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EDITORIAL.

THE TORONTO HOSPITALS AND THE GENERAL PRACTITIONER.

Sometime prior to the vote in Toronto on the by-law providing \$200,000 in sums of \$50,000 to St. Michael's, Grace, and the Western Hospitals, and the Home for Incurables, the following letter appeared in the newspapers of Toronto:—

“DEAR DOCTOR,—On January 1st, 1909, the property owners of Toronto will vote on a by-law to give \$50,000 to each of the following hospitals: The Western, Grace, St. Michael's, and the Home for Incurables—\$200,000 in all.

“Now each of those hospitals is at present a close corporation, with certain restrictions as to the physicians who shall attend patients therein.

“Before the above grants are made this association believes these restrictions should be removed or, at least, modified in so far as to permit each patient who pays public ward rates, or more, the privilege of being attended by his own physician or surgeon, and that the said medical man should have the same hospital facilities as a member of the staff.

“A meeting will be held to discuss this and other matters of interest to the society, in the Central Y. M. C. A. Hall, corner of Yonge and McGill Streets, on Friday evening, December 4th, at 8 p.m.

“To you a cordial invitation is extended to be present, and to take part in the discussion.

(Signed) “W. S. GRIMSHAW,”
Secretary.

This letter was sent to the Press in the interests of the unattached physicians and surgeons, who formed themselves into an association.

The statement that the four institutions named are “close corporations” is entirely incorrect. They are not close corporations but public institutions. They are managed by a body of responsible gentlemen who make no money out of these hospitals, but on the contrary give

much time and often a good deal of money in aid of these hospitals. These hospitals take in all sorts of patients from those who can pay nothing to those who can pay for the most expensive ward. They are under government inspection, and care for patients sent in under the medical health officer's certificate.

Each hospital has a staff of physicians and surgeons, whose duty it is to look after the city order and free patients. This must be done by a member of the staff, otherwise the hospitals could not maintain responsibility in the matter of the attendance upon these.

It must not be forgotten that the unattached physicians and surgeons are giving no time to the upbuilding of these institutions. The only time they give is when they attend one of their paying patients in these hospitals. The governors of these hospitals cannot call upon them as upon a member of the staff to give valuable time in the attendance upon free and pauper patients. The real facts are the unattached physicians and surgeons have the best of it, as they can attend their pay patients in these hospitals, and leave no responsibility in the matter of the poor cases.

There are some necessary restrictions regarding operations. At it will be found there also are restrictions on the members of the staffs of these institutions. Even members of the staffs have to conform to certain rules in the case of operations, etc.

All this has been very carefully thought out by the staffs and governors. No doctor not on the staff of any of the hospitals will have much cause for complaint if he approaches the matter with an open mind. Unattached physicians and surgeons will readily see that there must be regulations, and the desire is to make these meet as many conditions as possible.

OUR MARRIAGE LAWS.

These require revision. It is high time that steps should be taken to prevent degenerates and criminals marrying and producing a progeny of their own kind. For example, an epileptic male should not be allowed to marry a woman under 45 years of age, nor should an epileptic woman marry until she has attained this age.

There is no use being sentimental in this matter, and talking weakly about the rights of the individual. We do not hesitate to imprison a criminal or, in other words, take away his freedom to roam about doing wrong. In the same way we should take away the liberty of marriage from all those who are mentally perverted, the victims of alcoholism, or who have been convicted of crime in a high degree or for

several offences in a minor degree. For a jail bird to marry is only to produce jail birds. These have to be fed, and the honest worker, in the last analysis of things, pays the bills.

One criminal woman in London, England, became the ancestor of over one hundred degenerate or criminal descendants. This cost a good deal in the courts of law, the jails, the poor houses, etc. At the recent meeting of the Association of Canadian Charities and Correction the subject of undesirable marriages was discussed at some length, and a resolution unanimously adopted asking the Government to take up this matter.

We hope some definite steps will be taken in this matter. It is task enough to deal with the degenerates that arise among us as the result of disease and injuries, but it is altogether too much to expect the community to allow the production of those to go on unrestrained, and then be expected to foot the bills.

Some test should be exacted before marriage licenses can be issued, and then some strict regulations should be imposed upon the clergy to prevent the performance of the marriage ceremony if it should appear that either party is unfit to enter upon the married state. Many clergymen act according to this rule now.

HOSPITALS AND CITY LIFE.

Hospitals are now important centres of education. They are places in which many medical men meet on common and friendly terms. In this way a steady process of education is going through the interchange of views on diseases of all sorts. Every hospital in the country should have in connection with it a medical society for the discussion of diseases and the reading of papers. There should also be a reference library in each hospital for the use of the staff, and the physicians of the locality. This is one of the ways by which our hospitals may do a vast amount of good work.

Then, again, hospitals are places for the education of the public. Patients and their friends who visit these institutions imbibe much useful knowledge which they carry away with them, and which must influence their future on sanitary matters and the care of the sick. This aspect of the work of the hospitals throughout the country is having a widespread effect for good. The many instructions given to patients and their friends on the care of the sick, the treatment of wounds, the prevention of disease, and the spread of infection, are carried far beyond the confines of the hospital walls.

There is another way in which hospitals are doing a great work. There is continuously passing through these institutions class after

class of trained nurses who, after leaving the hospitals, carry their knowledge with them wherever they go. No matter where they may reside nor what their future station in life may be, they must ever remain educated women on matters of health. Their light and influence is shed around them in their own homes, in the homes of their friends, or in the sick-room.

But hospitals do more. They are great industries conducted for the purpose of making people well, prolonging life, and relieving suffering. A hospital is the union of science, art, business skill, and charity. It is in these features of their work that hospitals appeal to the imagination of all classes. The poor come to them because of the help they may receive, the middle classes because of the help they may give in many forms of service, the rich because of the help they may render through their benefactions, and the medical profession because of the altruistic spirit that governs it in all good works. It is thus that hospital work seems to bring out the best that is in human nature. Those who take part in hospital work develop adaptability, resource in emergencies, and the power to give moral, spiritual and physical help to those in need. It is right that they should receive the support of those in the world outside.

In an address on hospital work, Dr. S. Weir Mitchell, of Philadelphia spoke thus: "The public knows little the wonderful mechanism of the hospital of to-day. Here is art justified by science. Here are care, tenderness, consultations, case histories as exact as skill and laboratory work can make them. Here above has civilization brought the poor up to the level of the rich. The millionaire's case is no better studied, no better treated, nor could it be." Such an appreciation of the work of hospitals from such a person as Dr. Weir Mitchell must go to the hearts of the wealthy, indeed, often has done so as witness many great and generous gifts. Municipalities and the public as a whole are learning the same lesson.

In every locality where a hospital is located there should be a hospital Sunday. From the pulpits once a year, at least, the claims of these institutions should be held aloft. The work of the nurses and the medical staffs should receive due attention, and the ever-returning need for material aid in the caring for the sick who can pay little or nothing for their own support. If even only a few persons would agree to contribute something regularly, the aggregate would be very considerable. But doing good is contagious, and the example of such persons would be followed by others. Remember the words of Dr. George M. Gould: "Our duty is to cure and prevent disease by any right means in our power."

FOOT-AND-MOUTH DISEASE.

The appearance of this disease among the cattle in various places throughout the United States naturally gave rise to much alarm in Canada. This disease has not visited this country since 1876. The last appearance of the disease in the United States was the Massachusetts epidemic of 1903.

The mortality among cattle as a rule is not high, but epidemics in Europe vary very much in this regard. In man few deaths occur, though the young and the delicate may succumb.

The germ has not yet been discovered. Serum taken from infected sores and filtered through the finest Berkefeld filter retain the power of imparting the infection. This shows that the germ is an ultra microscopic one. The germ retains its vitality for a long time, many months, if in a cool, moist place. Heat to 60° and drying soon destroy it.

If an animal is put into a stable where the disease had existed many months previously it speedily becomes infected. The disease can only be stamped out by the rigorous measures of destroying infected animals and disinfecting contaminated premises.

The disease is manifested by mucous patches in the month and by vesicles between the toes. There is marked fever and prostration. Man may carry the disease from one part of the country to another and communicate it to cattle without being affected himself.

LIFE AND DEATH.

These subjects have been causes of much discussion. Many have written on the origin of life, and even a larger number on how to prolong it. One of the most recent writers on the problems of life is Dr. Charles Minot, of Harvard.

He points out that the size of the body does not determine the length of life, as some insects live for many years, while others of the same size may only live a few months. A parrot may live to be one hundred years old, and a dog is old at 15 years. There are very many exceptions to the general belief that the largest animals live longest.

Nor does it appear that the cessation of the reproductive power is a measure of the duration of life. Many animals live for a long time after the power of reproduction has ceased. Of course it is true that animals should live long enough to reproduce their kind; but it does not follow that this ended life should cease.

The theory has often been advanced that death is due to the fact that the body wears out, and that the more active species wear

out sooner than those of opposite temperament. Dr. Minot does not accept this view of the cause of death. He rather thinks that there is some general cell change that is mainly the cause of age and death. The rate of this change is the measure of life.

Too much weight should not be attached to the arterial theory, which has been advanced under the general text that "a man is as old as his arteries." Dr. Minot dissents considerably from this view. He holds that the hardening of the arteries will rarely give rise to the cell changes which he regards as the real cause of senility and death.

The theory that, with advancing age, the variation in the relationship of lung surface to body surface is the cause of death does not meet with favor. According to the alteration of respiratory capacity to the surface of the body the rate of aging may be determined. As we become old the surface of the body becomes relatively lessened. This theory must be abandoned.

Dr. Minot holds that death is the result of evolution. In the lowest forms of life the cell lives on through its succeeding cells. As we advance through the higher grades of life there is an ever-increasing amount of differentiation. The cell changes which he regards as the cause of death are the result of this evolution. Death is the price we pay for our complex-organization.

But there are many forms of life that are of very lowly type and devoid of a complex body, and yet they die. They have not become highly evolved, yet they perish. It would seem as if we had not reached the end of the problem of life.

THE SENTENCING OF CRIMINALS.

A great deal has been written upon this important subject. Of recent years it has attracted much attention; and the last word has by no means been said upon it.

The plan of stating at the time of the trial some definite time during which the criminal must remain in custody, is fast falling into disfavor. It is very hard, indeed, to measure out the term of imprisonment in advance to suit all cases. It may be said that by this plan very few cases are really properly apportioned so far as the term of servitude is concerned.

It is with the view of meeting this difficulty that many have turned their attention to the method of the indeterminate sentence. Under this plan the convict may be able to do much towards the securing for himself his lost liberty. The hope that he may earn his freedom may awake dormant good qualities into activity, and the lazy may become

industrious, the cruel kind, the harsh of language civil, the sullen cheerful, and so on. But due care must be had that all this improvement is not a scheme, and, therefore, true vice. Criminals are often very cunning; and to earn their liberty may be their one desire.

We would urge the system of indeterminate sentences; but we would also couple with it the parole and suspended sentence systems. A criminal may live within the bounds of the law from fear, though no change whatever has taken place in his nature. The pugilist ceasing fighting when he has had sufficient punishment. When a criminal has earned his freedom under the plan of indeterminate sentences, that freedom should only be accorded him on parole, and the sentence still remain in force. This would be a wholesome deterrent.

The psychology of the criminal classes is a very interesting study. Criminals, as a rule, are cowards so far as physical pain is concerned. What they would not hesitate to do so far as any public odium is concerned, or the fear of imprisonment, they might shrink from if they ran any risk of corporal punishment. For many offences against society we think that there is no other form of punishment as effectual as the cat. Flogging should be introduced for certain offences, and the number and severity of the floggings should be kept a secret from the offender, both while he is in prison, and when he is out on parole or suspended sentence.

THE PRECEPTOR IN MEDICINE.

In our issue for January we had occasion to say something in favor of the apprenticeship system. We could invite the careful attention of our readers to the following words from *the Journal of the American Medical Association*, of 12th December, 1908.

“With the advance of medical education, with the constantly increasing requirements for admission to the medical school, and with the lengthening and elaboration of the course of study necessitated by the enlargement of the field of medical knowledge, there has almost disappeared from view an erstwhile important factor in medical education—the preceptor. Formerly, before going to college, the student spent a year or more studying with his preceptor, going about with him, seeing his patients, and learning not only how to diagnose and treat disease, but, above all, how to conduct himself in his relation to his patients. His vacations were spent in the same manner, and thus from the beginning he was taught to meet his patients on a plane of personal relationship rather than to regard them merely as scientific problems. The graduate of to-day is often woefully lacking

in the personal side of the physician's art, and it may take years of sad experience to teach him what his father unconsciously absorbed while learning the sutures of the skull. Internship in a hospital can only partially replace this lost opportunity, for, while the young physician observes there the attitude of his chiefs toward the patients, the circumstances are quite different from those of general practice, as he must learn when he first "hangs out his shingle" and undertakes to meet the patient in his own home.

"The opportunity which came to the student of seeing patients with his preceptor before entering the medical school and observing the problems which must be met and solved gave him a sense of proportion which comes with difficulty to the student who is thrown without preparation into the perplexities of college life. The former was better able to grasp the importance of the subjects presented to him at college and their relation to the work which lay before him. It has been said that "a lofty scorn for detail is the natural attitude of the immature," and while the present tendency to insist on a preliminary training in the exact sciences is a healthy antidote for this attitude, the actual demonstration by the preceptor of the pre-eminent value of exact knowledge in treating the sick showed the student as nothing else could that generalizations can be based with safety only on a foundation of fact—that knowledge must come before wisdom. The encouragement and example of the wise preceptor taught the lesson that the medical school should be but the beginning of a lifetime of study—study of books, of men, and of things. The comprehension of the meaning of the medical school, the broader view of the opportunities which lay before him gained by the student who studied with the preceptor, particularly if he were fortunate in the choice of his preceptor, led inevitably to a greater interest in the work and to a more intelligent grasp of the subject.

"The proper relation of the physician to his professional brethren, the time-honored principles of professional etiquette, and the physician's duty to the community at large were inculcated in the mind of the beginner in a manner which unfortunately has no parallel in modern medical education. Osler says of the "true student" that he may be recognized by three signs—"an absorbing desire to know the truth, an unswerving steadfastness in its pursuit, and an open, honest heart, free from suspicion, guile and jealousy." The passing of the preceptor has removed a powerful influence in the encouragement of such an ideal."

We hope the general practitioner everywhere will take an interest in the important subject of medical education. He should make himself familiar with the best methods and most modern views. He will then be in a position to make his influence felt on the representative

from his district, whatever province he may live in. In this way the various provincial councils will be stimulated to adopt the latest and the best ideas in medical education.

THE COMPANY OF BARBOURS OF LONDON.

On Tuesday, 15th December, 1908, the Barbers' Company of London celebrated the sixth centenary of the admission of the first master by the Mayor and Aldermen of London, as a fit person to have supervision over the trade of the barbers. This first master was Richard le Barbour. The barbers practised many features of minor surgery.

Outside of the Barbers' Company there grew up a society of persons who regarded themselves as more highly educated in the art of surgery, and capable of being attached to the army in times of war between these guilds.

There was often much rivalry. They were united in 1540 by an Act of Parliament under the name of the "Maisters of Governours of the Mystery and Comminalte of Barbouris and Surgeons of London." The Act set out what the barbers and the surgeons of this united company might do. The union lasted until 1745, when it was dissolved by Parliament, and a surgeon's company established. This was, in turn, succeeded in 1800 by the College of Surgeons of London.

It was in 1191 that King John granted privileges to the Commune of London, and the office of Mayor came into use. It will thus appear that the corporation of London is only about one hundred years older than the Guild of Barbouris.

INDECENT ADVERTISING.

For some time there has come regularly to our office a sort of publication called "Chanteclair." In these from time to time there have appeared illustrations which we thought were very vulgar, in the sense that they were exceedingly coarse and common, such as an animal in a press with the blood being squeezed out of it.

These illustrations, however, must be allowed to take a back seat, indeed, when compared with the leading picture in the December, 1908, issue of that publication.

On the front page there is a picture and a biographical sketch of Professor Gaucher, in which we learn that he succeeds to the chair rendered vacant by the retirement of Professor Fournier.

On the last page of this issue there is again a picture of Professor Gaucher, this time done up in gorgeous colors. But in the picture there is also the figure of a woman in a most disgusting position. That Professor Gaucher would tolerate this sort of thing for a single moment is the most surprising part of the whole affair.

We are of the opinion that such disgusting matter should be denied the use of the mail service. *The British Medical Journal* for 19th December, 1908, expresses itself in no uncertain way against the issue.

A MOVE IN THE RIGHT DIRECTION RE TUBERCULOSIS.

There is an effort to be made to organize several associations, perhaps seven in number, in various parts of the Province of Ontario, to take steps to control the spread of tuberculosis.

Dr. C. A. Hodgetts, the energetic secretary of the Provincial Board of Health, is taking much interest in the movement. Already an organization is on foot to establish a sanatorium at London. On 13th January, Dr. Hodgetts met those interested in a similar work at Arnprior.

The intention is to interest the medical profession in the work. The question of money will come up for careful consideration; but this should not stand in the way. It is expected to raise \$50,000 in London. This should be an easy task. There are in and around London many wealthy people, and it is to be hoped that when the call comes to them they will also be generous.

There is no area of the province in which the requisite funds should not be readily forthcoming. The eastern portion of the province, in the direction of Ottawa, is specially well supplied with wealthy and public-spirited gentlemen.

We do not wish to say one word against the work done by those interested in the sanatorium at Gravenhurst, but the efforts of those interested in this institution cannot overtake the work. This statement is well borne out when we remember that in 1907 there were 2,051 deaths in Ontario from tuberculosis. This would mean about 8,000 afflicted with the disease. No one institution can handle this amount of work.

It is, therefore, perfectly plain that there must be a number of sanatoria, and these should be scattered over the province to suit the need of the people. All that is needed is money, and there is plenty of it once it begins to flow in the right channels.

ORIGINAL CONTRIBUTIONS.

BRONCHOSCOPY AND OESOPHAGOSCOPY.

D. J. GIBB WISHART,

Associate Professor of Laryngology and Rhinology, University of Toronto; Fellow of the Royal Society of Medicine, England; Surgeon in Chief to the Oto-Laryngological Department, Toronto General Hospital.

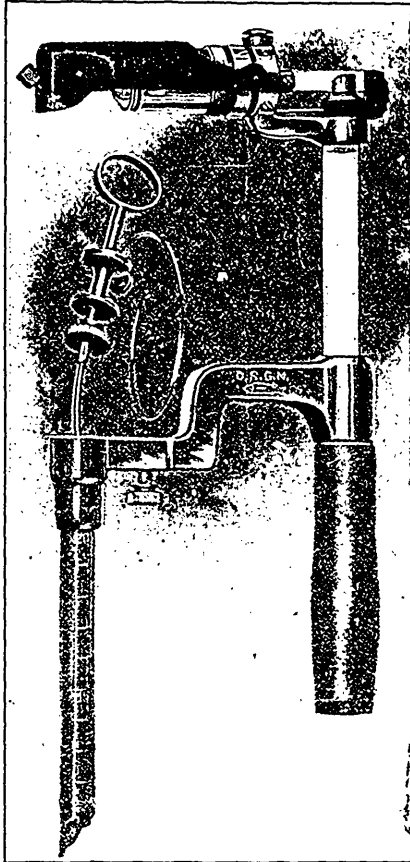
THE use of the method of examination of the larynx, trachea, bronchi, oesophagus and stomach, by the technique known as bronchoscopy and oesophagoscopy, has been slow in coming into employment in Canada. So far as Ontario is concerned it was employed by Professor McDonagh successfully in the extraction of a foreign body from a child's bronchus, and has been also several times made use of by myself and Dr. Geoffrey Boyd for the examination of the oesophagus and bronchi, and for the removal of papillomata by direct laryngoscopy in the nose, throat and ear service of the Sick Children's Hospital, as well as in our private practice. I have not noticed any report of cases in the Canadian journals, nor am I aware of any use of this method in Canada, except as above mentioned.

