our number of Corresponding Fellows is 1. This leaves the total Fellowship to date 585 as compared with 514 reported at the last Annual Meeting.

The Academy has sustained a most heavy loss by death during the past year, 7 in number in all. In the death of Sir William Osler the Academy lost one of its warmest friends, one who from its inception was devoted to its interest and contributed in many ways to its success. Four Charter Fellows are included in this list:—Dr. R. J. Dwyer and Dr. H. J. Hamilton, a former Past President and one of the best workers in its interest that the Academy has ever had; Dr. C. E. Treble and Dr. R. A. Stevenson, who was a Life Fellow; and 1 Non-Resident Fellow, Dr. W. A. Ross, of Barrie.

There have been 7 regular Academy meetings and 2 special; 8 regular meetings of council and 6 special. The average attendance at Academy meetings has been 91 and at council meetings 11.

In closing I wish to acknowledge my appreciation of the very faithful work of the Secretary, Miss Runciman, by whom all the details of the secretarial work have been efficiently performed.

All of which is respectfully submitted,

FREDERICK C. HARRISON, Honorary Secretary.

## STATISTICAL REPORT OF THE HONORARY SECRETARY

May 4th, 1920.

Resident	Fellows	s on Roll, May 1st, 1919	462	1
100,5100110 66	"	elected during year	81	
	"	transferred from Non Resident Roll	2	545
"	"	removed by death 4		
	"	" " resignation 3		
~~ ~~		transferred to Non Res. Roll 1		
66	66	left city 2		
"	"	election incomplete 1		11
		s on Roll, April 30th, 1920		534
		ellows on Roll, May 1st, 1919	40	
"	"	" elected during year	3	
"	"	" transferred from Resident Roll	1	

Non Resident Fellows		
" " " removed by death	44	
" transferred to Reg Doll		
$\frac{1}{2}$	3	
Non Resident Fellows on Roll, April 30th, 1920		
		4
Active Fellows on Roll, April 30th, 1920		
Life Fellows on Roll, May 1st, 1919	-	575
" elected during year	5	
" " removed by death	0	
- unatt in the second to at other but the	1	
Life Fellows on Roll, April 30th, 1920		
Honorary Fellows on Roll, May 1st, 1919		4
" elected during year	4	
" removed by death	0	
whis you it a laining it has separate when a second second	1	
Honorary Fellows on Roll, April 30th, 1920	-	
Associate Fellows elected during year	•	3
Corresponding Fellows on Roll, April 30th, 1920		2
· · · · · · · · · · · · · · · · · · ·		1
Total Fellowship to date	-	1056
Deceased : R. J. Dwyer		585
H. J. Hamilton		
J. W. Hayes		
C. E. Treble		
R. A. Stevenson		
Sir Wm. Osler		
W. A. Ross, Barrie.		
Resignations: Jennie Gray		
H. G. Macfarlane		
Victoria Reid.		
Regular Academy Academy	91	
Special Academy	11	
negular Counch		
Special Council 6		
Library Committee 8		
Programme Committee 8 array		
Publication Committee 11		
No. of notices mailed for Academy and Sections	8,30	15
for Council meetings	26	
" " " for Committees	20 93	
	Je	0

#### ACADEMY OF MEDICINE

HONORARY	TREASURER'S REPORT OF RECEIPTS AND DISBURSEMENTS
	YEAR ENDED MARCH 31st, 1920.

RECEIPTS						
Balances in Bank March 31st, 1919						
Savings account	\$ 3	98	12 054			
Special savings account						
Current account (surplus)	245	38	630	97		
Fees paid			6,645	80		
Refund on book			2	50		
Bank interest—savings account		10				
Special savings account	8	54	8	64		
Sale of dup. books			30	00		
Expenditures			tere ba			
Salaries			- (C. 199		\$2,530	00
Light, fuel and water					680	50
Insurance, rent, etc.					368	06
Postage, printing, etc					502	86
Furnishing and repairs					156	93
Books					195	28
Journals					253	64
Petty cash and miscellaneous					391	83
Binding					10	60
Academy guests					140	55
Trustees, Academy of Medicine					300	00
Bal. in banks Mar. 31st, 1920						
Savings account	.4	08				
Special savings account	134	65				
Current account (surplus)					1,787	66
					1-0	0.1

\$7,317 91 \$7,317 91 (Signed) J. H. McConnell,

E. J. WHITE, Auditor

> Toronto, Ont., April 23rd, 1920.