Having enjoyed the opportunity of witnessing the demonstrations of Chevalier Jackson, of Pittsburg, and later on of Professor Killian, of Freiburg, in New York and Philadelphia in 1907, I resolved to become better acquainted with the technique of the method during my stay in Europe last year, and visited the clinic of Killian for that purpose, availing myself of the courtesy of Dr. von Eicken, his first assistant, to perfect myself in the use of the instruments upon the living patient.

Those who have followed the literature concerned, especially the various articles of Killian and von Schroetter, in Europe; Patterson and Kelly, in England; Jackson, Mosher and others in the United States; are aware the instruments have been rapidly changed and improved, and that the methods of securing an illumination of the field are two, namely, the placing of the light at the eye of the examiner, the method exclusively used in England and on the Continent; and the placing of the light at the distal end of the tube, a method of lighting which owes its present perfection to the efforts of Chevalier Jackson. The instruments which I employ are those devised and constructed by Dr. W. Bruenings, assistant to Professor Killian, and brought out during the past midsummer. Without entering into a discussion of the relative value of the methods of lighting referred to above, I feel convinced that it will be difficult to produce a more excellent illumination of the most distal portions of the bronchial tract than that given by this new lamp of Bruenings.

It is hardly necessary to state the conditions which necessitated the invention of Bronchoscopy and Oesophagoscopy, and under which they may be serviceably employed.

By "Direct Laryngoscopy" the surgeon is afforded the opportunity of inspecting the larynx and of dealing with papillomata, foreign



The Instrument used in the Examination of Larynx and Oesophagus.

bodies etc., at close range, and directly under the eye, without the intervention of a throat mirror.

By "Direct Bronchoscopy," or "Tracheal Bronchoscopy," without any external incision, the entire trachea and bronchial tract, even into the smaller tubes of each of the several lobes, may be examined in detail under the direct observation of the eye. This method is used for the extraction of foreign bodies and for the examination of aneurisms,

enlarged glands, etc., causing lateral or thoracic pressure, paralysis, or dyspnoea, etc.

By "Indirect Bronchoscopy" the surgeon obtains the same observations through a tracheotomy wound, and selects this route for the removal of fish hooks, pins, etc.

By "Oesophagoscopy" the examination of the entire tract of the oesophagus and the greater curvature of the stomach is possible with the naked eye, and the surgeon is enabled to detect and remove foreign bodies without the intervention of coin catchers, bougies, and brushes formerly employed *in the dark*, and also to examine directly and precisely the various strictures, growths, and pouches which may be present.

The following cases of interest which have occurred during the past three months in my hospital service are useful as showing the variety of cases in which the method of examination under direct illumination devised by Killian may prove useful to the patient and satisfactory to the operator. I am indebted to my house surgeon, Dr. Pearl J. Sproule, for the notes thereon, and to Doctors Boyd, Goldsmith, Stewart and Royce, who assisted.

The instruments employed are those perfected by Bruenings, and the methods pursued were those which I had the privilege of studying through the courtesy of Dr. von Eicken, in Freiburg, last spring. Where a general anaesthesia was not administered the patient was placed in a sitting posture upon a low stool and the parts thoroughly cocainized, but where an anaesthesia was required the head was drawn over the end of the table and supported by an assistant, whose entire duty consisted in keeping the tract to be explored, as far as possible, in a straight line. The several assistants were required to handle the sponges, etc.

Case 1. G. W., male, aged 46. Stricture of the oesophagus, possibly malignant. History of dysphagia, regurgitation, dyspnoea, and pain in both sides of the chest of three months' duration. Referred by Professor McPhedran. Under local anaesthesia, the tube was passed to a point 29 c.m. from the teeth, when a bleeding granular area was observed on the posterior wall, and a smooth bulging in of the anterior wall, so as to close the lumen, all but a slight crack, close to the posterior wall. The subsequent history of this case confirmed this observation.

Case 2. Mrs. B., aged 64. Laryngeal Stenosis. Had attended the outdoor service for two years, for dyspnoea due to laryngeal stenosis of specific origin. The ulceration was healed, but tracheotomy became a necessity six months ago. There being still evidence of dyspnoea present, the bronchoscope was used through the tracheotomy wound and the tubes satisfactorily examined in all the lobes with the

purpose of discovering any strictures. The tubes, however, were found quite patent throughout their entire extent.

This case permitted an excellent demonstration of the usefulness of this instrument, and of the detail and extent of observation which it permits.

Case 3. Oesophageal Stricture. A boy aged three and a half years swallowed sulphuric acid over three weeks prior to examination. Referred by Dr. Glendinning, who reported that while improvement in capacity to swallow had shown itself up to a few days ago, a marked increase of difficulty had been experienced since and the patient was failing rapidly. Under general anaesthesia an oesophagoscope was introduced and the tube examined. Patches of whitened mucous membrane, some of them in process of separation, were found on all sides from the cricoid downwards, but the instrument was passed without difficulty and without abrasion to a point seventeen and half c.m. from the teeth, namely, to a point a little below the bifurcation of the trachea according to the measurements given by Chevalier Jackson. Here the lumen narrowed sharply to about the capacity of a straw, through which it was deemed inadvisable to endeavor a passage.

The value of the examination in this instance existed in the clear demonstration of the point of stricture, and, therefore, the point of danger in the use of the dilating bougie, and also of the condition of the mucous membrane above this point.

Case 4. Laryngeal Stenosis, two months after the onset of diphtheria. A girl aged two and a half years, referred by Dr. Ida Lynd. Intubations and subsequently tracheotomy had been performed, the latter five weeks ago. Swabs from the larynx and trachea had been pronounced clean by the health office, but it was found impossible to remove the tube, as even under a general anaesthetic, there was exaggerated suprasternal inspiratory depression. Examination with the bronchoscope was desired to discover the cause, paralysis or stenosis. Under chloroform the larynx revealed, by direct laryngoscopy, marked thickening of the parts, the presence of a whitish membrane, and an extremely narrow glottis. The oesophagus above and below was examined through the tracheal wound and found to be absolutely free and devoid of disease. Some of the membrane from the larynx was secured and found to contain K.L. bacilli. A tracheotomy tube was then re-introduced.

This case was highly satisfactory as a demonstration of the value of direct laryngoscopy in clearing up the diagnosis of a very difficult and interesting condition.

Case 5. Foreign Body in the Oesophagus. A young man aged 26, referred by Dr. D. N. McLennan, with the history of having swallowed

raw oysters a week previous, and a subsequent sensation of his throat being scratched by something sharp, with soreness and pain in the region of the larynx. Laryngoscopic examination had revealed nothing, but the patient could swallow no solid food, and liquids only with difficulty and accompanied by acute pain. The breath was becoming very offensive and there was sleeplessness and distress. A flexible bougie had been carefully passed by Dr. Chas. M. Stewart, and upon its withdrawal a portion of what resembled the fringe of an oyster was found adherent to it. Further interference, except under direct observation, being deemed dangerous, oesophagoscopy was advised.

Under general anaesthesia the largest tube was passed carefully, and, at a point, nineteen c.m. from the teeth, the upper edge of what proved to be a piece of oyster shell presented itself partially concealed by a bloody clot. A forcep was introduced and the shell seized with great precaution lest it might have pierced the oesophageal wall. It came away in four pieces and displayed a jagged wound, extending through the inner coats for over half an inch in length, and in the vertical direction. The shell was extremely irregular in outline and thin, and larger than a copper coin. The tube was examined for some distance further down, but no further evidence of shell or injury was discovered.

In this case there was demonstrated the *raison d'être* for the invention of this instrument. Without it the patient would almost certainly have died, either from the tearing of the tube by over zealous use of the instruments formerly employed in dealing with foreign bodies in the oesophagus, or from sloughing of the wound with its attendant results. The patient made a most excellent recovery.

47 Grosvenor Street, January, 14th, 1909.

CHRONIC EFFUSIONS INTO THE KNEE JOINT— DIFFERENTIAL DIAGNOSIS.*

By GEORGE EWART WILSON, F.R.C.S., Eng., Toronto.

THE subject of this paper is such an extensive one that I have considered it advisable to deal with one aspect only, namely, the differential diagnosis. This subdivision, while probably the most difficult, is at the same time the most interesting and discussion of it should be of benefit to all.

The causes of chronic effusion into the knee joint are rather numerous and varied but the most important are tuberculosis, syphilis, osteoarthritis, rheumatism, traumatism, nervous lesions, villous

* Read at The Clinical meeting, Toronto Western Hospital, 7th Jan., 1909.

synovity, loose bodies in the joint, dislocated ligaments, gonorrhœa, rarely in typhoid fever, occasionally in malignant disease of the lower end of the femur, a class of cases due to chronic suppuration, and, lastly, cases of persistent effusion of unknown cause.

Before proceeding to discuss these several conditions, it may be advisable to say a few words regarding the normal knee joint, the methods of examination, and the diagnosis of fluid within it. For our present purpose the synovial membrane is of paramount importance. While its boundaries are variable it may be said to extend three fingers' breadth above the upper margin of the patella, then down along the lateral margins of the same bone, but about three-quarters of an inch from the border, sweeping abruptly backwards just above the line of the joint. The condition of this membrane is in a great many cases the key to the diagnosis, consequently it is highly necessary to know whether this structure is changed or not.

As we proceed from the surface to the joint we meet first with the skin and subcutaneous tissues, then the capsule and, immediately beyond, the synovial membrane.

In a normal joint the skin and subcutaneous tissues are readily picked up between the thumb and fingers and they are easily movable upon the subjacent joint capsule. If then one ascertains by feeling that there is something extra covering the condyles of the femur on either side of the patella, then by picking up the skin and subcutaneous tissues and comparing the thickness with the opposite side or with a normal knee, should the disease be bilateral, one can readily tell whether this abnormal thickening is due to the skin or subcutaneous tissues or not. If then the superficial structures are normal any undue thickness must be either in the capsule or synovial membrane.

In differentiating between capsular and synovial thickening one meets with greater difficulty. Neither can be picked up. But we know from experience that if a joint is chronically inflamed and there is abnormal thickness, provided there is nothing in the superficial tissues, the synovial membrane must be thickened.

Again, the capsule of the knee joint is more extensive, especially upon the inner side, than the lining membrane, and if the abnormal thickness is limited to the known limits of the synovial membrane then it is fair to assume that the thickness is confined to the lining membrane. Then in certain cases if the trouble lies in the capsule pain will be complained of when the ligaments are put upon the stretch.

Lastly, synovial thickening has in certain cases such a definite and characteristic feel that one can say positively that it is thickened. This is the case with the pulpy swelling of tubercular origin.

As to the diagnosis of fluid in the knee joint, when the secretion is abundant there is never any difficulty, but when scanty it is not by any means easy. Inspection and a close comparison with the opposite joint or with some other normal knee, should both legs be affected, are of the first importance.

Not only should the lateral depressions be noted, but one should make sure that the swelling corresponds with the limits of the synovial membrane. Patellar tapping should be tried for as well as the fluctuation test with the forefinger and thumb of each hand on either side of the patella, one hand at the same time pressing out any fluid from the sub-crureal bursa. This latter sign, I believe in the majority of cases, to be a more reliable indication of fluid than the patellar tap, for reasons which will be given subsequently.

There are at least three not uncommon conditions which are very frequently mistaken for fluid in the knee joint. The first is pulpy swelling of the synovial membrane due to tuberculosis. This gives a pseudo-fluctuant sensation and can only be distinguished from fluid after considerable experience so that the tactile sense becomes sufficiently acute. It gives, however, no patellar tap and it is in this condition that this sign is invaluable.

The second condition in which a mistake is frequently made is enlargement of the sub-patellar bursa. This synovial sac sometimes enlarges so as to reach the middle of the patella. Pain is felt on active extension of the leg and at the same time it is noticed that it bulges on either side of the ligamentum patellæ. On close inspection it is found that it does not extend upwards as far as the normal synovial membrane and while fluctuation is obtained in the lower part it is not to be made out in the upper part of the joint cavity. In this condition the patellar tap may be present.

The third condition resembles the former in certain respects. It is due to increase in the infra patellar or as they would be more correctly called infra ligamental pads of fat. On extending the leg, and this should be done by the patient in order that the quadriceps is put into action, a swelling appears on either side of the ligamentum patellæ while a depression appears over the ligament. Like the previous condition the enlargement doesn't reach beyond the middle of the patella and a pseudo-fluctuant sensation is easily obtained in the lower part of the joint. In this condition, too, the patellar tap may be obtained. It differs from the enlarged bursa in being practically always painless and bilateral.

There are some very exceptional cases which have occurred such as diffuse sarcomatosis of the synovial membrane and a general naevoid

condition of the sub-synovial tissues, but for all practical purposes these may be neglected.

Effusions due to tubercular disease are usually in the young. The onset is insidious though in rare instances it commences as a sudden effusion which later on becomes chronic. With a tubercular history, while swelling of the knee, marked wasting of the calf and thigh muscles, the characteristic triple displacement, with discharging sinuses no mistake could possibly be made, but in the early stages where one finds but a small amount of fluid in the joint things are not so easy and it is at this stage that the synovial membrane gives us the all important information for it will be found to be thickened and pulpy. This, with an insidious onset, pain and slight wasting are usually sufficient to make a diagnosis. Occasionally one finds an effusion of tubercular origin in which for a short time no synovial thickening can be made out. In such a case the primary focus has been in the bone and burst into the joint so suddenly that time has not been afforded for the thickening to occur.

From the foregoing it might be assumed that all cases of tuberculosis of the knee showed synovial thickening but this of course would be an error as the well known cases of *caries sicca* prove. In them there is practically no thickening of that membrane from first to last, but one never finds any fluid in the joint in these cases so that they do not enter into the present discussion.

Syphilis, both congenital and acquired, is a frequent cause of chronic effusions into the knee joint. In the congenital cases the disease usually manifests itself about the age of puberty or a little later, and as a rule, both knees are affected. The amount of fluid is not excessive, there is no pain and only slight thickening of the synovial membrane. Apart from this there is nothing characteristic about these cases and one has to depend upon other manifestations of specific disease such as interstitial keratitis, Hutchinson's teeth, nodes, scars, high, palate, etc., for the diagnosis. The age of the patient, the absence of any apparent cause and the freedom from pain are, however, sufficient to put one on his guard and look for confirmatory evidence.

In the acquired variety, effusions are met with occasionally in the late secondaries when they present similar characters to the congenital ones. It is in the tertiary period, however, that the manifestations are chiefly met with. Here the changes encountered are very similar to those in osteoarthritis. The cartilages are eroded, there is lipping of the tibial and femoral extremities while the ends of the bones may be considerably enlarged. Other manifestations of syphilis may or may not be present; one case that I saw having had a large breaking down gummatous mass in the calf of the same leg. The synovial membrane

is often considerably thickened but is never pulpy. Pain in the majority of the cases is slight and may be absent. It is only fair to state, however, that in many of these cases of so-called chondro arthritis of syphilitic origin, a diagnosis cannot be made from osteoarthritis except by the therapeutic test of potassium iodide so that it is a safe plan to administer that drug in all doubtful cases.

Osteoarthritis as met with by the surgeon is practically always of the monarticular variety and the knee is the joint which is most commonly affected. In this condition a history of injury some months or weeks previously is almost constant. In a typical case the joint appears and is enlarged. There is wasting of the muscles above and below and in probably sixty per cent. excess of fluid is to be made out. There is marked lipping of the extremities of the bones, especially the lower end of the femur. In children one occasionally meets with cases associated with glandular enlargement, especially of the femoral group and designated Still's disease. Such are brought forward in support of the microbic origin of osteoarthritis. Just as pulpy swellings of the synovial membrane requires considerable training for its detection so with lipping, and one must be perfectly familiar with the landmarks about the joint in order that any pathological changes may be detected. Then, too, the build of the patient must be taken into consideration as the joint of a muscular individual in health may present certain changes which to the uninitiated might be considered evidence of disease. On flexing and extending the leg pain is complained of and this is usually worse in wet weather. With a finger and thumb pressing upon the femoral condyles on either side of the patella, hypertrophied synovial fringes can very often be felt rolling beneath, as the joint is moved to and fro. At the same time grating is usually observed and is due to the articular surfaces rubbing against each other. If, however, one were to diagnose as osteoarthritis every joint in which grating was present it would be erroneous as a certain amount seems to be normal to many young men who have indulged freely in such strenuous sport as football.

The synovial membrane may or may not be thickened but Baker's cysts are probably more common in this affection than any other, the most common being the enlargement of the semi-membranosus bursa. Some of these protrusions are very large and may extend almost to the middle of the calf.

While osteoarthritis is usually bilateral one side is practically always very much worse than the other and in many cases the patient only complains of one side. The importance of this fact lies in the difficulty of comparing the diseased joint with the opposite side something which should never be omitted so that one must be as familiar as

possible with the anterior and lower margins of the femoral condyles. Should tubercular disease be grafted upon an osteoarthritic joint as sometimes occurs the difficulty in diagnosis is many times increased.

Another not uncommon cause of chronic effusion into the knee joint though seen more often by the physician than the surgeon is subacute or chronic rheumatism. It may follow an acute attack or may be subacute from the onset. There is nothing characteristic in the physical signs in these cases. The synovial membrane is rarely thickened and then only to a very slight extent, while in some instances there is a certain amount of periarticular effusion. One must look, however, for other manifestations of rheumatism and there will probably be a history of previous attacks or of frequent tonsillitis fibrous nodules about the ulnae, and, lastly, there may be a slight rise in the temperature.

Traumatism, while very common as a cause of an acute effusion, is occasionally the origin of a chronic effusion into the knee joint. It may follow an acute attack of synovitis or the injury may have been a slight one, and from want of rest the effusion persisted. There is not much pain but the joint is weak. On physical examination the only abnormality found is the effusion and one has to rely entirely upon the history and the negative findings corroborative of other disease.

Among the nervous lesions associated with joint disease the most important are Tabes and Syringomyelia. Charcot's joint is probably met with most frequently in the knee. As a rule the onset is sudden, the joint becoming distended with fluid in the night. At the same time the general signs of locomotor ataxia are well marked, although it is to be borne in mind that Charcot's disease may occur before Tabes can be diagnosed. Of the two varieties the hypertrophic is the one that is most constantly associated with effusions. On examining such a joint one finds enlargement of the ends of the bones, stretched ligaments so that a sort of flail joint results, painless movements, thickened capsule in which osteophytes sometimes develop and marked lipping of the bones. This with loss of knee jerks and the Argyll-Robertson pupil make up a picture that cannot very well be mistaken. Baker's cysts are frequently associated and when present are apt to be very large.

In the atrophic form the ends of the bones are eroded and often to such an extent that pathological dislocation follows.

Syringomyelia, although usually affecting the cervical portion of the cord, does occasionally involve the lumbar region and then a condition of knee may be found which is identical with that present in Charcot's disease. The diagnosis is arrived at by the absence of tabetic symptoms and finding that the sensations of pain, heat and cold are impaired or entirely absent from the leg.

Suppuration occasionally supervenes in either a Charcot's or a Siringomyelia joint, and if the patient is seen for the first time when sepsis is present the diagnosis may be rather obscure but the absence of pain should be sufficient to attract one's attention to the true nature of the affection.

Villous synovitis is a condition which sometimes gives rise to chronic effusion. The normal villi of the synovial membrane become hypertrophied and their free ends float about in the fluid. They are exactly similar to the fringes found in osteoarthritic joints and can readily be demonstrated by extending and flexing the leg while the anterior surface of the condyles is palpated when the fringes will roll beneath the fingers. They also have the same tendency to become caught between the articular surfaces producing a temporary locking of the joint with increase in the amount of fluid present. This condition is readily distinguished from osteoarthritis by the absence of bony and cartilagenous changes and there is no creaking.

Loose bodies in the joint are a fairly common cause of chronic effusion. They have several methods of formation such as fibrin from blood clot, the melon seed bodies of tuberculosis, a synovial fringe which has broken loose and may contain cartilage, a piece of articular cartilage broken off from the margin of a condyle or occasionally a piece of fibro cartilage. In these cases the history and physical signs are often helpful in ascertaining the origin of the loose body. The symptom complex when such a body gives rise to trouble is quite characteristic.

The patient is engaged in any ordinary quiet pursuit when suddenly a sharp and sickening pain is felt in the knee which causes him to fall and the joint is found to be locked in a position of partial flexion. After being unlocked an acute synovitis soon supervenes which rapidly subsides under rest. The same series of events, however, is apt to recur, and later the effusion becomes chronic. On physical examination, the loose body can sometimes be felt but more frequently by the patient himself. In one case that I remember the body could be very readily pushed from one side of the joint up beneath the quadriceps extension to the other side and back again. Where the loose body cannot be felt the diagnosis from a loose semi lunar cartilage is made largely from the history for in the latter case the initial locking is always associated with some severe strain of a twisting nature as in playing football, while the loose body produces locking when engaged in the routine affairs of life as walking. Locking of the joint also takes place in osteoarthritis with fringe formation and in the villous synovitis. In both the cause is the same, namely, the fringes becoming caught between the articular surfaces. In osteoarthritis there are the other signs to guide one to a

correct diagnosis, while in villous synovitis the fringes and fluid and other negative signs should suffice to clear up the case.

Dislocation of the semi-lunar cartilages, especially the internal, is another cause of chronic effusion. As stated in the preceding paragraph the initial locking is always due to a severe twisting strain when the joint is partially flexed. It is the anterior part of the ligament which is involved and it may simply be detached at the anterior horn or split either horizontally or longitudinally or doubled upon itself. After the locking is relieved a reactionary effusion occurs and as the locking is almost sure to recur the effusion tends to become chronic. In a small percentage of cases one can feel the cartilage move in and out when flexing and extending the leg, but this is unusual and the patient frequently asserts that he can feel something loose over the cartilage when the surgeon is unable to do so. Much more frequently, however, one finds localized tenderness over the affected part and there may be slight swelling. An auxiliary sign is frequently present in that pain is complained of when the articular surfaces are pressed together by forcibly attempting to hyperextend the joint.

Gonorrhœa is a fairly common cause of chronic effusion, and it seems to have a special predilection for the knee joint. While it frequently occurs during the height of the attack, it is more common during the decline. Two main types, the articular and periarticular, are described, but while the effusion in any particular case may be largely one or the other, the virus tends to affect both structures. Apart from this fact there is nothing very distinctive about the physical signs. There is no synovial thickening unless the case has lasted for a long time. The pain is as a rule rather severe, and in the worst cases is accompanied by fever. There is a marked tendency for the effusion to persist. If the patient be young and gives a history of having experienced a severe pain with sudden onset, and usually in the night, and noticed the swelling in the morning, one's suspicions should be aroused and an examination made of the urethra. If nothing abnormal be found the patient, if a male, should be made pass his urine into a glass vessel when prostatic threads will almost surely be manifest. In rare instances it has been known to be subsequent to an ophthalmia.

In typhoid fever a chronic serous effusion is sometimes seen. It may be very large and dislocation, especially of the hip, is apt to take place.

Malignant disease, especially sarcoma of the lower end of the femur, occasionally involves the knee joint, producing an effusion. This never occurs except very late in the disease as the articular cartilage being non-vascular prohibits the invasion by the tumor.

The next class of cases which I wish to allude to is one which is just beginning to be recognized by the profession. I refer to those cases of simple chronic synovitis with effusion which are the result of toxins absorbed from some suppurative focus as a leucorrhœa or post nasal discharge from disease of the ethmoidal cells. The late Mr. Barnard was, I believe, the first to draw attention to this class of cases. The physical signs are not peculiar in any way, only one is at a loss to know the cause, so that in any such case a careful search should be made for some primary focus of muco-purulent discharge. Moreover, in some instances a septic arthritis starts up instead.

The last group of cases for consideration comprises a series to which no cause has yet been assigned. They occur as a rule in young people. The joint is only moderately distended with fluid, the synovial membrane is slightly thickened, the ligaments are not relaxed and there is absolutely no pain or inconvenience. Clinically they resemble very closely the joint found in tertiary syphilis but there are no other signs of specific disease and they are not in the least affected by anti-syphilitic or any other treatment. Of this class I have seen two examples and have watched their progress for months and could observe no change whatever.

I have not attempted to deal exhaustively with this question but simply to bring forth the most salient points from a clinical standpoint, believing that the greatest amount of benefit will in this way be derived.

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A PLEA FOR RATIONAL THERAPEUTICS.

By V. E. HENDERSON, Lecturer in Pharmacy and Pharmacology in the University of Toronto.

THE past decade has seen a great advance in our knowledge of the use of drug-stuffs and of other methods of influencing the course of disease. This advance seems so marked that one feels almost justified in calling therapeutics a science instead of an art. The reasons of this advance must interest every practitioner, and yet the steps and causes of this advance and even, one is forced to believe the fact of the advance itself, are not as yet appreciated by all. The important causes seem to me to be as follows.

First of all the simply tremendous advance that has been made in physiology. It is perhaps worth while to illustrate this by one or two concrete examples. If one turns in any text-book of physiology written 15 years ago, Michael Foster's well-known work will serve as an example, one finds a very vague and unsatisfactory description of the

movements of the alimentary canal. The work referred to says, for example, of the movements of the stomach. "These movements have been described as of such a kind that the contents flow in a main current from the cardia along the greater curvature to the pylorus and back to the cardia along the lesser curvature, subsidiary currents mixing the perperipheral portions of the contents with the central." In place of this vague description, any modern text-book will give a description such as that which follows and which is based upon the accurate studies made by Cannon, Magnus, Bayliss and Starling, Grutzner, and Heintz, with the aid of the Roetgen rays and highly developed modern technique. Such descriptions are also often illustrated with drawings so that anyone can obtain a clear conception of the mechanism.—

Food entering the stomach lodges in the cardiac portion whose walls gradually relax to receive it, some of that first arriving passes over into the pyloric portion. At the junction of the cardiac and pyloric portion a constriction appears which separates the pyloric from the cardiac portion. In the pyloric portion peristaltic waves arise which gradually increasing in force and in frequency, sweep the food towards the pylorus, and mix it thoroughly with acid. On the food becoming sufficiently acid the pyloric valve relaxes to allow it to pass. Hard particles of food impinging upon the pylorus set up increased tone in the pyloric sphincter and thus prevent its relaxation. The cardiac portion of the stomach undergoes a slow contraction so that the food is slowly forced into the pyloric half. Fluids as Grutzner showed, taken when the stomach contains food, pass in large part over the surface of the food along the lesser curvature to the pyloric half of the stomach where mixing with its contents serve to render it more fluid and thus rapidly pass on into the intestine.—This concise and definite knowledge destroys many old hypotheses and gives many openings to the therapist. That the taking of moderate amounts of fluids with the food can be harmful is immediately seen to be impossible and even absurd if the stomach be normal. Pancreatic ferments it is evident will have favourable conditions under which to disclose their action while the food is in the cardiac portion of the stomach and before the food becomes mixed with the acid gastric juice. The saliva, too, it has been shown, continues to act from an hour to an hour and a half upon some, if not upon all the food taken in an ordinary meal.

Even more marked than our advance in the knowledge of the movements of the body is the increase in our knowledge of the chemistry of the bodily functions. Take, for example, the metabolism of the starches. We now know the successive stages in their digestion, the successive ferments under whose attacks they are reduced to simple

mono-saccharides. But, further, we understand something of their fate within the body. For example, we know that unless there is some combustion of carbohydrate going on in the body that fats can not be completely broken up, but some of their radicles, at least, appear in the breath and urine as the acetone-bodies, and are undoubtedly the cause of diabetic coma. This makes clear to the therapist at once the danger of cutting down suddenly the carbohydrate intake in severe cases of diabetes mellitis and the impossibility of cutting off completely the carbohydrate intake in the severest type of diabetic cases.

These two examples chosen at random make clear sufficiently well the first point, that without in some fashion keeping track of the modern advance in physiology, and in striving to apply the knowledge of physiology that one has, rational therapeutics is impossible.

In the second place, the advance in pharmacology should be noted. It is only in the last decade that in Anglo-Saxon communities that pharmacology has been accorded a place in the ranks of the medical sciences. There is only one chair for pharmacology in England, and one Lectureship that are occupied by scientists who devote their entire time to the subject. The United States and Canada are proportionately not better off. The duty of the pharmacologist is to isolate, if necessary and possible, the active principles of crude drugs and to test all such active principles and chemicals as are, or may promise to be useful in medicine, by accurate experiments upon animals, and as he gets opportunity upon man. His training makes possible a more accurate study of the efficacy of a drug-stuff upon man than could be carried out by the ordinary physician. The science, too, seems to have abundantly justified its existence. Literally hundreds of drug-stuffs, many of them in use and in repute for years, examples, are gensing, used by Chinese for centuries, guaiacum long a vaunted specific for syphilis, and many other drugs introduced by pharmacopœial houses, such as, for example, piperazin, have been clearly shown to have little or no pharmacological action. Nothing but the persistence of the pharmaceutical houses and the ignorance of the medical man makes possible the continued sale of such drugs as, cactus or sodium cacodylate. But more important than the destructive criticism that the pharmacologist has brought to bear on the drug-stuffs, is the constructive work that has been done. The magnificent work of Magnus, and of others, has now completely cleared up our knowledge of the action of purgatives, so that now we know the point of attack and the conditions under which all the important purgatives act. These drugs and also the carminatives can in consequence be used with a precision that was formerly impossible. A host of observers have devoted their attention to the action of diuretica

and in consequence, though there is no unanimity of opinion as to how they cause diuresis in all cases, there is a very definite knowledge as to the conditions under which they act and under which they may be used. Precisely, the same statements might be made with reference to the drug-stuffs with a specific action upon the heart. For example, we now know that digitalis in therapeutic doses slows the rhythm of the heart's action, increases its contractile force and its irritability, larger doses or the cumulative action of smaller doses manifest their toxic action in that they tend to interfere with the conductivity from auricle to ventricle so that the phenomenon of missed beats occurs, the auricle beating two or three times for one beat of the ventricle. The action of therapeutic doses upon the vessels is known to be so slight that no increase of blood-pressure occurs save that owing to the improvement in the heart's action. There is also some evidence that even in therapeutic doses digitalis is capable of dilating the vessels of the kidney. One would hesitate to give digitalis in any instance when the heart was abnormally slow or when it showed missed beats.

Pharmacologists have also been pointing the way in suggesting new methods of administration. Having observed in pharmacological laboratories the rapidity and certainty which attended the intravenous administration of digitalis, several German physicians have tried the effect of intravenous administration of strophanthin. This member of the digitalis group was chosen because it was known that a pure and standard glucoside could be obtained. The intravenous administration in cases of acute cardiac failure has given the most astonishing success, one dose of one milligramme in many cases sufficing to restore the broken compensation, to cause the disappearance of the oedema, and to relieve the cardiac distress. The beneficial effects make themselves manifest within an hour, and a single dose in the course of two days brings about an improvement such as could not be attained by a week of treatment with digitalis per os.

The pharmacologist has also realized that he has a very important function in checking in, as far as possible, the pharmacist. There are unfortunately a series of drugs such as digitalis from which the active principle can only with difficulty be isolated in a pure state, and others in which the process of isolation is such as to introduce into the active principle such changes as to make the final product very uncertain in strength and composition. This happens, for instance, in the case of aconite; the isolated aconitine will vary more in strength and efficiency than well made tinctures. Many and perhaps all of these drugs can be standardised pharmacologically. Methods have been devised by which digitalis and its analogues can so be standardised, as can aconite, but as yet no safe and reliable method of standardisation has been devised for ergot.

If then the physician intends to carry out rational therapeutics, in other words he intends to do his duty by the patients, who trust themselves to him it is necessary that he, from time to time, read something of modern pharmacology and have a good book to use for reference.

The third cause that I would mention for the great advance that has been made towards rational therapeutics is the growing knowledge of the natural history of disease. It is now a matter of common knowledge that simply astonishing remissions take place in the course of a case of pernicious anæmia even without treatment. Therefore no physician should be misled by any person who claims for any drug, that it is a specific or of remarkable value in pernicious anæmia, and supports his claims by reporting four or five cases which have shown improvement when the drug has been used. The natural history of the disease would alone be sufficient to explain the suggested success.

The studies of the last few years has taught us that typhoid must be looked upon as a systemic infection, that the bacillus typhosus can be isolated from the blood while the patient is in the prodromal stage of the disease. The widespread nature of the infection may be seen in the fact that the bacteria may be isolated from the skin papules and from the urine. Further the urine and stools of the patient may contain the bacteria for not only days and weeks but even months and years (25 years in one case), after he is apparently well. The gall-bladder is frequently the seat of this chronic infection and doubtless many of our cases of gallstones are the consequence of bygone infections of this nature. What effect has this growing knowledge had upon your treatment of typhoid? Would it not be wise when convalescence is well begun to give the patient for a day or two at a time good doses of hexamethylenamine (urotropin), which is now known to be an excellent antiseptic for both the urinary and for the biliary passages? In the same stage intestinal antiseptics might be used with advantage. Has the fact of the occurrence of the bacteria in the sweat, urine, stools and sputa made you more careful in the isolation of the patient and in the preventative measures you have taken? These are, again, but crude examples, drawn more or less at random, but will serve to emphasize the need for keeping in touch with modern developments in medicine. To keep fully up to date is almost impossible, but do you give yourself a chance by taking and reading a good journal which contains accurate reviews of the important papers appearing in other publications?

There are, of course, many fields in which progress is being made in medicine, and all that one can do in a short paper is point out the importance of some of them, but this paper will have done all that it

is meant to do, if it has suggested to any of its readers the necessity of trying to keep in touch with the advances of to-day. But there is one thing further that I would like to suggest and that is the necessity of attempting to apply the knowledge that one acquires to the treatment of one's own cases. Too often we try a course of treatment recommended by some authority without understanding it. Is it likely that we will apply it correctly?

A plea for rational therapeutics should, it seems to me, be converted into a plea for a more complete knowledge of the fundamentals of our art and a more thoughtful application of those fundamentals.

MILK AND MILK SUPPLY.

By R. J. MANION, M.D., Medical Health Officer, Fort William.

IN compliance with your request I am pleased to offer you the following article in regard to milk and milk supply. As there is nothing new under the sun, you will find in this paper nothing new and very little original; but I think it is all up-to-date and agrees with modern ideas. The milk supply of any town or city takes rank next to the water supply and sewage system in preserving and promoting the good health of the community, and so it behooves us as citizens to pay great attention to it.

Milk is perhaps the most important of the animal foods, and the only animal whose milk is practically available for infant feeding is the cow. So, when the lacteal glands of the child's mother fail to supply sufficient nourishment for the child's requirements (as is the case in so many mothers of the present day) our main reliance in artificial feeding is cows' milk; and it is or should be the staple food of all young children after weaning. Thus, the importance can at once be seen of obtaining it in as pure a state as possible.

Each year thousands upon thousands of deaths of young children are caused by impure cow's milk. Some one has stated that "the slaughter of the innocents through the milk can has far exceeded the slaughter wrought by pestilence and war."

Milk was made white and therefore I think it was meant to be pure; and as it comes from the cow it is pure, providing the cow is healthy and her food good. The main trouble is to keep the milk in a perfect condition till it reaches the stomach of the child. Pure milk is ivory white, opaque, has no unusual or offensive taste or odor, is slightly alkaline in reaction and has a specific gravity of 1030 or above. Modified by dilution, lime-water and milk sugar it is the best imitation of mother's milk we can obtain. Needless to say, in cases in which a

mother, without ill effects to herself or her child, can nurse her offspring it is a moral duty devolving upon her to do so. That is nature's method.

The most important conditions to be fulfilled in a milk which is to be used for infants or young children are (1) it should not be over 24 hours old; (2) it should contain no preservatives; (3) it should be from healthy animals; (4) it should be clean; (5) it should not be skimmed or watered; (6) it should not contain any disease, germs, such as the germs of tuberculosis, typhoid, scarlet fever or diphtheria, which are commonly conveyed by milk. Contrary to the usual idea, mixed or herd milk is to be preferred, as it is liable to fewer variations than milk from one cow.

When milk is more than 24 hours old it is always dangerous for children unless handled with a care which it rarely gets. In large cities especially, where it is difficult to get milk to the consumer within 24 hours, some dishonest dealers add preservatives, those most in use being annatto to improve its color, and formaldehyde, salicylic acid or boric acid to keep it sweet. Any of these are injurious to children. (In appreciation of the milk dealers of Fort William, I might state that out of all the milk samples sent to Toronto for examination, none of them have shown the presence of preservatives and most of them have shown a good quality of milk). In a city the size of Fort William, where milk can be obtained within 24 hours, so long as it is handled with a reasonable amount of care, it should be fresh and sweet and fit for children's use, and generally speaking this is the case with us. It is the cities of the size of New York and Chicago, and even Toronto and Montreal, that they have a great deal of trouble during the hot summer months, and anyone looking at the infant death rate of any of these cities during June, July and August will indeed be appalled. During the past summer in Toronto municipal milk stations were established which helped much to lessen the death rate among the poor. Dr. Chas. Hodgetts, chief health officer of Ontario, is doing much toward awakening the public to their duties in regard to the milk supply.

The quality of the milk depends on many different things, any one of which may make it unfit for human use. It depends,--

(a) On the cattle; they should be free from tuberculosis or any other taint.

(b) On the feed of the cattle as some foods alter the milk.

(c) On the ventilation, light and general sanitation of the stables and surroundings.

(d) On the health and cleanliness of the milkers, and on the method of milking.

(e) On the after treatment of the milk and the care of the utensils and vessels.

(f) On the early, careful and cleanly delivery.

(g) On the general cleanliness, and prevention of the access of flies, as flies are a common carrier of typhoid fever, as was amply proven in the South African war. (This latter fact is one often forgotten by the otherwise careful housewife who leaves the milk exposed in open vessels).