Honorary Treasurer.

Hon. Sec. of the Academy of Medicine, 13 Queen's Park, Toronto.

Dear Sir :--

## Re Academy of Medicine

I hereby certify that I have audited the books and accounts of the Academy for the year ending March 31st, 1920, and have found same to be correct and satisfactory.

With regard to the securities held by the Board of Trustees of the Academy of Medicine I wish to report that I attended at the Safety Deposit Vaults of the Canada Permanet Mortgage Corporation and examined Certificates and Bonds, as follows:-

360 chares Canada Permant Stock—par value ......\$3,600.00Dom. of Canada Victory Bonds (2 for \$1,000 and 3 for \$100)2,300.00Province of Ontario Debenture .....100.00Debenture of Canada Permanent Mortgage Corporation ...1,000.00

The bonds and debentures above mentioned are held by the Canada Permanent Mortgage Corporation for the purpose of detaching coupons at the necessary dates and acknowledgment has been made by them to me as to possession.

Properly signed statements are also enclosed.

Yours very truly.

(signed) E. J. WHITE,

Auditor.

# MISCELLANEOUS

# MANY MENTAL DEFECTIVES

Dr. Hastings, M.O.H., in his monthly report, draws attention to the necessity of looking after the mentally defective of the city and the whole country and although the feeble-minded child, he declares, is not curable, the reproduction of such children is preventable. He notes the thousands of dollars spent every year by the Departments of Agriculture and animal farming to improve the stock, but no precautions or safeguards are being used in improving the human stock.

"This," he says, "is a sad indictment on our boasted civilization."

In 38 schools in Toronto, with a population of 32,347 there were found 538 mentally defective children or 1.66 per cent. of the total investigated. "Unquestionably," he states, "so far as Toronto is concerned, industrial classes should be arranged for in various groups of schools in Toronto, probably numbering from 15 to 20 in all."

# RELIEF OFFICER BUSY

Toronto's Relief Officer Coyle reports a slight increase in the number of people seeking relief during August. During the month 456 orders for admission to hospitals were issued. Part payments on hospital treatment amounted to \$1,032 for the month, against \$915 for the same

#### MISCELLANEOUS.

month of last year. During August, 554 cases were approved by the department, against 158 for the corresponding period of last year.

A table showing the work of the department follows:

an more than the product streng of a point of	Aug. 1920	Aug. 1919
Hospital orders	456	448
Consumptive sanitarium	31	35
House of Industry		0
Infants' Home	13	7
Provisions and fuel		11
Transportation	10	23
Burial orders (adults)	1.00	4
Burial orders (children)	6	15

## NEW VACCINATION ORDER WORRIES SHIPPING MEN

Steamship officials are disturbed over orders issued by the Immigration Department that no passengers on ocean liners whether saloon, second cabin or third class, be permitted to land at Canadian ports before vaccinated, unles they can give proof that they have previously been vaccinated within the required time

As a result of this order the C. P. O. S. Prinz Frederick Wilhelm was recently held up at Grosse Isle for five hours and the passengers did not reach Montreal before midnight, when it was difficult to secure hotel accommodation.

Steamship officials state that if the order holds passengers will cease to use the St. Lawrence and other Canadian routes when they can get accommodation on others. They point out that the ruling is absurd, since the passengers can land at any point in the United States and enter Canada by a dozen of railways without being vaccinated.

# CANCER DEATHS INCREASE IN TORONTO

The publicity given to the new serum treatment of cancer by Dr. Glover, and the consequent attraction of sufferers to the city, is suggested as one of the causes for a slightly increased death rate in Toronto for the past month, according to the report issued by the department of public health recently. The general mortality for the month was 474. Based on a population of 515,000, this was 10.8 per thousand of population. For the corresponding month during the past five years the rate has been 10.2 per thousand, while the rate last August was 8.6 per thousand.

"Cancer headed the list of causes during the month," says Dr. Hastings in the report, "with 64 deaths against it. It also showed the greatest increase for any single cause, there being 27 more cancer deaths recorded than in August, 1919. Doubtless the publicity given to a new treatment for this disease has drawn many cases to Toronto."

Deaths from some of the principal causes for the month, compared with a year ago, are as follows:

	Aug. 1920	Aug. 1919
Cancer		37
Heart disease	46	28
Infant diarrhoea	46	31
Pneumonia	26	18
Tuberculosis	25	23
Violence, including suicides	25	23
Communicable diseases	20	14
Cerebral hemorrhage	13	16

Deaths of infants under one year of age were also more numerous during August than a year ago. The total last month was 120, while that of August, 1919, was only 92, but as there was, during the same period, an increase of 60 per cent. in the birth rate, the increase in the infantile death rate is not difficult to explain.

# HEALTH DEPARTMENT IS SAVING THE CHILDREN

The story of man's battle to save the child from the ravages of disease is told in a striking manner at the exhibit of the Ontario Bureau of Health in the Government Buildiing, and in addition to this story there is a great deal of valuable information which the mothers of children and fathers of City or Town Councils may have for the asking. Methods of clothing and feeding children in the most simple and economical manner are demonstrated daily, while feeding classes are held daily at 11 and 3. There is also the baby clinic, where mothers may obtain any possible information about their children, the demonstrations being held from 2 to 5 daily. There is, as well, the clinic on wheels, which will shortly start out in charge of a doctor and nurse to visit various parts of the province to carry the gospel of child health to remote districts, and there is a sample of the car used by nurses in their regular rounds of the province. There are now eight of these cars which will be in use shortly for the promotion of public health. Officials of towns and cities have been much interested in the filtration and sewage disposal plants which are on exhibit, while the treatment of tubercular patients and the story of

#### MISCELLANEOUS.

fresh air and sunshine, as applied to the health of the child, are told in other departments. The Canadian National Council combating venereal diseases also have an interesting display, with much literature, which may be had for the asking.

# NURSES TOOK SERUM

Another untold story of war heroism has just come to light through publication of a report on the prevention of lockjaw during the war issued by the Research Defence Society. The reports tells how women from the Royal Free Hospital submitted to experiments with antitetanus serum that soldiers might benefit.

About a dozen of the young women were inoculated with the serum. Weekly blood tests were made for the presence of the anti-toxin. When the efficiency of the serum was proved the death rate from lockjaw became one in 20,000, whereas previously it had been nine in 1,000 wounded men. Major Gen. Sir David Bruce said that but for the injections the number of cases would have been ten to twelve times as great.

Anti-tetanus serum was used not only by the British but by the American and all other allied armies.

# CANADIAN DOCTORS SOUGHT FOR SOUTH AFRICA

Canadian doctors are being sought for service in East and West Africa. A letter addressed to his Excellency the Governor-General by Lord Milner, Secretary of State for the Colonies, asks as to the number of Canadians who would be liekly to accept service under the Colonial Office, and for particulars concerning them. If sufficient candidates were available, the letter states, a senior medical officer of the colonial service would be sent to Canada to interview candidates and report as to their suitability.

The West African services need doctors for service in the Gambia, Sierre Leone, the Gold Coast and Nigeria. Vacancies in the East African service are in Uganda Protectorate, Nyassaland, Kenya Colony and Protectorates, Tanganyika Territory, Zanibar and Somaliland.

Salaries commence at £600 per annum, rising on a set scale to £960. Before passing £800 medical officers are required to take a special course of studies. Leaves with full pay and free passage are granted after one year's service in West Africa and thirty months' service in East Africa.

# INTERNATIONAL ASSOCIATION OF "PNEUMOTHORAX ARTIFICIALIS"

# Lugano, August, 1920.

The International Association of "Pneumothorax Artificialis," of which the work was paralyzed during the long war, desires to resume its activity by inviting all former members of the Association to renew their subscription and all other physicians interested in artificial pneumothorax to send their names and addresses to Prof. Umberto Carpi, Lugano, Switzerland, and to become members.