Many diseases are conveyed by impure milk, particularly, (1) scarlet fever, where a case occurs at a dairy and is not recognized or where milk is exposed to the handling of someone with the disease without knowing it. Some authorities go so far as to say that this disease is in a large majority of cases carried by contaminated milk, although this is probably much too strong a statement. One writer, states that in Japan, where cows' milk is not used, scarlet fever is practically unknown. This may be another case of *Post hoc, ergo propter hoc*—after this, therefore because of this.) However, there is no doubt but that this disease may be carried by milk. (2) Diphtheria, under circumstances as above. (3) Typhoid fever may very easily be carried by milk, either where the vessels are washed by water containing the bacilli of Eberth, or where the milk is adulterated with such water. (4) Tuberculosis. In this disease the germ may enter the milk, either from tuberculous people or from tuberculous cows. There is now no doubt that bovine tuberculosis may affect human beings. The British royal commission, appointed to enquire into "the effects of food derived from tuberculous animals upon human health," consisting of some of the most eminent physicians and physiologists in England, after careful examination of many experts and some very extensive and thorough experimenting, unanimously reported in 1895 that they believed "that an appreciable part of the tuberculosis that affects men, is derived through this food, and that no doubt the largest part of tuberculosis which man obtains through his food is by means of milk containing tuberculous matter." And the royal commission of 1901 demonstrated conclusively that bovine tuberculosis can be transmitted to human beings.

In all cases where a milk, used for children especially, is thought to contain germs of disease it should be treated much as water would under the same circumstances—boiled. A more recent method and perhaps a better one is pasteurizing, that is sterilizing at a lower temperature than is required for boiling. A temperature of 140 degrees F. is said to destroy the germs of tuberculosis, diphtheria and typhoid fever, and about 99 per cent. of all other bacteria in milk. But milk

that has been heated is not so good a food as fresh milk. The heating changes its taste, has a constipating effect, and may cause scurvy.

As milk is a necessary food, and a perfect food when pure, the problem of obtaining it pure is causing a great deal of thought and study. The health boards of many European countries, of many states of the union, and provinces of the Dominion, including our own provincial health board, have drawn up rules to be observed by the dairies and enforced by local boards of health. These rules apply to the standard of the milk, to the buildings and stables, the cattle and their feed, the employees' habits and the care and delivery of the milk; and if these rules were enforced they would ensure a practically pure milk. Many of these regulations depend upon the honor and integrity of the milk dealers and their employees, and while I give them credit for as high a sense of honor as any other class of men, the commercial spirit of the age, and the severe competition, make it hard for some to live up to the rules, particularly in the large cities; for as I stated earlier in this paper I believe that in Fort William we get very good milk, generally speaking.

The object to be aimed at by all cities and towns facing the pure milk problem, is not to teach people to sterilize or pasteurize milk after it has become dirty or germ-contaminated, but to obtain pure, fresh milk, from cattle, which are healthy and properly fed, which are stabled in a sanitary and cleanly manner, said cattle to be milked and said milk to be handled only by scrupulously clean and healthy people. If this object could be obtained, thousands of innocent lives could be saved annually on this continent, and surely this purpose is worthy of any of us.

THE INCREASING PREVALENCY OF PNEUMONIA.

By H. A. STEVENSON, M.D., London.

A GREAT deal of discussion has taken place about consumption. The people have been warned very well about the infectiousness of it. Every person sooner or later becomes infected with it. The great thing about it is to recognize it early, that is the secret of recovery from it. Since the discovery, by Koch, of the germ which causes consumption there has been no increase in the death rate but a steady decline. But there is another disease of the lungs which has received very little attention, and which is infectious and no doubt in time will be preventable and curable. It is to be hoped in the future that it will be like diphtheria which has lost all its terrors now with the antitoxine treatment. This disease is pneumonia or inflammation of the lungs. A disease that strikes down a person in the best of health and strength

in the middle of an active business career, without any warning. In the great majority of cases the medical men are powerless to help.

The reason why I draw attention to this disease is that this disease alone among the maladies of modern life has increased in alarming frequency and severity. There is no question of the enormous increase in the death rate from inflammation of the lungs, more particularly in the cities. In some cities it has increased not only two, but six and eight fold. For instance, in Toronto, in 1898, there were 132 deaths, in 1907 there were 341; Stratford, in 1895, had 5, in 1907, 15; in London in 1895 there were 21, in 1907 some 54; Hamilton, in 1903, had 41 deaths, in 1907, 93 deaths; St. Thomas in 1894, 6 deaths, in 1907, 12 deaths; Ottawa in 1891, 16 deaths, in 1907, 83 deaths; and, if we add those deaths due broncho-pneumonia, it is even more alarming. About one in 19 or 20 deaths is due to inflammation or congestion of the lungs, and yet nothing is being done to prevent it or to educate the people against it. It is one of those disease that medical science has made very little headway against.

In this, the banner province of our fair Dominion, there were in 1905 2,667 deaths due to consumption, and in the cities 728 deaths. Pneumonia claimed that year 2,155 deaths, nearly as many as consumption. In 1907 the deaths from pneumonia had risen to 3,062, including broncho-pneumonia. As the Registrar General's report shows, it is in the cities that the greatest increase has taken place, as in 1894 there were only 384 deaths in the cities from pneumonia, while in 1907 there were 792; in the province 1,487 deaths occurred in 1894, while in 1907 there were 2,564 deaths from this disease. Every city shows an alarming increase. There are evidently conditions in our modern city life favoring the spread of this infectious disease. What are these conditions? Well, it is not easy to say. In this city household sanitation has everywhere improved. In the city the element of frequent contact comes into play, in the school, in the street, and in public assemblies. This may be an important factor in the promotion of the spread of this infection. A disease due entirely to a germ we are face to face with a most serious situation. In preventative medicine, one more deserving than the study of consumption. This germ of pneumonia may be called the "David" of the bacteria army killing its tens of thousands to the thousands by any other germ. Let us consider this a very formidable disease, and what about patients going to the hospital with this disease? This disease is the most formidable acute disease of modern times and medical science has made little headway against it, unless this new opsonic treatment will prevail. As to the patients going to the hospital, there should be a part of the hospital for themselves only. A patient in a bed next to one with pneumonia may contract the infection, and may not suffer with it while in the hospital.

CURRENT MEDICAL LITERATURE

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MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

—
THE ACTION OF BALSAM SULPHUR BATHS, THIOPINOL
MATZKA (SYN., PIUTINOL).

Dr. H. Jacobi, of Brunswick, in *The Therapist*, for 15th October, 1908, concludes his article on the external actions of Piutinol, as follows:—

The action of the Piutinol bath in gouty and rheumatic affections is also explained by the supposition that in these complaints micro-organisms play an important part, since the hyposulphurous acid, as well as the terpene compounds, act toxically on the micro-organisms. Further, it cannot be denied that the psychic disposition of the patient during the Piutinol bath cure is quite different from that in natural sulphur baths, and that this circumstance favours remedial success. Formerly the patient spent a wretched time in an atmosphere impregnated with sulphuretted hydrogen. The remembrance of a sulphur bath was repugnant. The Piutinol bath can be taken comfortably at home, and the balsamic odour of fir leaves is substituted for the nauseous sulphuretted hydrogen. The walls of the bath-room are not blackened, and the bath is not attacked. It may be safely asserted that it is a pleasure to take a Piutinol bath.

Symptoms:—gout, gonagra, podagra, rheumatism of the joints and muscles, acute and chronic rheumatic swellings of the joints, and neuralgia, ischiagra, rheumatic paralysis. When it is a question of revivifying a group of muscles which have become inactive, the Piutinol bath cure must be simultaneously supported by electricity.

Skin Diseases.—In skin diseases, terpene and sulphur behave analogously, as they both possess antiparasitic and disinfecting action. Consequently all vegetable or animal organisms which develop in the skin are destroyed by the Piutinol bath. The pyogenic cocci are killed in the follicles, and in general, the Piutinol bath acts curatively in an extensive series of cutaneous diseases.

Symptoms:—chronic eczema (herpes), scrofula, psoriasis, acute pityriasis, furuncles, ucler on the leg and foot, etc. Exudations which are produced either in consequence of contusions or dislocations, or in women's diseases, and other unhealthy excretions in general, absorbable products, are removed after the use of Piutinol baths. For rapid

cure the bath is assisted by suitable massage, as exudations are absorbed more easily in a mechanically divided state than when presenting soft or stiff solid bottles.

The remarkable activity of the change of matter due to Piutinol baths is recommended in metallic poisoning (mercurial and lead poisoning). The action of the sulphur bath is explained by sulphuretted hydrogen decomposing the metallic albuminate, whereupon the metal molecule separates out through the liver into the urine.

The use of Piutinol baths is also expedient in diseases of the bones, glands, and joints, as well as for syphilis and syphilitic efflorescences.

There are many other pathological conditions in which Piutinol may be employed with success, and it may be left to the opinion of the doctor as to the cases in which it is considered advisable to employ it.

We will briefly summarize the properties and advantages of Piutinol baths :—

(1) The percentage of effective sulphur corresponds to the percentage of the best known natural sulphur springs (calculated per 200 litres of water).

(2) In the Piutinol bath no sulphuretted hydrogen develops towards the outside, but in the cutaneous cells.

(3) Without adding acid, a milk-white emulsion of milk of sulphur and volatile oils is produced.

(4) Piutinol baths can be taken at home in any bath, as zinc, marble, wood, stoneware, cement, and burnt enamelled iron, without attacking the same. Also it does not blacken the walls and articles painted with white paint.

(5) The Piutinol bath contains, besides sulphur, a high percentage of oils of coniferous trees, whereby the action and curative effect is increased.

(6) Simple to make.

(7) The Piutinol preparation decomposes, when kept well closed, even after several years, or if crystals have separated out.

Analysis.—Contents of a bottle of Piutinol, according to the analysis of Dr. Friedrich and Dr. Rossé, of Brunswick:—83.500 grms. alcohol, 18.875 grms. volatile oils of coniferous trees, 14.3375 grms. sulphide, 0.0625 grm. sulphate, 4.375 grms. glycerine.

Duration of bath and directions for use. The patient remains five minutes in the bath at a temperature of about 34° to 38° C. without Piutinol being added, in order that the pores of the skin may be cleaned, and that any secretions may be removed. The bottle of Piutinol is then poured directly into the water, and the water well stirred. The duration of the bath depends on the sensitiveness of the patient, but twenty minutes in all should be the standard. If sensitive patients should notice

too great an irritation on certain parts of the body, as the genitals, etc., etc., rub a little with fat, vaseline, etc. It is recommended to massage the parts of the body lightly by hand during the bath, but not to scratch, as this causes an irritating action. The baths are preferably taken in the evening, so that the patient can go to bed soon afterwards.

ECONOMIC VALUE OF SANITATION—TYPHOID FEVER.

Dr. George M. Kober, of Washington, D.C., during the Governors' Conference at the White House last May, presented figures which showed that the decrease in the "vital assets" of the country through typhoid fever in a single year is more than \$350,000,000. Typhoid fever is largely spread by polluted water, so that the death rate from this disease can be directly reduced by the purification of city drinking water. The increased value of the water to the city of Albany, N.Y., where the typhoid fever rate was reduced from 104 in 100,000 to 26, by an efficient filtration plant, amounts to \$475,000 a year, of which \$300,000 may be considered a real increase to the vital assets of the city. The average annual death rate from typhoid in cities with contaminated water supplies, was reduced from 69.4 per 100,000 to 19.8 by the substitution of pure water supplies. *Virginia Medical Semi-Monthly*.

THE SCHOOLROOM AS A FACTOR IN TUBERCULOSIS.

Wm. Oldright, M.D., Toronto, said at the Congress of School Hygiene in London, 1907, that "Tuberculosis is undoubtedly prevalent among school-teachers. In Canada, in 1881 and 1883, an analysis of the returns showed that teaching was one of the occupations most frequently attacked. Late figures from the United States census are significant.

The ratio of deaths from consumption in 1,000 deaths:

Of all males engaged in all occupations was.....	154
Of all male teachers	184
Of all females engaged in all occupations	215
Of all female teachers	256

The causes are to be found in foul air and possibly chalk dust. The remedy is obvious." *School Hygiene*, October.

LOCOMOTOR ATAXIA. A NEW THEORY AND TREATMENT.

In the *Medical Record*, November 21st, Denslow's paper before the New York Academy of Medicine is given, with his theory of tabes and record of results which aroused so much attention from the metropolitan press. He discusses the history and the pathology of the disease with the current theories as to the causation and the well known objections to them. The physiological pathology is given as follows:

"From these posterior roots are given off the variously named tracts that constitute one continuous system of descending commissural fibres receiving and giving off fibres at different levels of the gray matter, and connecting together the various segments, as well as the upper and lower spinal centers with each other. The change that takes place in the roots, according to most recent research, is a progressive dystrophy or demyelization and ultimate destruction of the nerve fibres. The myelin sheath breaks up, becomes granular, and finally disappears; a proliferation of the neuroglia network occurs only in proportion to the atrophy of the nerve tissue proper. These changes are, as a rule, most pronounced in the lumbar and lower dorsal regions which contain the long fibers from the lumbosacral regions in their course up to the nuclei gracilis of the medulla oblongata."

And Ferrier's statement in the Lumlucian lectures:

"I am inclined to adopt the hypothesis of Thomas and Hauser that the essential lesion of tabes is a dystrophy similar to that induced by certain toxic agents, affecting the protoncurone as a whole and manifesting itself in degeneration of the peripheral and central terminations, of which the intermedullary are the more vulnerable and are usually the earliest to exhibit anatomical changes. The process, however, is not confined to the spinal protoncurone, but may effect among others the optic, the sympathetic, and certain other motor neurones."

He claims that these changes are due to exhaustion of the central nerve substance caused by continuous irritation from sensory nerve impulses conveyed from some peripheral point, which kept up, it may be for years, finally results in dystrophic degeneration—in fine not a toxic but purely physical cause. The fact that incessant irritation can show shrinkage in nerve cells is proven by electrical experiment by Howell, and Edinger states that "the fatigue or exhaustion induced by over-work of a healthy nerve or simple use of a poisoned or degenerating nerve, may never be recovered from, so that the outcome is paralysis and atrophy."

Syphilis is no doubt a prime factor in tabes, but only so far, probably, as it is responsible for a tissue condition necessary to render such tissue more susceptible to the continuous sensory explosions or impulses.

Whether all cases of tabes have a prior syphilitic history is a question beyond the scope of the present paper to discuss; it is certain that other causes that have been supposed to be direct factors in the etiology of tabes, such as exposure to cold, overexertion, alcoholism, are only, in so far as they lower the resisting power of the system in general, and the nervous centers in particular. Sexual excesses, I think, have a direct bearing where the irritation is in the genital tract, by aggravating and perpetuating the points of irritation.

In this paper he recites cases where the source of irritation was found in the male urethra and bladder, although other points in the body may be the seat of their initiation. Eye strain and intestinal putrefaction have been thought of as possible factors in aggravating the condition where peripheral already exists. During 1905 and 1906 some ten cases were treated successfully. They all had characteristic symptoms of tabes.

The gait was affected, from a slight ataxia and staggering to utter helplessness and inability to stand. In nearly all the cases there was incontinence of urine besides pain; all had loss of knee reflex and Argyll-Robertson pupils. All recovered from the incontinence, and their pains were relieved, two helpless ones were able to walk again with the aid of a cane, while others practically recovered a fairly normal gait. The helpless had only been so for less than three months.

Although three and four years have now elapsed since these patients have received any treatment, there have been but two instances where there has been any relapse, and this only in the gait; not in general condition or any other symptom although incontinence of urine existed. Both these patients had but a short course of treatment followed by neglect on their part.

A characteristic history is given showing the method of treatment. The writer warns us that the line between relieving and producing still greater irritation is a narrow one, and only the most capable genito-urinary surgeon should attempt the cure.

Case 1.—H. B., February 27, 1907. Male, aged 47. Duration of disease seven years, syphilis sixteen years ago. Weight 102 pounds; general condition very low. Gait fully 50 per cent. off normal; Romberg and Westphal symptoms present, also Argyll-Robertson pupils; frequent gastric crises. Has severe pains, also girdle sign. Has analgesia and anesthesia, and incontinence of urine day and night. Examination revealed erosions in middle third of urethra. These were treated per urethroscope during seven months when all symptoms disappeared, patient walking normally and weighing 138 pounds. A gain of 36 pounds. Can walk in dark. He has not had treatment for over a year and a half, has gained in every way, and is about to resume his work as an actor.

He came to me from the Incurable Hospital at Fordham, earlier was in the New York Hospital, suffering from gastric crises. I saw him first at his rooms, he being too weak to go out.

The conclusions advanced by Dr. Denslow are as follows:—

(1) That peripheral irritation can produce pathological change in the central nervous system by creating continuous nerve impulses which exhaust the substance of its nerve centers.

(2) That the peripheral nerve degenerations of tabes are probably due to the same impulses carried on past the central system expending its force upon the points of greatest vulnerability or least resistance.

(3) That symptoms occur in certain cases of tabes with a severity out of all proportion to the actual pathological change that has taken place in the nerve centers, and that such symptoms are caused by the initial change creating a zone or aura of irritability beyond such change which extends to the cerebrum, cerebellum, and sympathetic, and at times appears to cover almost the entire nervous system including that of nutrition.

(4) That removal of this causal irritation resulting in recovery from such grave symptoms, as loss of balance, ataxia, incontinence of urine and feces, anesthesia and hyperesthesia, etc., etc., would appear to indicate the existence of such zone of functional irritability beyond the actual pathological change.

SURGERY.

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

PRURITUS ANI.

In the course of an article in the *New York Medical Journal* of June 13, 1908, Mason remarks that certain errors of digestion as well as certain articles of food may start an attack of pruritus. In the opinion of the author coffee is more harmful than any other article of diet, and will alone produce the disease in certain persons. All of these things should be searched for, and if found, given careful attention. The author refuses to treat a person who maintains the habit of drinking any form of alcohol.

As a rule, the treatment must be long and tedious, and unless the patient will make every effort to assist in bringing about a cure he refuses to treat him.

There are many formulæ that are used with more or less success, a few of which are here given. Tuttle speaks highly of the following :

℞	Ac. carbolic,	-	-	-	-	-	ʒij.
	Ac. salicylici,	-	-	-	-	-	ʒj.
	Glycerini,	-	-	-	-	-	ʒi.

M. Sig. : Apply with camel's-hair brush after bathing with hot water.

Mathews recommends :

℞	Camphor and phenol,	-	-	-	-	ʒj.
	Glycerin,	-	-	-	-	ʒj.

M. Sig. : Apply after using hot water, and repeat frequently, if necessary.

In cases in which there are fissure-like cracks at the junction of the skin and mucous membrane, Cripps recommends the following :

℞	Ext. conii,	-	-	-	-	ʒj.
	Ol. ricini,	-	-	-	-	ʒj.
	Lanolini,	-	-	-	-	ʒj.

M. Sig. : Apply frequently.

An ointment of chloroform as follows acts nicely in many cases :

℞	Chloroformi,	-	-	-	-	ʒj.
	Petrolati,	-	-	-	-	ʒj.

M. Sig. : Apply frequently.

This must be put up in a wide-topped bottle and kept tightly corked, as otherwise the chloroform will soon evaporate.

Where the parts are too moist the treatment is often assisted by the use of powders that will absorb the moisture. Plain starch has given good results in many cases. Dry calomel many times is very useful. The following has given good results :

℞	Camphor,	-	-	-	-	ʒij.
	Carbolic acid,	-	-	-	-	gtt. 1ʒ.
	Precipitated chalk,	-	-	-	-	ʒij.
	Zinc oxide, pulv.,	-	-	-	-	ʒij.
	Perfume,	-	-	-	-	q. s.

M. Reduce the camphor with alcohol and mix the others through bolting cloth of one hundred meshes to the inch.

The author has operated under chloroform three times by removing a section of the skin for about an inch on each side of the anus, and then undermining the surrounding skin and drawing it together to cover the denuded surface and stitched it to the mucous membrane of the bowel.