The purpose of the association is to spread all practical and scientific information concerning artificial pneumothorax. Although induced pneumothorax for therapeutic purposes has become remarkably prevalent ("Bien que la diffusion de la thérapie du Pneumothorax soit devenue très remarquable"), it has remained a therapeutic procedure applied only by physicians specially trained and experienced in this operation. For the convenience of the patients who may be obliged to change their residences, to know the names and addresses of physicians who practice artificial pneumothorax is of great value, in order that the patient may continue the tratment by periodic refilling. A complete list of physicians practicing artificial pneumothorax will be published with the scientific journal known as "Pneumothorax Thérapeutique" for 1920-21, edited by Carlo Ferlanini. This list will be sent to all the member and to the most important medical societies, medical academies, and similar institutions of the different countries. In the journal will be enumerated and discussed all the world's literature on pneumothorax. The association will continue its labors under the policy indicated by the illustrious master and creator of artificial pneumothorax therapy. As soon as the finances of the society will permit the renewal of the publication, the editor will put himself in communication with the editors of such medical journals of other countries as are publishing articles on artificial pneumothorax. For the present these are "die Sonderhefte des Tuberculose Centralblattes ueber Lungenkellapstherapie" and the collected monographs in the journal "La Tuberculosi" which appears in Rome. (I trust that our very excellent "American Review of Tuberculosis," edited by Prof. Allen K. Krause of Baltimore, will be included in this list.-S.A.K.)

The subscription price of five francs should be addressed to the General Secretary, Prof. U. Carpi, Lugano. The subscriber is entitled to receive the journal with the list of names. Those who desire to receive

#### MISCELLANEOUS.

the monographs of the journals indicated should make a request for them to the General Secretary who also has an international exchange office for all publications appertaining to artificial pneumothorax. Summaries in English, French, and German on any topic relating to artificial pneumothorax will be gratefully received and published.

# PROF. U. CARPI,

General Secretary, Lugano, Switzerland.

# TORONTO'S HEALTH

Communicable diseases in the city in August as reported to the City Hall were:

II were:	Aug. 1920	July 1920	Aug. 1919	
Diphtheria	701	• 117	80	
Scarlet Fever	00	81	46	
Typhoid	. 95	3	10	
Measles	-1	311	8	
Smallpox	-	17	0	
Tuberculosis		79	41	
Chickenpox	and the second second	39	18	
Whooping Cough	and the second sec	63	88	
Mumps		21	16	
Diphtheria Carriers		41	7	

## MEDICAL MEETING AT COBOURG

District No. 6, of the Ontario Medical Association, representing the Counties of Peterboro, Victoria, Durham, Northumberland, Hastings and Prince Edward, presided over by Dr. T. S. Farncomb, of Trenton, held a very successful meeting at the Arlington Hotel on 16th September. The afternoon session was devoted to interesting and instructive papers, the program being as follows: Appendicitis, Dr. H. B. Longmore, of Campbellford; Surgical Treatment of Tonsils and Adenoids, Dr. A. C. Publow, of Picton; Gastroptosis, Dr. James Third, of Kingston; Chronic Gall Bladder, its Diagnosis and Treatment, Dr. E. V. Frederick, Peterboro; Diagnosis and Treatment of Septic Endocarditis, Dr. H. Crawford, Marmora; Relation of Hospitals for Feeble-minded to the General Practitioner, Dr. McNaughton, Cobourg.

Between 50 and 60 practitioners were present, most of whom participated in the discussions, which proved to be very interesting features of the programme. Dr. T. C. Routley, of Toronto, secretary of the Ontario Medical Association, outlined the organization of the provincial association, presenting many arguments favoring thorough and complete organization of the medical profession in the province.

The president of the association, Dr. J. Heurner Mullin, of Hamilton, addressed the gathering after dinner, strongly urging the need of closer co-operation of the entire medical profession.

Dr. N. A. Powell, of Toronto, presented an illustrated address on "Fractures" during the evening session, particularly dwelling upon the commoner fractures, with their diagnoses and treatment.

The convention was voted by all present to be of practical value and interest. Resolutions were adopted strongly urging upon the provincial association the advisability of constantly maintaining efforts for organization, and memorializing the association to increase the annual membership fee from \$2 to \$5.

# MEDICAL PREPARATIONS

# THE THERAPY OF ADRENALIN

The important position of Adrenalin in the materia medica is undoubtedly attributable to the vast amount of scientific work that has been done in connection with the product, to say nothing of the marvellous array of clinical facts that have been accumulated and now constitute the basis of our knowledge of its therapy.

This thought is suggested by the appearance in our advertising section, this month, of a unique announcement from Parke, Davis & Co. entitled "Adrenalin in Medicine," which every medical practitioner should read. It deals with the physiological action of the medullary suprarenal principle and reflects a clear light upon a subject concerning which much misinformation persists, even in medical circles. This, we understand, is the first of a series of short essays that will have to do with the scientific aspect of the subject rather than its commercial features. Others will include discussions of "The Treatment of Asthma"; "The Treatment of Shock and Collapse"; "The Treatment of Hemorrhage"; "Adrenalin in Combination with Local Anesthetics"; "Adrenalin in Organo-therapy."

These topics appeal strongly to the progressive physician who seeks to be well informed. New facts are being constantly developed in the domain of endocrinology; and as this series of concise "talks" will cover the field pretty thoroughly, in so far as Adrenalin is concerned, it will be well worth while to review them.

# The Particular Qualities

which recommend Grape-Nuts to the physician—whether for his own use or as an article of diet for patients—are its ease of digestion and its nourishing, up-building properties.

is made to supply the necessary nutritive elements of whole wheat and malted barley in a palate-pleasing form which the body will quickly and easily assimilate.

**Grape-Nuts** 

Nothing enters into the making of Grape-Nuts except whole wheat, malted barley, salt, yeast and artisian water. Twenty hours baking, after a mixing process, starts the breaking down of the starch in the grains and produces the sweet, nut-like flavor, making the use of sugar unnecessary in serving.

Grape-Nuts with cream or rich milk is a remarkably well-balanced ration—unequaled by any other ready-cooked cereal for building health and strength.

# "There's a Reason"

Samples of Grape-Nuts, Instant Postum and Post Toasties, for personal and clinical examination, will be sent on request to any physician who has not received them.

> Canadian Postum Cereal Co., Limited Windsor, Ontario, Can.

# **Quotations from Doctors: No. 6**

"When the cervix is red, eroded and indurated, when ulcerations are present, accompanied with thick, tenacious discharge; in acute and chronic endometritis; in ovarian, uterine and vaginal inflammations, the liberal use of



produces immediate results.

"In treating the cervix and vagina, I use a lamb's wool tampon, with hot Antiphlogistine. This is packed well against the affected parts and held in place by gauze. Portion of gauze is allowed to protude, as well as the string attached to tampon; and patients given instructions to remove it after allowing it to remain from twelve to fourteen hours."

> R. A. V., M. D. ST. LOUIS, MO.

THE DENVER CHEMICAL MANUFACTURING COMPANY MONTREAL

# Endorsed by Eminent Physicians-

For nearly 50 years BOVININE has been fully endorsed by the medical fraternity. Physicians, surgeons and nurses have found in this remarkable tonic a welcome health builder and giver of vitality.



# The Food Tonic

Founded nearly 50 years ago on a basically correct formula BOVININE has remained unchanged. It is still the same reliable product with every good quality—intact as it has always been.

To the convalescent, young or old, BOVININE will bring its revitalizing qualities wherever prescribed.

THE BOVININE COMPANY 75 WEST HOUSTON ST. - NEW YORK





# Election to the Council of the College of Physicians and Surgeons of Ontario

170 University Avenue, Toronto, August 23rd, 1920

To the Members of the College,

Gentlemen :--

I beg to advise you, in accordance with the Ontario Medical Act, and amendments thereto, and the By-Laws of the College

That the Quadrennial Election, to select Representatives for the Council of the College, will be held this year, date of said election being Tuesday, October 19th, 1920;

That the time for receiving Nominations of Representatives will close at the hour of Two o'clock p.m., on Saturday, October 2nd, 1920:

And that the Nomination Papers of the Candidates must be in the hands of the Returning Officer for each Division at that time.