In two cases he secured good results, while the third patient was lost sight of. This procedure was suggested to him by Dr. Hamilton, and as a means of last resort he believes it to be very valuable. He intends to make further use of it as opportunity arises.

Patients should always be told not to scratch the parts, although this warning is seldom heeded. If the itching is so severe as to interfere with sleep, have them use hot water, gradually increasing the temperature, until it is nearly scalding. In case this is not sufficient to give relief, and ointment of chloroform, one drachm to one ounce of petrolatum, may be applied. A weak solution of carbolic acid in water and glycerin will often give relief when all else fails. The following mixture is a most excellent one :

℞ Sodium hyposulphite,	-	-	-	-	ʒj.
Carbolic acid,	-	-	-	-	ʒss.
Glycerin,	-	-	-	-	ʒj.
Distilled water,	-	-	-	-	ʒiij.

M. Sig. : Apply frequently on compresses.

Also :

℞ Cocaine,	-	-	-	-	gr. ijss.
Ext. rhatany,	-	-	-	-	gr. xv.
Ext. hamamelis,	-	-	-	-	gr. vij.
Petrolatum,	-	-	-	-	ʒv.

M. Sig. : Apply freely.

Dr. Buckley recommends the following, and the author can testify to its merits :

℞ Ungt. picis,	-	-	-	-	ʒiij.
Ungt. belladonnæ,	-	-	-	-	ʒij.
Tr. aconit. rad.,	-	-	-	-	ʒss.
Zinci oxidî,	-	-	-	-	ʒj.
Ungt. aquæ rosæ,	-	-	-	-	ʒiij.

M. Sig. : Apply freely.

The writer has cured several patients by injecting cocaine under a small portion of the skin where it is thickened and then cauterizing it with the actual cautery. After healing has taken place, another area

is treated in the same way. This makes the parts quite sore, but not more than is bearable, and most patients are willing to put up with it if it is likely to cure them.

While the principal attention should be paid to the skin in order to get relief from the itching, yet measures should be taken to cure the catarrh in the bowel above by having the patient wash out the bowel with solutions of boracic acid and then injecting a 25-per-cent. mixture of glycerite of hydrastis (not fluid extract). Other antiseptic astringent solutions may be used, such as would be beneficial in cattarrhal conditions in other parts of the body.

Owing to the difficulty experienced in effecting a cure in some of the chronic cases that have come to him for treatment, and being anxious to try anything that held out any hope of cure, the author was led to try the Roentgen rays. While his experience has not been great in the number of patients treated, it has been so satisfactory that not only himself but his patients have been delighted with the result.

THE SERUM TEST IN HEREDITARY SYPHILIS.

According to the usual teachings, hereditary syphilis may result either by paternal or maternal transmission or from both these sources. It is generally taught, too, that the mother not only may pass on her own syphilis to the fetus, but that she may also be the means, as it were, of transferring virus without herself appearing to become infected. In the latter instance, in the light of our present knowledge of the etiologic role of the *Spirochæta pallida* in syphilis, it would be reasonable to assume that the semen from the syphilitic father is not in itself infectious but carries the spirochete which then perhaps might enter the ovum at the same time as the spermatozoon. There is, much, however, that favors hereditary syphilis always being the result of syphilis in the mother. Thus, for instance, Welander in Stockholm has not seen a single case in which there was any probability that a woman free from syphilis gave birth to a syphilitic child. Another author (Edmanson) found that in 345 congenitally syphilitic children he could determine syphilis in 343 of the mothers and he concludes that the mother is the source of congenital syphilis. Matzenauer of Vienna expressed himself as being of the same opinion. This being the case, what about Colles' law?

Recent applications of the Wassermann test for syphilis to newborn children suspected of being syphilitic and to their mothers appears to throw some light on the question. Thus Bauer found that of 201

new-born infants and nurslings examined at random, twenty-two gave a positive result with the Wassermann test; in all the cases that appeared clinically to be congenitally syphilitic the reaction was positive. His tests further showed that mothers of distinctly hereditary syphilitic children, although themselves apparently well and free from symptoms and without any history of infection gave a positive reaction. Consequently there seems to be strong reason to conclude that the immunity of the mother postulated by Colles' law in reality does not exist, the mother, on the contrary, being the subject of latent syphilis. While it might be possible that soluble poisons from a paternally infected fetus could pass back to the mother and stimulate in her the formation of immune bodies, and while it is also possible that antibodies might pass directly from the fetus to the mother, we have no analogies of such occurrences so far as we know in other infections.

There is another law usually mentioned in connection with hereditary syphilis, namely, Profeta's law: When a woman suffering from syphilis in its contagious stage bears a child which shows no taint, that child may be suckled by its mother with impunity and will not contract the disease from her. This so-called law is not without exception. The serologic test here also has given results which indicate that apparently or nearly healthy children may have latent congenital syphilis, as the serum of seemingly healthy children of syphilitic mothers may give a positive reaction with the Wassermann test. On the whole, it would seem as if latent syphilis in the woman is the reason for the maternal immunity described in Colles' law, and that latent syphilis in children explains the instances of immunity in the offspring of syphilitic mothers covered by Profeta's law.

In case the Wassermann reaction continues to receive the credit at present accorded to it, so far as reliability is concerned, it no doubt will prove of great importance for the crucial examination of wet nurses and of nurslings as to their freedom from syphilis because it seems able to reveal the disease when all clinical symptoms are absent. By its means some light may be thrown also on the disputed question of syphilis in the third generation. But before final conclusions can be drawn from the results obtained with it, it will be necessary for us to know more definitely than we do at present the nature of the bodies in the serum of syphilitic patients that inhibit hemolysis by fixing the complement. It is not at all certain that these bodies are true antibodies for the syphilis germ, as is so generally taken for granted at present. *Jour. Am. Med. Association*, 7 November, 1908.

GYNÆCOLOGY AND ABDOMINAL SURGERY.

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

ACUTE DIVERTICULITIS OF THE SIGMOID, WITH OPERATION BEFORE RUPTURE.

G. E. Brewer, New York, (*Journal of the American Medical Association*, August 15, 1908), reports a case of diverticulitis of the sigmoid, the first in which diagnosis was made and operation performed before the occurrence of rupture, and the only one recorded in which the patient survived two operations for this condition. In the first attack there was a localized abscess, but the patient recovered and remained well over five years. In such cases Brewer would lay down no general rules of technic, but if the diverticulum is large, attached by a broad base or covered with a plexus of enlarged vessels, the safest method, he thinks, would be extra peritoneal drainage, as chosen in the case reported. If, from the situation, this is impracticable, he suggests packing with gauze and leaving it in place for from 48 to 72 hours or until firm adhesions have formed, then removal of the gauze and free opening of the abscess, allowing it to drain through the channel thus formed.—*Am. Jour. of Surgery*, October, 1908.

HERNIA OF THE APPENDIX. REPORT OF TWENTY-ONE CASES.

W. B. De Garmo, (*The Post-Graduate*, August, 1908), says that considering the great variety of positions in which the appendix is found, it is not in the least surprising that it should be the occasional occupant of a hernial sac. The condition is probably more common than is supposed, as many of these appendices are probably reduced where the patient assumes the recumbent posture for operations. Extreme sensitiveness, either in the tumor or surrounding parts, during the manipulation of the hernia, should always cause the surgeon to suspect that there is some condition present other than the hernia.

In the majority of instances where the appendix is found in a hernial sac, the pathological condition of the organ is such that its removal is necessary. Although there may be objections to doing an appendicectomy through a hernial wound, as a rule the colon has dropped down enough to make the procedure a comparatively easy one. In only one case was the author unable to do the operation this way—*Am. Jour. of Surg.*, October, 1908.

The reviewer has frequently, and without special difficulty, removed the appendix through the incision for right herniotomy. He thinks it better to enlarge, if necessary, the hernia incision, than to make a special one for the appendectomy.—*S.M.H.*

URETEROVESICAL IMPLANTATION.

R. L. Payne, Jr., Norfolk, (*Journal A. M. A.*, October 17), reports two cases of unilateral fistula successfully operated on by uniting the lower end of the ureter with the bladder by a new method. The ureter was split up on two sides, thus forming separate flaps which are drawn down through an incision into the bladder by traction sutures and fixed on each side of the vesical incision. As regards the method of approach to the ureter he prefers the extraperitoneal route, making the lumbo-ilio-inguinal incision from a point one-half inch below the last rib and at the outer margin of the erector spina muscle and running obliquely downward, parallel with the last rib, to a point one-half inch inside the superior iliac spine. The incision is then prolonged downward parallel with Poupart's ligament by cutting with scissors, while the peritoneum is separated with the forefinger. Though long, this incision cuts few important structures and the shock is small compared to that of any intra-abdominal operation. The bladder is pulled upward to meet the shortened ureter and the bladder is then cut on the point of a male sound. The needles carrying the traction sutures are passed down through the incision and made to pierce the bladder from within out, at a point distant from the margin of the incision equal to the length of the flaps. The traction sutures are then tied and the anastomosis completed by vesical-ureteral sutures. The resulting opening into the bladder is larger than the caliber of the tube and there are around it no sutures or mucous margins to cicatrize and contract. He is satisfied also that the union of the flaps to the mucous membrane of the bladder is complete. The danger of stenosis is avoided by this method, and Payne does not believe that there is any special danger of ascending infection. The site of the implantation being at the summit of the bladder, regurgitation is less likely, and he thinks that its role in subsequent infection in these cases is small, and in his cases reported the conditions cleared up satisfactorily. It is reasonable to believe, he says, that vesical contraction would produce a valve-like constriction of the ureter, preventing regurgitation. In his first case reported, it was found, after the anastomosis had been made, that there was a strain on the shortened ureter. Fearing to leave it this way, on account of danger of its tear-

ing out, as well as other reasons Payne proceeded to lower the kidney a sufficient distance and fixed it so as to relieve the strain. This, he thinks, is the first time this operation has been done for this purpose in the human subject.

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty
McGill University, Montreal.

THE CUTANEOUS AND OPHTHALMIC TUBERCULIN TEST IN INFANTS UNDER TWELVE MONTHS OF AGE.

H. L. K. Shaw, in *Archiv. of Ped.* Nov., 1908, states that Von Pirquet employed cutaneous vaccination in 147 infants under three months of age, and obtained no reaction. Out of three children between three and six months old three reacted positively. Sperk vaccinated with tuberculin 159 infants under five months of age and obtained no reaction. Aronade vaccinated 47 infants under twelve months of age, reaction being obtained only in one, who was suffering from tuberculosis of the knee. Only seven of these babies were healthy infants. Falude vaccinated 195 new-born infants and their mothers with a 25 p.c. solution of tuberculin, obtaining 126 positive reactions in the mothers and not a single reaction in the babies. Freer got no reaction in 70 infants under six months, but in 42 cases between six and twelve months he obtained three reactions.

Langstein, in 100 vaccinations under twelve months of age, had only one positive reaction. The child died and the autopsy revealed tuberculosis. Cannata obtained no reaction in 70 infants under six months of age, but three reacted out of 42 between six and twelve months of age. Bruckner reports three positive reactions out of 31 infants, all three showing positive signs of tuberculosis. All these observations were with the cutaneous test.

The author obtained tuberculin prepared from the bovine type. He made two series of tests on infants under twelve months of age, at St. Margaret's Hospital, Albany. The first series was on 47 infants, 14 of them being five months of age. In this case human tuberculin in a dilution of 1-100 and 1-200. Neither gave any reaction when dropped into the conjunctiva.

Later, the same infants were subjected to cutaneous vaccination, human tuberculin being employed. One case showed slight reaction. The child was suffering from empyema, with a discharging sinus. The pus was injected into a guinea pig, which died a week later of tuberculosis.

Later, in the same institution, 34 infants, 16 of whom were under five months of age, had one drop of a 1 p.c. solution of bovine tuberculosis instilled into the left eye, and a drop of 1 p.c. solution of bovine into the right eye. No reaction occurred in either eye. Vaccinations were also made with both types of bovine with no reaction. A drop of full strength bovine tuberculin instilled into the eyes of four infants produced absolutely no irritation. One of these babies, aged 3½ months, subsequently died and the autopsy revealed acute malaria tuberculosis.

The status of both these tests seems to be secure, and in older children and adults they are most important aids to diagnosis. In young infants they cannot be said to be as reliable.

The autopsies on infants by Czerny, Binswanger and Hamburger show that of 1,002 autopsies on infants under three months of age, tuberculosis was found in 23, or 2.3 p.c.; in 542 autopsies on infants of four to six months of age, tuberculosis was found in 62, or 11.1 p.c.; and in 463 autopsies on infants between 7 and 12 months of age, tuberculosis was found in 92, or 19.9 p.c.

The published statistics show that less than 1.5 p.c. of all infants under twelve months of age reacted to either test or either type of tuberculin.

PERSONAL OBSERVATIONS IN SCARLET FEVER.

Charles G. Kerly, *Jour. A.M.A.*, Oct. 24th, 1908, claims to have seen in institutional and private work over 500 cases of scarlet fever.

He records facts, proving the disease is both contagious and infectious. He has rarely seen a case in which incubation has lasted more than seven days. If an exposed child passes the ninth day without signs of the disease, it is safe.

The disease is rarely met with in children under six months. He mentions the case of four nurslings detained for ten months in a scarlet fever ward, the mother of one suffering herself from the disease. The infants thrive and grew fat and failed to develop any infection.

Fever and angina are the most common symptoms. He thinks the angina is peculiarly valuable in enabling one to make a diagnosis in doubtful cases. He has seen but few cases without a distinct angina, and no cases without angina when a characteristic rash was present.

Desquamation is subject to wide variations. Some cases seem to escape it altogether, while others with little or no rash, subsequently desquamate freely. He mentions one case in which a boy of six years had two attacks of scarlet fever within three months. The first attack

was moderately severe and was followed by free desquamation. The second attack was of unusual severity and the boy died.

The author then discusses the management of uncomplicated cases. He gives milk considerably reduced with cereal concoctions or not at all. He prefers thin gruel and milk soups to which enough animal broth is added to give it a pleasant taste.

The urine should be examined daily.

All cases should be sponged over the entire body with cold, cool or lukewarm water, depending upon the body temperature. After sponging, the patient should be oiled with liquid petroleum or cold cream.

The throat, ears, glandular system, and heart should receive daily inspection.

In all cases of pronounced angina, chlorate or potash internally, and peroxide of hydrogen, in the form of sprays or gargles, are recommended. In cases of severe angina, with false membrane, the throat is irrigated with hot salt solution at a temperature of 120° F., the child being placed on its right side, without a pillow for the purpose.

Swollen glands are best treated by cold sponging and packs. He has seen no evil results. In most cases the cool pack is most advantageous. The child is wrapped in a towel which is moistened with water at 95° F. Every three minutes it is re-moistened with water 5° colder each time till 80° F. is reached. It is kept at this temperature for one-half hour when the temperature is again taken. If the patient's temperature is not reduced, the temperature of the water is reduced to 70°, or, if necessary, 60° F. The pack must be kept up for 72 hours. The patient's temperature should be taken every half hour during the first hour or two. In cases readily controlled the pack may be necessary for only one half hour or one hour intervals of three or four hours.

An ice bag, with advantage, may be kept at the head when the child is in the pack.

TRAUMATIC RUPTURE OF THE UTERUS AND BLADDER DURING LABOR AT FULL TERM. HYSTERECTOMY, REPAIR OF BLADDER AND RECOVERY.

J. Y. Brown and P. H. Swahlen, (*Jour. A.M.A.*, Oct. 24th, 1908), give the account of a patient, a multipara, 29 years of age. She was attended by a midwife for the first 30 hours of labor, and then two physicians endeavored to extract the child with forceps. Failing, a specialist was called who, on examination, found the os not completely dilated, the fetal head above the brim, with a large caput. Internal version was performed, in the course of which the fetal head was felt to

have passed through the uterine wall into the abdominal cavity. Vaginal hæmorrhage was slight.

The patient was removed to the hospital and the abdomen opened, permitting the escape of a large quantity of blood and amniotic fluid. The child was delivered through the abdominal wound.

There was a tear in the lower uterine segment extending around the cervix and up into the body of the uterus. Both uterine arteries were bleeding. The bladder was ruptured. The uterus was removed above the cervix, the stump being covered with peritoneum. The bladder was repaired with two layers of silk suture. The convalescence was uneventful.

The pelvic measurement showed the patient to have suffered from a moderate degree of pelvic contraction, the condition present being a generally contracted flat pelvis with an external conjugate of 17 c.m.

URINARY INFECTION IN CHILDREN.

John Zahorsky has seen in a little over two years (*Pediatrics*, Sept. 1908), forty-six cases of urinary infection in infants and children, chiefly in private practice. He considers urinary infection a very common disease and states that it is usually overlooked or mistaken for some other condition, such as malaria and dentition.

The route of the bacterial invasion is by no means settled, though the fact that the disease occurs most frequently in girls suggests infection through the urethra.

The condition may arise probably as a result of injury to the rectum in consequence of constipation. In several of the cases coming under the author's observation a small vaginitis preceded the cystitis. As a rule it is impossible to decide whether the bladder only or the pelvis of the kidney is affected.

The author states that in the vast majority of his cases no casts could be found, and he is inclined to consider that the disease is limited to the bladder.

One of the author's cases died of the disease at eight months of age. The baby died suddenly with a temperature of 107°, after an illness of about two weeks. The autopsy revealed no disease in the renal organs except in the urinary tract, which, from the pelvis of the kidney to the urethral openings, showed congested and pigmented areas. There were minute circular areas denuded of epithelium throughout the whole tract, which varied in depth from superficial erosions to deep, punched-out ulcers. A bacillus, corresponding in character, to the colon bacillus, was present.

He describes three clinical varieties in his cases. The first is a febrile form with or without symptoms referable to the urinary organs. The fever may be remittent or continuous. One characteristic of it is the absence of any great systemic depression.

Thus the author concludes that in every case of fever in infants and children, the cause of which is not determined in a physical examination of the body, a microscopical examination of the urine should be made.

In the second class of cases which is often a sequel of the febrile form, there is malnutrition, fatigue, pallor, nervousness and steady loss in weight.

The third form is characterized by urinary incontinence developing suddenly, though usually preceded by some febrile movements.

All the cases showed remarkable tendency to relapses, the relapses being favoured by the other infectious diseases.

The author's treatment consisted of the administration of large doses of hexamethylenamine combined with alkalies. It must be remembered that this drug will cause hematuria if continued too long or in too large doses. The author advises its administration for two days and then its discontinuation for two days.

Of the forty-two cases coming under the author's observation three occurred in the male and thirty-nine in the female sex. The onset was gradual in twenty-two cases and sudden in twenty cases. Six of the cases were under six years of age, and nine of them were between six months and one year. Of those under one year of age only two of them were breast fed. The length of the disease is measured by the pus in the urine, varying from five days to eight months. As a rule more pus corpuscles could be found in the urine for two weeks, even two or three days after the subsidence of the fever.

APPENDICITIS OCCURRING IN THE NURSING.

E Stéphan, *Thèse*, Paris, 1907, contends that appendicitis is not uncommon in the first two years of life. It is more common during the first six months of the first year and the last six months of the second year. We have not been able to determine why it is almost absolutely absent between the eighth and fourteenth months. The author has been able to collect fifteen cases after the first year and eighteen cases during the second year; therefore, appendicitis is apparently slightly more frequent during the second year of life. Among the causes of the disease in this period of life may be mentioned the infectious diseases and gastro-intestinal disturbances.

The appendicitis of the nursing may have a sudden onset or its onset may be marked by gastro-intestinal disturbances. In one or the other case, its evolution is unusually rapid. Without remission, diffused peritonitis quickly develops, and this is the more common the younger the patient. The safety of the patient lies in operation. Immediate operation is indicated. No recoveries have occurred before the eighteenth month. *Surgery Gynaecology and Obstetrics*, September, 1908.

ELECTRO-THERAPEUTICS AND RADIOLOGY.

Under the charge of JOHN STENHOUSE, M.A., B.Sc., Edin., M.B., Tor.

X-RAYS IN CHEST AFFECTIONS.

A. L. Gray, (in *New York Medical Journal*, December 5th, 1908), points out the value of X-rays in chest affections. The early diagnosis of thoracic aneurysms enables the physician to modify the habits of the patient and thus prolong his life. Thus, a thoracic aneurysm was found in this way in a woman in the sixth month of pregnancy, and she was saved from sudden death by the early induction of miscarriage.

In pleuritic effusions the level of the fluid shows distinctly in the radiograph. Fluid gives a denser and more diffuse shadow which obscures the ribs.

In localized effusions a distinct wall of thickened pleura may be seen enclosing the fluid. Pus throws a deeper shadow than hydrothorax, and shadows of the ribs are often entirely obliterated.

In pneumothorax the normal lung shadow is absent. Abscesses show as very dense, generally single areas, shading gradually into the lung tissue.

Tumors of the lungs have a more or less irregular outline and are distinguished from abscesses by the absence of fever, and by the result of the blood examir .

In early tuberculosis the X-ray has recently been shown of the greatest value. Cases which exhibit no special physical signs frequently give clear evidence of tuberculosis in the skiagraph, especially when the picture is made by those machines which are capable of taking an instantaneous photograph while the breath is held; the smallest areas of consolidation, isolated tubercles, minute calcified glands are plainly seen. Cavities may also be determined and the healing or advance of the disease may be shown by pictures taken at different times.

LIGHT IN TUBERCULOSIS.

In *The Boston Medical Journal* of December 3, 1908, J. Frank Wallis gives an account of the results of light treatment in tuberculosis. It was Professor Finsen, who proved that the sunburn was not produced by the heat of the sun, but by the actinic rays. Kellogg showed that there is an increased production of carbonic acid under the action of light which, by its action upon the circulation of the skin, depletes the congested abdominal organs and stimulates the oxygen-storing capacity of the red corpuscles.

Fraudenthal, in his experience with tuberculosis, claims that the light of the arc lamp improves nutrition and aids in the elimination of exudate, relieving pain and greatly facilitating expectoration.

Margaret Cleaves reports a chronic tuberculous ulcer of the larynx healed in two weeks after having only five exposures to the electric arc.

X-RAYS IN EPITHELIOMA.

G. E. Pfahler, of Philadelphia, writes in the *Journal of the American Medical Association* of Nov. 21st, 1908, on the action of X-rays in the treatment of epithelioma. For practical purposes he divides them into five classes.

Class 1. Superficial Epitheliomata, which is the early condition, may often be cured in from six to twelve treatments, extending over two or three months. These treatments are best given at the intervals of a week and should yield 100 per cent, of cures. A soft tube about one-eighth of an inch from the skin is used for from five to ten minutes; the surrounding skin is, of course, protected.

Class 2. Superficial Epitheliomata, associated with senile keratoses. These are frequently multiple and are associated with precancerous keratoses. Such patients do not react so well, and hence require milder exposures at shorter intervals, lest a severe dermatitis should be set up.

Class 3. Pearly Epitheliomata. These show a circular or pearl-like elevation surrounding a soft central white scar. The outside elevated ridge gradually spreads while the central portion heals. These are of slow growth and not very malignant, but require more than the other varieties. The healed centre may be protected while the border is treated with a soft ray.

Class 4. Deep Ulcerating Epitheliomata. Here the deeper tissues are involved, and the edges and bases are frequently indurated. They often consist of recurrences, following excision or the application of caustics. If they occur on the trunk or limbs, where excision or amputa-

tion is possible, this should be done at once, and followed by Roentgenization of the glandular area. While giving much relief, the X-ray only occasionally cures such cases.

Class 5. Epitheliomata of Mucous Membranes. These frequently involve the lower lip, the inner surface of the cheek, vagina, glans penis and other mucous surfaces, and should be immediately and thoroughly excised with subsequent treatment of the glandular area by the X-ray.

THE USE OF THE X-RAYS IN THE DIAGNOSIS OF APPENDICITIS AND SOME OTHER ABDOMINAL CONDITIONS.

Wm. H. Bennet, London, (*Lancet*, May 23rd, 1908), reports a number of cases, all of which presented symptoms simulating those of appendicitis, in which an x-ray examination revealed the true condition to be a stone in the ureter. He therefore believes that in all cases of abdominal pain or discomfort, unless the diagnosis is obvious, an x-ray examination should be made before the patient is subjected to an exploratory operation. Stones in the ureter are not the only condition that may be found; the x-ray plate may show caseous tuberculous glands, new growths of bone, etc. The author feels convinced that if this procedure is resorted to, cases of recurrence of symptoms after appendicectomies will be less frequently reported.—*American Journal of Surgery*, August, 1908.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. Karl H. Van Norman, was in Toronto from London, England, for a brief visit.

The hospital by-law was carried in Toronto by a majority of 4,934. The votes for and against numbered respectively 12,119 and 7,185.

The Port Arthur Marine and General Hospital asks the approval of the Legislature for the issue of debentures to the amount of \$35,000.

The voters in Hamilton rejected the by-law asking for \$30,000 for the hospital.

The by-law to appropriate \$5,000 for a consumptive hospital in London was carried by 1,038 majority.

Dr. Hincks, who graduated from the University of Toronto in 1907, has located in Campbellford.

Dr. D. Marr, of Ridgetown, has been appointed an associate coroner for the County of Kent.

Dr. E. Fidler, a Toronto graduate of 1907, has been appointed pathologist to the State University of Minnesota.

Professor A. B. Macallum, of the University of Toronto, had the degree of D.Sc. conferred on him by Trinity College, Dublin.

Dr. J. M. Park, of Marshville, was married recently to Miss Hutchison.

Dr. Herbert Walker, of Bealton, was married in Dunnville to Miss Taylor.

Dr. Paul L. Scott, of Toronto, was recently married to Miss Wilson, B.A.

Dr. W. O. Stewart, who has practised for many years in Guelph, was married at St. Catharines to Miss Sheppard.

The wedding of Dr. G. A. Winters, of Toronto, and Miss McFarlane, of Montreal, took place in the latter part of December.

Dr. G. E. McCartney, of Fort William, was visiting his parents, Rev. Mr. and Mrs. McCartney, 90 Wells street, during January.

Smallpox has been very prevalent in many places during the past months, due to neglect of vaccination.

Dr. McDonagh, of Toronto, has gone on a trip to South America, He will be absent for about three months.

Subscriptions to the H. C. Hammond Endowment Fund has put the amount over \$50,000. This is a good testimonial to a good cause and in honor of a worthy man.

Dr. E. C. Dickson, who was for some time one of the internes at Johns Hopkins Hospital, Baltimore, has been appointed assistant pathologist at the Leland-Stanford University, San Francisco.

Dr. John Caven left Toronto for Naples on 20th January. His many friends wish him a pleasant voyage and an improved state of health on his return.

Dr. John Caven and wife were on board the wrecked Republic. Their many friends congratulate them on their escape from the sinking ship.

Dr. K. H. Van Norman, sometime house surgeon in Toronto General Hospital, after spending a year in Britain, has gone to Germany to take up further post-graduate work.

Dr. A. E. Howard, late house surgeon in St. Michael's Hospital, Toronto, is acting as surgeon on the Empress of India, sailing between Vancouver and Japan.

Dr. E. C. Wilford, a recent graduate of Toronto, is going to China as a medical missionary. He is now in Edinburgh doing some post-graduate work.

Dr. Percy W. Howard, of the Class of 1902, is now acting as pathologist in the city of London Hospital for diseases of the chest, London, England.

Dr. Robert H. Sheard, Grosvenor street, has sailed from New York by the *Campania* to take up post-graduate work in the London Hospital.

It is understood that Dr. Gilbert H. McIntyre, member for South Perth, will be named as Deputy-Speaker of the Commons on the opening of the session.

The Cobalt Red Cross Hospital is doing good work. It is a two-storey frame building with large verandahs. It has an active board of directors. There is accommodation for about 40 patients.

Dr. James H. Richardson has sent in his resignation as surgeon to the Toronto Jail. He has held the position for 50 years, and during that long time no word of complaint has been heard.

The River Thames is cutting into the embankment at the rear of the Victoria Hospital, London, Ontario. Some prompt action will be required in the matter.

Dr. Peter Macdonald, for many years member for East Huron, and Deputy Speaker, from 1900 to 1904, has been appointed postmaster of the city of London, in succession to the late John Cameron.

Plans have been completed for the organization of a Tuberculosis League for the treatment of tuberculosis patients. The medical profession has already secured promises for seven thousand dollars and a site of five acres on which to erect a sanatorium.

Some time ago the Meredith family, of London, gave \$7,600 to the Victoria Hospital to remodel the old building suitably for a free dispensary. The work has been completed, the same family now gives \$850 to furnish it.

Dr. George H. McLaren, late Resident Surgical Officer, Birmingham Eye Hospital, and Inspector of Ophthalmic Hospitals for Egyptian Government, desires to announce that he will confine his practice entirely to diseases of the eye, 129 Bloor Street E., Toronto.

Dr. Sheard, Medical Health Officer for Toronto, has asked for \$60,000 for a new wing to the Isolation Hospital. Ald. Foster suggested a second Isolation Hospital in the western part of the city, while Mayor Oliver thought it would be better to have one large hospital in the northern portion of the city for all infectious cases.

In his annual report to the Board of Health for Hamilton, Medical Health Officer Dr. Roberts stated that there were during the year 1,200 cases of contagious and infectious diseases, reported to him. There were 112 deaths from these diseases, and eighty-four were due to consumption. This is largest death rate from consumption since 1902.

The first letter opened at the Hospital for Sick Children on New Year's morning contained a cheque for ten thousand dollars, a Christmas and New Year's gift combined from Mr. J. Ross Robertson, the chairman of the hospital. The hospital is behind on maintenance account \$50,000, and this gift, which the institution gratefully acknowledges, has come just at the time when it was most needed.

Dr. N. A. Powell, professor of medical jurisprudence and associate professor of clinical surgery, has been appointed senior assistant surgeon in connection with the emergency ward of the new General Hospital, Toronto. It is expected that the plans for the new building will be completed during the winter and that actual work will be commenced next summer.

The medical health department will require \$48,743, as against an expenditure of \$41,502 last year. This sum includes \$9,000 for small-pox, as compared with \$8,900 last year. For the Isolation Hospital \$27,391 is asked, and \$60,000 additional for the erection of a new wing to provide increased accommodation. The total increase over last year's estimates is \$7,000. This includes \$1,200 for the new morgue and increased ambulance service, and \$6,000 for medical inspection in the newly-annexed districts.

Following up the resolution of the Alumni Association to re-erect at a cost of \$1,500, the memorial window to Mewburn, Mackenzie and Tempest, the students who fell at Ridgeway. Subscriptions sent to H. H. Langdon at the University of Toronto. In order that as many graduates as possible should be represented in the good work the subscription from each has been limited to not more than \$5. As the window is now in course of construction in accordance with design approved by the Committee to be placed in the East Hall of the Main University Building, it is necessary that the fund should be completed at as early a date as possible.

QUEBEC.

Dr. Kennedy has been urging before the Dental Society the necessity for the regulation inspection of the teeth of school children.

Sir Hugh Graham has contributed \$10,000 towards the cost of building the Children's Memorial Hospital, in Montreal, in commemoration of Miss Sarah Maxwell, who lost her life in a burning school in her efforts to save the children. The total subscriptions received amount to \$27,000, which is enough to complete the building.

In *Le Journal de Medicine et de Chirurgie*, (Montreal), a plan is outlined for the management of the tuberculosis problem in Canada. A central committee should be formed composed of physicians, philanthropists, business men, etc. This committee would aid in raising funds for the

relief of needy cases and the erection of suitable places for the treatment of consumptives. Provinces, cities, municipalities, companies and individuals would be asked to contribute annually a fixed sum. The funds collected in this way would be employed in aid of sanatoria, camps for consumptives, dispensaries, needed nourishment, etc. In this way it would be possible to overtake the ravages of the disease.

The Anti-Tuberculosis League, Montreal, has been in operation for five years, and during this period has, through its visitors, seen 11,005 patients, to whom care, clothing and nourishments have been furnished. One inspector has made 20,000 visits, and has disinfected 3,000 rooms. Of those coming under observation, 50 have been sent home to their own country, 180 have been sent to the Hospital for Incurables, 50 have been sent to the country, and 4,186 have died. In one year \$12,724 were spent in the work. The needs of the fight against tuberculosis are: A dispensary, a quinquennial census, a number of infirmaries, two inspectors, the co-operation of the churches, the co-operation of the municipal bureau of health, a sanatorium, another home for incurable cases on a farm, a proper distribution of charity, enforcement of the law regarding reporting, expectoration and disinfection, conferences in the schools and colleges, property owners who will not sacrifice the lives of their tenants in unhealthy houses for gain, and aid from the Government in the form of money, as donations are not sufficient.

MARITIME PROVINCES.

Dr. H. Kent, of Truro, has been in poor health for some time.

Drs. D. R. MacDonald and F. T. L. Ford have gone to London for a period of post-graduate work.

Dr. W. H. Eager has gone to London to be married to Miss Scarfe.

Dr. W. Mosher has been appointed surgeon to the Mimico in lieu of Dr. MacDoanald

Dr. A. T. Neader has returned from his trip to London, Edinburgh and Paris, and is looking much improved in health.

Dr. H. A. Abraham, who practised for some time at Kenora, has located in Newfoundland.

At the St John's Medical Society a short time ago, the President, Dr. Pratt, advocated that the medical library should be placed in the public library with suitable rules.

The proposed new Medical Bill for New Brunswick is calling forth a good deal of discussion. A committee has been appointed to look into its contents and report to the Medical Society.

Dr. A. P. Reid, Medical Health Officer for Nova Scotia, has gone to Mobile for an extended rest. His health has not been good, and he is going to spend the winter in the south.

It is proposed to establish in Nova Scotia and vicinity an Anti-Tuberculosis League. It was agreed to call a meeting for this purpose.

At the meeting of the Halifax Branch of the British Medical Association there was a lengthy discussion on the epidemic of diphtheria which has been present in that city for some time. A number of useful recommendations were drawn regarding steps that should be taken for the arrest of the disease.

At a meeting of the Halifax Branch of the British Medical Association a resolution was carried to the effect that the publishers be requested to send copies of *The British Medical Journal* printed on better paper than was now the custom.

The Halifax branch of the British Medical Association elected the following officers: President, Dr. J. P. Doyle; Vice-President, Dr. J. R. Costin; Secretary, Dr. T. C. Watson; Treasurer, Dr. J. M. Campbell; Executive Council, Drs. Ross, MacDonald, Roach, Woodbury, Matthews and Campbell.

The fire which broke out in the laundry of the Provincial Hospital for Nervous Diseases at Lancaster on the outskirts of St. John, N.B., a little before 6 o'clock on 5th January, caused damage estimated at from \$40,000 to \$80,000, and for a time threatened the total destruction of the series of structures which make up the institution where New Brunswick's insane are treated. There are 400 patients in the institution, and Dr. J. V. Anglin, the superintendent and his assistants so managed them that no life was lost, and but one man is known to have received injury, and that of a minor character. The fire gutted the centre wing, a three-storey structure, about 300 feet long, jutting out from the main building and in which were the boiler-house, and laundry, kitchen, chapel, attendants' rooms and one ward in which some twenty-five men patients slept.

WESTERN PROVINCES.

Fifteen candidates sat for the examinations for qualification to practice in Saskatchewan.

The bazaar in aid of the Children's Hospital in Winnipeg was a decided success.

The University of Saskatchewan proposes opening classes in Arts, Science and Agriculture next fall.

Dr. Charles Freeman, of Moosejaw, a graduate of McGill, will devote his attention in future to diseases of eye, ear, nose and throat.

Dr. C. C. Cragg, a graduate of Toronto of 1903, is now practising at Lethbridge, Alta.

Dr. J. E. Lehmann, of Winnipeg, and Miss Hillers, of Hesse, England, were married a short time ago.

The Department of the Interior has agreed to give the General Hospital Board of Calgary 15 acres of land, worth \$50,000, fronting the hospital if the city will close the street between the blocks.

The Victorian Order of Nurses in Winnipeg had a good year. The calls numbered 2,075. The income for the year was \$2,721. It was suggested that the society might seek incorporation. Mrs. Bryce stated that a grant from the Government might become a necessity if the work was to be done that was urgent.

The Provincial Board of Health for Manitoba has passed a strongly worded resolution calling attention to the danger to the health of the people by the erection of so many tenement and apartment houses in Winnipeg. The Board also held that there ought to be a better system of collecting the vital statistics of the province, and that the Board of Health should have charge of the matter.

The *Western Canada Medical Journal* says: "Our objects are (1) Register for Western Canada. (2) A National Register. (3) Proper Return of Vital Statistics in the West. This lack of proper return of vital statistics has a very bad effect on our standing in the world's eye—and the attempt to send rosy accounts or none shows there is room for progress. (4) To note if our Councils are faithful stewards of our interests."

BRITISH COLUMBIA.

Dr. W. H. Lang, formerly of Taber, Sask., and Dr. Proudfoot, of Montreal, have passed the examination for registration.

Dr. J. C. Davie, of Victoria, is ill with an attack of cerebral hemorrhage.

It is thought that a hospital, to be named the Royal Columbia, will be commenced in the spring at New Westminster.

A strong demand is being made for better medical service in the various camps of the G.T.P. construction.

Dr. F. M. Campbell has removed from Rossland to La Crosse, Washington State.

FROM ABROAD.

The Royal College of Surgeons of England have decided not to admit women to the privileges of membership.

Dr. Rosswell Park, of Buffalo, was banquetted recently by his friends in honour of his 25th anniversary as a teacher of surgery.

Dr. William Warren Potter was elected chairman of the Board of Examiners for the State of New York.

Dr. Charles A. L. Reed, of Cincinnati, has received the decoration of Chevalier of the Legion of honor of France.

Dr. H. E. Roaf, a graduate of Toronto, and now connected with the University of Liverpool, was married to Miss Herdman, of that city.

The late Henry Chapman, London, has bequeathed £120,000 to the King Edward Hospital Fund.

Dr. M. U. Popoff, the eminent Neurologist of Tomsk, died a short time ago. He was widely known as an author.

The Nobel Prize Committee have divided the prize for medicine between Professor Metchnikoff, of Paris, and Professor Paul Ehrlich, of Franfort-on-Main.

Dr. Charles Edward Beevor, died in London on 4th December, 1908. He was a noted authority on diseases of the nervous system. He was in his 54th year.

At an inquest in London, the parents of a child, who had died under a system of treatment by prayer, were convicted of manslaughter. The child died of pleurisy with effusion.

The Privy Council of Great Britain is promoting a bill to the effect that a general anaesthetic cannot be administered by any other than a regularly qualified medical practitioner.

In *The Medical Times*, (London), the statement is made that in the United Kingdom the number of births for 1907 was 1,148,573, while the deaths were 678,822, or an excess of births over deaths of 469,751.