By Order,

H. WILBERFORCE AIKENS, Registrar-Treasurer Coll. Phys. and Surgs., Ont.

# Prescription 1920

an improved

Compound Syrup of Hypophosphites

# General Debility

It has been found that if the alkaline hypophosphites are given to nursing mothers, whose milk contains an abnormally small amount of phosphates, their milk soon becomes rich in the earthy salts. Clinically, advantage is taken of this fact, and alkaline hypophosphites are given to nursing women debilitated from prolonged lactation or whose milk is found poor in phosphates, not only to build up the nutrition of the mother, but to furnish bone and nerve-building material to the infant.

PRESCRIPTION 1920 contains tissue-building material in the form of sodium, calcium, potassium and manganese hypophosphites, and combines hæmogenic properties of iron and phosphorus, with the "dynamic" action of quinine and strychnine. The winter months call upon the organism for an increased expenditure of energy, and as spring approaches persons in all walk so of life and at all ages feel, more or less, the effect of nervous exhaustion. PRESCRIPTION 1920 will be found invaluable in these cases. School children who have become anæmic by indoor confinement combined with study, and young women who have become exhausted by social duties, will be greatly benefited by the use of PRESCRIPTION 1920. In the debility of the old and feeble, who require a stimulant to keep alive the failing flame of life, the physician will find this prescription very useful.

### SPECIAL NOTE

Prescription 1920

is supplied in the form of a syrup and is also put up without sugar for use in cases where sugar is contra-indicated as in diabetes.

Stocks of both forms of this improved combination of the hypophosphite salts are now in the hands of your local druggist. We solicit your prescription for same.

PREPARED IN CANADA BY DAVIS & LAWRENCE COMPANY

MANUFACTURING CHEMISTS

NEW YORK

MONTREAL

We will be pleased to send samples of PRESCRIPTION 1920, with or without sugar, to physicians upon request.

P FERRER CONTRACTOR STATES



# Adrenalin in Medicine

## 1—Its Physiological Action

THE active principle of the medullary portion of the suprarenal gland and other chromaffinic cells, adrenalin, has been used by physicians throughout the civilized world since the day we introduced it, almost twenty years ago. It has attained a position of importance in the medical equipment that was hardly dreamed of in those early days when comparatively little was known concerning its physiological action. Today its effect on most of the tissues is pretty well defined.

Adrenalin affects body tissues in a manner strikingly similar to the effect produced by stimulating the sympathetic nerve system. Thus, if the sympathetic nerves govern the contraction of certain unstriped muscle tissue, adrenalin, too, will contract it. If, on the other hand, the tissue in question is supplied with inhibitory impulses by this nerve system, adrenalin relaxes it.

These actions, however, are exerted neither through the medium of the sympathetic nerves nor directly upon the muscle fibres themselves. The receptive organs for these adrenalin impulses are the points of union of the sympathetic nerves and the unstriped muscle fibresthe myoneural junctions.

Probably the most important action of adrenalin is stimulation of the muscular coats of the arterioles. At first there is acceleration of the pulse rate, but the rise in blood pressure which results from vaso-constriction soon excites the vagus centre and as a consequence the heartbeat is slowed and strengthened. Besides this indirect vagus action, adrenalin stimulates the heart directly, thus producing more complete evacuation of the chambers. In large doses, however, adrenalin predisposes the heart to fibrillary contractions.

The stimulating action of adrenalin is exerted also on the dilator muscle of the iris (dilates the pupil); the muscular fibres of the uterus and vagina; the retractor muscle of the penis; the pyloric and ileocecal valves; the glycogenolytic function of the liver; the salivary glands and the glands of the mouth and the stomach.

Adrenalin relaxes the muscular walls of the esophagus, stomach and intestines. Also on the muscular coat of the bronchioles adrenalin has a relaxing effect, due probably to vagus stimulation.

# PARKE, DAVIS & COMPANY.

T. H BEST PRINTING CO. LIMITED, TORONTO