Johns Hopkins University received \$750,000 from Mr. Henry Phipps. The money is for a four-storey addition to the hospital, and also for a chair in the University.

The sixth annual dinner of the Medical School for Women, London, was held a short time ago. The attendance was large and the function a very successful affair.

The Lancet, (London), reports the results of its analysis of 13 anti-opium cures to the effect that 10 of them contained morphine. Such acts of deception and fraud should be stopped by legislation.

Dr. Alexander Robertson, who held the chair of Practice of Medicine for many years in St. Mungo's College, Glasgow, died recently in Glasgow.

About sixty students and an equal number of policemen were injured in the recent student riots. The examinations, which were the cause of the trouble, have been withdrawn.

Medical matters are badly mixed up in Britain. The universities grant degrees and the various colleges licenses. The holders of the latter find themselves badly handicapped when applying for appointments.

Sir Charles Cameron said to the Women's National Health Association that the backbone of the Tuberculosis Bill was compulsory notification. If this was taken out of the bill what would be left would be of little value.

At the Berlin Medical Society, Dr. Rosenthal showed a patient who had suffered from a severe attack of syphilis and who did bear mercurial treatment. The case was successfully treated by subcutaneous administration of arsenic.

In a recent article in *Wiener Medizinische Wochen*, Dr. Otto Schmidt holds strongly to the view that malignant tumors are caused by a micro-organism of the mycetozoa group. The organisms reach cells of an alovistic poorly differentiated type.

The discussions now going on in the United States go to show that the Emmanuel movement is likely to do more harm than good. *The Boston Medical and Surgical Journal* regards the establishment of a church clinic, presided over by its pastor, as an anomaly.

The methods of mosquito destruction in the canal zone are fumigation, use of crude petroleum, use of larvacides, use of open ditches, blind drains, filling, tilling and clearing of jungle. By these means malarial fevers have been greatly reduced.

The general Medical Council for Great Britain has taken a great step onwards. It has adopted the course of appointing a Royal Commission on quacks and quackery. Sir Donald MacAlister has advocated this course.

Dr. Harold B. Wood, in *New York Medical Journal*, gives an account of an epidemic of scarlet fever which arose from one case, and was carried by means of milk from an infected dairy. There were 16 cases in 13 families.

In the *British Medical Journal* we learn that the broken bristles from tooth brushes may cause appendicitis. Should this frighten people from using too stiff bristle brushes, it would be a boon to the teeth oftener than to the appendix.

The struggle goes on between the Members and the Fellows of the Royal College of Surgeons, England over the demand of the former for some representation on the Council. The Fellows have steadily opposed this request of the members.

There is an active agitation being carried on by the reforming party in Turkey for many important sanitary improvements in Constantinople. The Government is very poor, however, and the needed improvements may come slowly.

On 10th January, Sir Arthur Conan Doyle, the well-known doctor and author, underwent an operation for a painful but not serious condition. Information to hand points to a satisfactory progress of the case.

The Medical Directory for Britain for 1909 gives 39,703 names. Of this number there are residing abroad 5,009, while the naval, military and India services show 3,303 entries. It will thus appear that there are left 27,391 as engaged in practice in Great Britain and Ireland.

Drs. Guthrie Rankin and R. V. Moon, in an article in *The Lancet*, (London), are inclined to hold to the view that the cause of Acromegaly is some morbid change in the pituitary body. The duct may become obliterated and the secretion absorbed into the lymphatic circulation.

Dr. Argyll Robertson, the eminent ophthalmologist, died at Gondal, in India, in his 72nd year. He retired from practice some years ago, and settled in Jersey. Last fall he started for India on a visit. Though retired from practice, he kept up his interest in ophthalmology.

Mr. Charles Coppinger died recently in Dublin. At one time he was Professor of Physiology in the Catholic University Medical College. He then became surgeon to the Mater Misericordiæ Hospital, where he was very popular as an operator and clinical teacher.

The Eugenics Education Society had an important discussion on the influence of marriages among first cousins. Miss Elderton showed by a careful study of statistics that first cousins should not marry unless both sides were free from hereditary taints. If these existed they became intensified by such marriages.

In a lecture on Ophthalmia, Neonatorum, Stephen Mayou, F.R.C.S., remarked that there were 7,000 blind persons in Britain from this cause; and the cost to the public of caring for these and educating them was £150,000 yearly. The gonococcus caused about 60 per cent. of the cases.

According to *The Medical Times*, medical inspection of school children is national in scope in England, France, Belgium, Sweden, Switzerland, Bulgaria, Japan, Argentine Republic, and nearly so in Germany. In the United States one hundred large cities and three hundred towns have some measure of inspection.

The German Reichstag has appropriated the following sums: For the fight against typhoid fever, \$48,000; for the investigation of syphilis, \$7,200; for the campaign against mortality in infants, \$9,600; for the fight against tuberculosis, \$28,800; for the investigation of industrial accidents, \$60,000.

Some progress is being made in the negotiations between the Royal College of Surgeons, England, and the Royal College of Physicians, London, on the one hand, and the University of London, on the other, to the effect that in future those who secure the qualifications of the conjoint board shall be entitled to the degrees of M.B. and B.S.

In South Africa there has been expended within recent years a vast amount of money in controlling malaria. Now the attention is being

turned to India on the same disease. Commissions have been appointed in every province to look into the best methods of dealing with the widespread evils of malaria throughout India.

There is a law in France that permits poor persons to apply to their own doctors for treatment and the latter may charge for their services to the public treasury. During the last seven years the amount of treatment given under this law has increased four times. Some doctors are accused of abusing the law and running unnecessary bills. A good thing may be sadly abused.

The progress in reducing the death rate from tuberculosis is shown by the recent reports for Scotland, Ireland, England and Wales. For each 1,000 the death rate was as follows: England and Wales in 1864, 3.3, in 1908, 1.6; Scotland in 1864, 3.6, in 1908, 2.1; Ireland in 1864, 2.4, in 1908, 2.7. It will be seen that in Ireland there has been an increase.

Sir Jonathan Hutchinson has recently been urging that the term, "Soft Chancre," should be discontinued. He contends that there are no definite means by which these sores can be diagnosed from the "hard sore." The absence of induration is guarantee that syphilis will not follow. Sores which are often regarded as typically soft chancres are really of the class which he speaks of as herpetic. One or more of these may become indurated.

The *Medical Record* took a good position recently when it held that in the medical, surgical and scientific work of hospitals such regulations should be laid down as would prevent lay governors from hampering those engaged in these services. The lay governor and a member of the staff are not master and servant, but comrades in the work. There should be good business men on the Boards and good doctors on the staffs.

The Old Age Pension Fund came into operation in Britain in the beginning of this year. Those entitled to share in the fund must be over 70 years old, and can draw from 1 shilling to 5 shillings a week, according as their present income varies from £31,105 down to nothing. It is reported that several aged people have died as the result of the excitement and expectancy due to the new change. The oldest pensioner yet reported is a lady 104 years of age.

Professor Klemperer, of Berlin, has adopted the method of feeding patients with pernicious anaemia on foods rich in cholesterine, as this agent lessens the tendency to hoemolysis present in the disease. He employs Arsacetin as a remedy likely to make red blood corpuscles. It is thought the disease may be protozoal in origin. The foods he depends on mainly are milk, cream, and butter, as these contain large quantities of cholesterine.

Two young lady doctors, Miss Pinto and Miss Correa, passed through a terrible experience during the flood that caused such fearful damage to Hyderabad, in India. These lady doctors had charge of the Victoria Zenana Hospital, and when they saw the waters rising around the hospital, along with the nurses, they removed all the patients to the flat roofs, and arranged what shelter they could. Before the rain ceased the roaring waters were within a few inches of the roof. All were saved.

Louis Bazy was assisting his father, a well-known surgeon of Paris, in the performance of an operation. Some pus was ejected from the wound into young Bazy's eye, but he continued at his duty and declined at once to care for his eye, and thereby risk the patient. After much suffering he lost his eye. President Fallieres, on hearing of the incident, sent for Bazy and conferred on him the decoration of the Legion of Honor. The President thought a wound received in the attendance on the poor was not less worthy than that received by the soldier.

OBITUARY.

A. T. STEELE, M.D.

The death of Dr. Alexander Thomas Steele, Associate Coroner for the county of Dufferin, Shelburne, took place on 28th December, 1908, at the residence of his father, Mr. Alexander Steele, principal of the Orangeville high school. Dr. Steele, who was but thirty years old, had practised for the past five years at Shelburne, after a distinguished career at the University of Toronto. The deceased, with his wife and two children, was in Orangeville spending the Christmas holidays, but in the afternoon was taken suddenly ill. The immediate cause of death was diabetes. Doctors Henry and Kyles were in constant attendance on the stricken physician, and Dr. Arnott of London, a cousin, came specially to visit him, but nothing could be done.

Doctor Steele married Miss Lizzie Barrell, of London, about five years ago.

W. J. McGUIGAN, M.D.

Dr. W. J. McGuigan, pioneer physician and former mayor of Vancouver, died of Bright's disease, 28th December, 1908. He was coroner and alderman many years. He enjoyed a very large practice in British

Columbia and was ever on the alert for opportunities to improve the standing of the profession in the far West. He took a very active interest in the various medical societies of his Province. His presence and advice will long be missed.

FRANCIS P. L. CANTILE, M.D.

Dr. Cantlie died in Montreal, on 10th November, 1908, at the age of 30. He was a graduate of McGill of the year 1907. Was one of the house physicians of the Royal Victoria Hospital for a year. For some time past he was in very poor health.

JOHN EASTON, M.D.

Dr. John Easton, the dean of the medical fraternity of Leeds and Grenville, died of paralysis at his home in Brockville, on 10th January, 1909, in his 88th year, after a short illness. From the time of his graduation from McGill in 1852 he practised his profession continuously till shortly before his death. For 28 years he was a resident of Brockville, coming here from Prescott, where he was actively identified with municipal affairs, both as a town councillor and member of the School Board. He was also a coroner of these united counties for many years. At one time he was in partnership with the late Senator Dr. Brouse.

Dr. Easton joined the Masonic Order in 1859 and was a Knight Templar for 40 years and a Mason of high standing generally. He is survived by his second wife, one daughter and two sons.

FRANK MIDDLEMISS, M.D.

Dr. Middlemiss died rather suddenly on 10th November, 1908, at his home in Berwick, King's County, N.S. He was the senior practitioner in that district, and enjoyed the confidence of a large circle of friends and patients. He graduated from Harvard in 1873, having studied under Holmes and Bigelow. He was gifted with fine qualities of both head and heart, and was in every gathering where he might be an interesting personage. He was a very hard worker and never refused to answer a call, however inclement the weather might be. Though a very busy man, he read a good deal of the best kind of literature, such as Carlyle, Byron, Burns, Hugh Miller, etc. He leaves a widow, three sons and two daughters to mourn his loss.

W. F. TEMPLAR, M.D.

The death of Dr. Templar, of Brantford, occurred suddenly on 8th January, 1909. The symptoms pointed clearly to an overdose of strychnine, which he administered to himself. It is not known whether by mistake or not. No inquest was held, as the coroner felt that no suspicion rested on anyone. The doctor when dying made the statement that he thought it was a scidlitz powder he was taking, whereas it had been the fatal dose of strychnine. There was no cause for suicide other than some worry over property.

BOOK REVIEWS.

INTERNATIONAL CLINICS.

A Quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pædiatrics, Obstetrics, Gynæcology, Orthopædics, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by W. T. Longcope, M.D., Philadelphia, U.S.A., with regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Volume IV. Eighteenth Series, 1908. Philadelphia and London: J. B. Lippincott Company. Price, \$2.25 for volume.

This volume contains clinical lectures on treatment, medicine, surgery, gynæcology, obstetrics, hygiene, neurology, laryngology, paediatrics, and pathology. The plates and illustrations are good. This volume is in keeping with the others in the series, and this means much. This series of volumes furnish much valuable information on the topics discussed in these lectures. The series should be popular.

A TEXT-BOOK OF GENERAL BACTERIOLOGY.

By Edwin O. Jordan, Ph.D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Octavo of 557 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$3.00, net. Canagian agent, J. A. Carvoth & Company, Limited, Toronto.

In this new work full consideration is given to the non-pathogenic bacteria as well as to the pathogenic. The bacteria of many occupations are also given such as agriculture, training, dairying, etc., and also the bacteria of foods, plant life, water, and sewage. The relationship of bacteriology to sanitary science and domestic affairs is taken up in a very interesting manner. These features render the work invaluable to the sanitary worker and the scientist as well as to

the medical practitioner and student in medicine. It is a unique book and fills a most useful place in the great subject of bacteriology. The illustrations are many and excellent.

DISEASES OF THROAT, NOSE AND EAR.

Practical Guide to the Diseases of the Throat, Nose, and Ear for Senior Students and Junior Practitioners, by William Lamb, M.D., A.M., Edin., M.R.C.P., Lond., Honorary Surgeon, Birmingham Ear and Throat Hospital. Second Edition. London: Ballière, Tindall and Cox, 8 Henrietta Street, Covent Garden, 1909. Price, 2s. 6d. Can be ordered through any bookseller in Canada.

The first edition of this book appeared four years ago. Since then the author has made many changes and improvements in the book. The arrangement of the matter is scientific. The author pays special attention to diagnosis and treatment. The illustrations are excellent, and the appearance of the book quite attractive to the eye. The text is such as one enjoys reading; for it is both clear and instructive. There are many useful formulæ at the end of the book. This book is just what the general practitioner requires, and we commend it to him.

BACKBONE.

A Collection of bright and inspiring sayings from many writers, by S. Dewitt Clough, Ravenswood, Chicago, December, 1908. Price, 50 cents. Copies can be obtained from The American Journal of Clinical Medicine, Chicago.

We had much pleasure in reading this little booklet; for we could not help reading it, the selections are so good. There is scarcely a phase of life that cannot find its fitting expression on "Backbone." Just read the following: "There was one thing," said John W. Gates, "that was ground into me when a boy. Make up your mind what you want and then go after it, and keep after it until you get it. More than all other things I learned in childhood this has stuck to me—and it has paid dividends too."

SLEEPING SICKNESS.

Bulletin No. 2, December, 1908, issued under the Direction of the Honorary Managing Committee. Director of the Bureau and Editor, A. G. Bagshawe, B.A., M.B., B.C., of the Uganda Medical Staff.

In 1901, Forde found a parasite which was regarded by Dutton in 1902 as a trypanosome. In 1903 Bollen found the same parasite in

three cases of sleeping disease in Uganda. In 1898 Brault made the significant statement that he thought the disease was caused by a trypanosome from the bite of the tse-tse. Much attention is paid to the subject of enlarged glands. The statement is made that every negro with enlarged glands must be assumed to have the disease until the contrary is proven. It is also stated that the disease may be contracted through sexual intercourse. It may also be imparted by the agency of food. Atoxyl and mercury appear to be the treatment.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY.

By Robert H. Greene, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York, and Harlow Brooks, M.D., Assistant Professor of Clinical Medicine, University and Bellevue Hospital Medical School. Octavo of 605 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00, net; half morroco, \$6.50, net. Canadian agent, J. A. Carveth & Company, Limited, Toronto.

What one requires most in a work of this sort is reliability and modernness. These qualities are found here to the fullest degree. The work has been prepared to be of practical value to the general practitioner. The illustrations are particularly well chosen and help out the text very materially. All necessary surgical procedures receive full attention and are described clearly and with much care. The treatment of venereal diseases form an important part of the work. We can recommend this book with much confidence.

ONTARIO PROVINCIAL BOARD OF HEALTH.

Twenty-sixth Annual Report of the Provincial Board of Health of Ontario, Canada, being for the year 1907. Printed by order of the Legislative Assembly of Ontario. Toronto: Printed by L. K. Cameron, Printer to the King's Most Excellent Majesty, 1908.

This report, like those that have appeared in the past, is full of very interesting information. Turning to the table dealing with contagious disease, we notice that the death rate in scarlatina was 5 per cent., in measles 5 per cent., in diphtheria 13 per cent., in whooping cough 14 per cent., in typhoid fever 20 per cent. of all the cases reported in these diseases. There were 482 cases of smallpox with only 2 deaths. On this disease it should be noted, however, that it causes very much loss of time and causes much expense. There is much useful information on sanatoria, the disposal of sewage, the regulation of certain trades that might be dangerous to health, etc.

PRINCIPLES AND PRACTICE OF PHYSICAL DIAGNOSIS.

By John C. DaCosta, Jr., M.D., Associate in Clinical Medicine, Jefferson Medical College, Philadelphia. Octavo of 548 pages, 221 illustrations. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$3.50, net. Canadian agent, J. A. Carveth & Company, Limited, Toronto.

This is an entirely new book, and the author has put to the practical test every method which he advances. The relationship between abnormal physical signs and the pathological conditions on which they depend is very fully given. The technic of auscultation, percussion, palpation, and inspection is fully stated, and the methods using the various instruments set out in detail. The newer helps in diagnosis, such as blood-pressure, exploratory puncture, venous pulse, etc., receive due attention. There are 212 original and practical illustrations. The work is large enough to be complete enough for nearly all purposes, and not too large to be cumbersome for the student. We regard this new work as a particularly good one.

 THE NATIONAL STANDARD DISPENSARY, NEW AND REVISED EDITION.

Containing the National History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognized in the Pharmacopœias of the United States, Great Britain and Germany, with many references to other Foreign Pharmacopœias. In accordance with the Eighth Decennial Revision of the U. S. Pharmacopœia, by authorization of the Convention. By Hobart Amory Hare, B.Sc., M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia; Charles Caspari, Jr., Ph.G., Phar.D., Professor of Theoretical and Applied Pharmacy in the Maryland College of Pharmacy, Baltimore; and Henry H. Rusby, M.D., Professor of Botany and Materia Medica in the College of Pharmacy of the City of New York; Expert in Drug Products, Bureau of Chemistry, Department of Agriculture, Washington, D.C.; Members of the Committee of Revision of the U. S. P.; with valuable assistance from Edward Kremers, Ph.D., Daniel Base, Ph.D., and Joseph F. Geisler, Ph.C. New (2nd) edition, thoroughly revised. Magnificent imperial octavo, 2,050 pages, with 478 engravings. Cloth, \$6.00, net; full leather, \$7.00, net. Thumb-letter index 50 cents extra. Lea & Febiger, Publishers, Philadelphia and New York.

This modern dispensatory exemplifies the highest type of a book required by all who have to do in any way with drugs. Originally created to supply the intentional omissions of the pharmacopœia, self-limited as that work is to the bare description of drugs arbitrarily selected as "official" and to the lists of ingredients in compounds thereof, the dispensatory has developed its great usefulness by the addition of two other main features. Besides containing the pharmacopœia and rounding it out with the information absolutely necessary to its use in practical pharmacy, the Dispensatory contains the fullest

pharmacology anywhere obtainable, and completes these two departments with a third, that on medical action and uses, appealing thereby no less to the prescriber than to the dispenser, and enabling them to co-operate safely and efficiently. It goes far beyond the Pharmacopœia by dealing fully with the "Non-Pharmacopœial" or "unofficial" drugs, a section of the materia medica of scarcely less importance. It should be noted that although the Pharmacopœia is published in book form only once a decade (the 1905 issue being the latest), the Committee is incessantly at work on its subjects. The latest changes are contained in this new edition of *The National Standard Dispensatory*, which is therefore three years ahead of the Pharmacopœia itself.

Small wonder then that several printings of the first edition of *The National Standard Dispensatory* were absorbed by the two professions it interests, and that a thorough revision is now demanded. Every line has been scrutinized and two hundred new drugs of value incorporated. Important new features are found in the addition of *The National Formulary* in abstract, as well as a Formulary of unofficial preparations widely used, and the United States Pure Food and Drugs Law, together with the decisions necessary for its interpretation. The great *General Index*, of 120 three-columned pages, contains in one alphabet the names of drugs in English, French, German, Italian, Spanish and Latin, rendering it easy to find the article on any substance used in medicine by civilized nations. This applies to the minor as well as the major drugs of the world, an inestimable service peculiar to this book. The *Therapeutic Index*, of 20 three-columned pages, arranged under diseases, brings most suggestively to the mind of the physician every drug of value, and guides him to the directions for its use.

Of the high authority of any work emanating from such masters as Hare, Caspari, Rusby, Geisler, Kremers and Base, it is unnecessary to speak. In short, this great encyclopedia of the latest pharmacology, pharmacy and therapeutics is recognized as the leading reference for every one concerned with drugs, their manufacture, dispensing and medicinal uses. We can, therefore, recommend this book for the guidance of practitioners everywhere. It ought to be in every medical library as a work of reference.

VISITING LIST, 1909.

The Practitioner's Visiting List for 1909. Thirty Patients per week. Philadelphia and New York: Lea and Febiger. Price, \$1.25.

This Visiting List is so well known that it needs no words of commendation. It contains 32 pages of data useful for every practitioner.

The arrangement of the blanks is very convenient for the record of one's visits and engagements. Of the proper size for one's coat pocket and bound in limp leather, it is just the thing the busy doctor needs in making his rounds, and keeping a careful daily record of what he does.

PROGRESSIVE MEDICINE, VOL. IV., DECEMBER, 1908.

A Quarterly Digest of Advances Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 333 pages, with 26 engravings and 2 colored plates. Per annum, in four paper-bound volumes, containing over 1,200 pages, \$6.00 net; in cloth, \$9.00, net. Lea & Febiger, Publishers, Philadelphia and New York.

The December issue of Progressive Medicine is fully abreast of the reputation of this quarterly for practical usefulness to every active medical man, whether physician, surgeon or specialist. In fact, its contents are purposely limited to the clinical as distinguished from the theoretical aspects of medicine. As brief examples of these characteristics, we may cite only a few of the multitude of topics treated by Dr. Edsall, of Philadelphia, in his 80 pages on diseases of the digestive system, if possible the most important in the entire range of human ailments. He points out the clinical bearings of recent physiological researches on the stomach and of psychic influences on digestion, deals with the results of recent x-ray advances in connection with that organ, devotes 10 pages to gastric ulcer, stenosis and carcinoma, revises to date the recently developed subject of intestinal diverticula, and illuminates the hitherto obscure field of diseases of the pancreas. In the same most cursory manner we may refer to the articles on renal tuberculosis and syphilitic nephritis in the section on the kidneys, written by Dr. John Rose Bradford, of London. Bloodgood, of Baltimore, has covered in a hundred pages, the real additions to practical surgery during the year. His remarks on surgical shock deal instructively with a common and serious condition. He devotes twenty-five pages to advances in surgery of the blood-vessels, a subject of especial interest at the present time, and the same may be said of his articles on surgery on the joints. He closes with twenty pages on tumors, thus completing in connection with his successive sections on these morbid growths, the most important monograph on the subject in the language. Belfield, of Chicago, covers the latest advances in the genito-urinary field authoritatively in thirty pages. The Assistant Editor, Dr. Landis, closes the year with a practical therapeutic referendum, reviewing the advances in both medicinal and non-medicinal treatment, and giving due prominence to untoward results following serum therapy.

Progressive Medicine occupies a unique position by reason of the fact that in it a high authority on each line describes all advances in his own language. It is wholly original, easy and interesting to read, and instructive on just the points the medical man most values, namely, those necessary to bring his own knowledge to date. The writers have the latest medical literature of all civilized countries at command, hence the reader can get in these pages what he could neither find elsewhere nor gather for himself, namely, a concise statement of the latest developments in the whole world of medicine.

SURGERY, ITS PRINCIPLES AND PRACTICE, VOLUME IV.

In five volumes. By 66 eminent surgeons. Edited by W. W. Keen, M.D., LL.D., Hon. F.R.C.S., England and Edinburgh. Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Volume IV. Octavo of 1,194 pages, with 562 text-illustrations and 9 colored plates. Philadelphia and London: W. B. Saunders Company, 1908. Per volume: Cloth, \$7.00, net; Half Morocco, \$8.00, net. Canadian Agent, J. A. Carveth & Company, Limited, Toronto.

This new work, consisting of five large octavo volumes, covers the entire field of surgery in a very thorough manner. The list of contributors to this series of volumes is a very complete one, and such as is well calculated to inspire confidence in the mind of the reader. The various chapters have been so arranged as to avoid overlapping and duplication. Each article is a complete monograph upon the subject therein discussed. This volume treats of the surgery of the Intestines, the Rectum, Hernia, Genito-Urinary Diseases, the Eye, the Ear, Military and Naval Surgery, and the Surgery of Tropical Diseases.

This volume is all that could be desired. It is full, complete, and accurate. It is one of a splendid system and should be in the hands of every surgeon.

OSLER'S MODERN MEDICINE, VOL. V.

In original Contributions by American and Foreign Authors. Edited by William Osler, M.D., Regius Professor of Medicine in Oxford University, England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, in McGill University, Montreal. Assisted by Thomas McCrea, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 900 pages each, illustrated. Volume V, Diseases of the Alimentary Tract. Just ready. Price per volume: Cloth, \$6.00, net; leather, \$7.00, net; half morocco, \$7.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

This great work goes steadily forward to completion, the fifth of the seven volumes now being fresh from the press. It covers the great

field of diseases of the digestive system and furnishes a thoroughgoing and authoritative exposition of a group of primary importance. The convenience of having the whole of the great divisions of disease in single volumes has evidently been borne in mind, and the same idea of logical classification and arrangement has been carried out even to the paragraphing, so that any desired item of information can be quickly found. Nothing could be simpler or better than the uniform presentation of each disease in sections dealing with the cause, pathology, symptoms, diagnosis, course and prognosis, and treatment. The paramount importance of the latter is recognized in the fulness with which it is considered.

Modern Medicine differs from anything undertaken in the past in at least one very important particular, namely, its cosmopolitanism. The world is a unit in these days of quick communication, a fact that is vastly beneficial to its inhabitants. The leaders of medicine are scattered through all civilized countries, but engaged in the same quest of knowledge wherewith to combat disease. This knowledge would be confined within very small circles were it not for some means of diffusion, such as Modern Medicine, which carries it to all who read English, a large section of mankind. Professor Osler has distinguished himself both as a great physician and a great editor. He not only knows medicine and is interested in every part of it, but also knows the men who are doing the best work everywhere. Consequently he has been able to select the best authority for each subject, and moreover to secure his co-operation. Such is the advantage of prestige and position.

It is scarcely necessary to point out the benefit which every physician can derive from possessing and consulting a work covering the entire domain of practical medicine and reflecting the world's latest and best knowledge. In these pages he can qualify as never before to meet his responsibilities.

We can speak of this monumental work as one of the highest order. Any physician with this work in his possession is armed for every possible condition that may arise in medicine.

OCULAR MANIFESTATIONS OF GONORRHOEA.

Studies from the Royal Victoria Hospital, Montreal, by W. Gordon M. Byers, M.D., Assistant Oculist, Royal Victoria Hospital, Lecturer on Ophthalmology, McGill University.

This fasciculus covers gonorrhœal affections of the eye very fully. It deals with those of the conjunctiva, cornea, sclera, uveal tract, optic nerve, retina, etc., The forms of gonorrhœal diseases of the eye treated

of in this work are those arising from systemic gonorrhoeal infection. It is stated that males suffer most frequently, and, again, when the disease is in the posterior urethra, the author declares that it is the gonococci and not their toxins that are responsible for these inflammations. The eyes should not be used much, as rest is very important in the treatment of these affections of the eye. These studies are dedicated to the memory of the late Frank Buller, M.D., M.R.C.S., England, and are well worthy his name and the college he did so much for. Gelle and Swediane described the condition known as "gonorrhoeal rheumatism," in 1781. This was followed by the work of John Hunter in 1786. In 1818, Sir Benjamin Brodie mentioned metastatic conjunctivitis and iritis in persons with gonorrhoea and gonorrhoeal rheumatism. He mentions having patients in whom this train of symptoms had occurred. In 1820 Vetch described a case of systemic gonorrhoea with iritis. From these dates onward, Abernethy, Sir William Lawrence, Sir Astley Cooper, etc., describe cases. As we come down nearer our own day, the reports of cases become more frequent and more definite. This work of Dr. Byers is worthy of careful study.

THE ETIOLOGY AND NATURE OF CANCEROUS AND OTHER GROWTHS.

By W. T. Gibson, A.R.C.S. London: John Bale, Sons & Danielsson, Oxford House, 83-91 Great Titchfield Street, Oxford Street, W., 1909. Price, 6s. net.

This little book is a most interesting one. The author has analyzed with marked ability, the tables showing the incidence of cancer in different occupations. The light which this line of research throws upon the etiology of cancer is certainly worthy of careful consideration. The author goes on to show that irritation is an essential matter for consideration, but that chemical irritation must not be lost sight of. In chimney sweepers, for example, it is those who work with the soot of hard coal who suffer most. Then, again, it is shown that the parts of the body most frequently irritated suffer most. The subject is important and the author has done his work remarkably well.

Papine, in the new 16-oz. bottle, as offered from Jan. 1st, 1909, by Battle & Co., Chemists Corporation, St. Louis, shows a saving to the profession of \$2 per dozen, as against the price of 2 dozen of the 8-oz. size at \$8.50 per dozen, and in which latter there will be no change, either as to size or price.

MISCELLANEOUS.

COST IN TORONTO INSTITUTIONS.

The annual financial statement of Toronto's 34 charitable institutions was handed out at the City Hall recently. It gives some interesting information, and shows that the demand on charity for the care of children is much smaller, per capita, than the cost of keeping old folk.

Seven cents per day, per child, is the figure given by the Children's Shelter, but in the Old Folks' Home it is 30 cents per head, and in the Home For Incurables 60½ cents per capita. The Hospital for Sick Children tops the list in per capita cost, with a \$1.37 figure. It is, of course, not in the same class as the others. The statement in detail is as follows :

	Total receipts.	No. of people assisted.	Amount for wages and salaries.	Main'ce per capita per day.	Total expenditure.
House of Industry	\$8,995 44	299	\$1,562 00	20	\$11,447 14
House of Providence	51,424 35	5,100	1,441 95	28	51,930 80
Protestant Orphans' Home...	13,200 46	.....	2,452 00	19	11,924 99
Home for Incurables	26,696 13	180	8,360 19	60½	30,445 53
Infants' Home	7,661 83	240	2,215 95	28	9,180 04
Prison Gate Mission	9,642 97	470	1,683 09	21	10,235 76
Boys' Home	8,110 14	204	1,353 75	18	7,371 39
Girls' Home	7,379 22	.....	2,054 26	22	7,284 28
Industrial Refuge	6,606 23	49	1,821 53	14	5,891 17
The Creche, Victoria St.....	3,907 26	615	1,115 61	22	4,195 54
East End Day Nursery	5,022 89	700	1,805 50	15	4,894 72
Sunnyside Orphanage	20,713 32	1,375	937 00	18	20,431 51
Working Boys' Home	6,709 76	189	1,768 94	16	6,715 95
St. Nicholas' Institute	5,875 17	963	104 05	27	5,797 94
Home for Aged Women.....	11,603 11	111	3,766 52	17	11,996 21
Home for Aged Men	4,076 32	39	1,647 32	18	4,399 07
Old Folks' Home	5,476 86	36	1,429 20	30	5,463 89
Church Home for Aged	3,326 43	29	558 72	37	3,125 54
Frances Willard's Home for Girls	2,150 98	330	420 00	28	2,189 56
Sisters of Good Shepherd ...	7,811 77	.....	756 00	19	7,942 31
Ladies' Montefiore Benév. Soc.	1,202 15	197	.....	...	1,148 18
Toronto Jewish Benév. Soc.	1,311 60	365	.....	...	1,313 35
S. A. Rescue Home for Women	6,310 00	256	1,023 00	35	6,310 00
S. A. Men's Social Dept.....	3,395 32	5,570	3,882 50	1	6,908 33
Hospital for Sick Children...	55,290 29	11,908	25,839 05	1 37	70,340 93
Home for Incurable Children	6,621 56	30	2,891 05	94	6,909 85
Nursing at Home Mission...	3,320 77	7,643	1,097 02	33	3,238 75
Nursing Mission, Beverley St.	3,117 52	624	642 62	...	2,030 89
Toronto Relief Society	3,318 63	573	.....	...	3,252 46
Prisoners' Aid Society	4,064 45	1,219	15 32	...	4,184 21
Children's Aid Society	11,639 51	1,546	2,907 12	07	9,532 96
St. Vincent de Paul Child's Aid	1,652 93	140	758 00	...	1,604 09
Victor Home for Young Women	1,707 43	261	410 00	21	1,679 01
Victorian Order of Nurses ...	4,424 40	512	1,839 80	...	4,878 67

NEW GENERAL HOSPITAL BUILDING.

It is expected that between now and spring the plans for the new General Hospital at the corner of College Street and University Avenue will be perfected, in which case work will be begun during the summer. The architects and the board have been at work on plans for a considerable time. One of the features of the new hospital will be a greatly improved ambulance system, in which electricity instead of horses will be the motive force.

The thorough inquiries being made relative to the style of building, but especially the equipment, has brought out the fact that British hospital authorities, because of climatic and other conditions, have not always been able to erect and carry out hospital buildings and equipment in the clean, light and well-appointed manner of the plans followed in Canada, although great advances are being made in the old land in this respect. The new hospital, when completed, will be the best equipped institution for its work on this continent and the very highest standard of efficiency will be maintained.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF
SCIENCE.

In connection with the above meeting in Winnipeg, August 25th to September 1st, 1909, the office of the honorary local secretaries has been organized in the University building, and to request that in future all enquiries and communications connected with the meeting be addressed to the local secretaries, British Association for the Advancement of Science, University of Manitoba, Winnipeg, Man., as follows:—

C. N. Bell.
W. Sanford Evans.
Matthew A. Parker.
Swale Vincent.

THE SICK CHILDREN'S SANTA CLAUS.

When it is said that Toronto's rich men do little relatively for charity's sake a few notable exceptions must be made to the statement. Probably no institution on the continent has a more generous friend than the Sick Children's Hospital has in Mr. John Ross Robertson. The hospital had rather a heavy overdraft at the New Year and Mr.

Robertson sent along a check for \$10,000. Nothing has been said of the gift in *The Telegram*—probably nothing will be said of it save in this column. Only a short time ago Mr. Robertson gave the hospital a Nurses' School and Home at a cost of at least \$135,000. His gifts to the hospital proper on capital account and for maintenance have never been totalled up, because no one save Mr. Robertson knows how much they have been, and he won't tell. It would not be surprising to learn that first and last the Sick Children's Hospital and the Lakeside Home have benefited to the extent of almost half a million from Mr. Robertson's admirable Santa Claus habit. That is a somewhat startling figure for our rich men to live up to. Doing good by stealth, as Mr. Robertson does it, has its disadvantages. It cannot be used as effectively in spurring on others as can the subscription-list method.—*The Globe*, January 4th, 1909.

CANADIAN MEDICAL ASSOCIATION.

The next meeting of the Canadian Medical Association will be held at Winnipeg, August 23rd, 24th and 25th, 1909. The following officers and committees have been appointed: Dr. Blanchard, President. Committee on Transportation—Drs. Blanchard, Vrooman, MacKenzie, Moorhead, Rogers, Leney. Ophthalmology and Otology—Drs. Prowse, Turnbull, Smith, Good, Raymond, Brown, Williams. Entertainment—Drs. Rogers, Field, Devine, Milroy, Young, Fletcher. Finance—Drs. Patterson, Simpson, Pope, Brandson, Popham, Moody. Pathology—Drs. Bell, Pierce, Vrooman, Webster, Leeming. Credentials—Drs. S. Campbell, Kenny, Mitchell. Exhibit and Accommodation Committee—Drs. Munroe, Coulter, Davidson, W. G. Campbell, A. M. Campbell, Hiebert, Dubuc, Burrige. Medicine—Drs. J. R. Jones, Hunter, MacDonnell, Rorke, Bjornson, E. W. Montgomery, Chestnut, McCalman. Executive—Drs. Chown, Smith, Blanchard, Milroy, Devine, McLean, J. R. Jones, Halpenny, Vincent, Hughes. Surgery—Drs. Nichols, McLean, Blanchard, Todd, Lehmann, Galloway, D. S. Mackay, J. McKenty. Advertising and Publication—Drs. Hugh Mackay, Hughes, D. Stewart, D. Macdonald.

MEDICAL PREPARATIONS, ETC.

A SUCCEDANEUM FOR MORPHIA.

We meet with many cases in practice suffering intensely from pain, where from an idiosyncrasy or some other reason it is not advisable to give morphine or opium by the mouth, or morphine hypodermically, but frequently these very cases take kindly to codeine, and when assisted by antikamnia, its action is all that could be desired.

In the nocturnal pains of syphilis, in the grinding pains which precede labor, and the uterine contractions which often lead to abortion, in tic-douleureux, brachialgia, cardialgia, gastralgia, hepatalgia, nephralgia and dysmenorrhœa, immediate relief is afforded by the use of this combination, and the relief is not merely temporary and palliative, but in many cases curative.

Muscular spasm is often controlled by antikamnia and codeine tablets. Their action is of essentially the same character as the morphine action; the same parts of the central nervous system are affected, and in the same way as morphine, but not in the same degree. Nor do they induce habit.

In pulmonary diseases this combination is worthy of trial. It is a sedative to the respiratory centers in both acute and chronic disorders of the lungs. Cough, in the vast majority of cases, is promptly and lastingly decreased, and often entirely suppressed. In diseases of the respiratory organs, pain and cough are the symptoms which especially call for something to relieve; these tablets do the work, and in addition, control the violent movements accompanying the cough, and which are so distressing.

FUNCTIONAL NEUROTIC DISORDERS.

The various vital functions of the organism are so intimately associated and correlated that it is impossible to definitely attribute any chronic nervous illness to disease or derangement of but one of the great bodily systems, *i.e.*, circulatory respiratory, digestive, lymphatic or nervous. The many neurotic conditions which the physician is so frequently called upon to treat cannot be successfully attacked by confining treatment to the nervous system exclusively, any more than can the cutaneous affections—acne, eczema or urticaria, be permanently relieved by lotions, washes and unguents alone. Neurasthenia, nervous "break-down," nervous prostration, "brain-fag" and allied states are usually but neurotic manifestations of some constitutional metabolic

fault, which must be sought out and remedied if intelligent therapy is to be applied. Among the various pathologic conditions which oppose the relief of neural disorders, anæmia, whether primary or secondary, is always worthy of therapeutic attention. Unless the blood supply is relatively normal in both quantity and integrity, its oxygen-carrying capacity is "below par" and, consequently, metabolic exchange and interchange is embarrassed and the necessary improvement in bodily nutrition is difficult of accomplishment. Pepto-mangan (Gude) stimulates and encourages oxygenation and nutrition, by furnishing the more or less impoverished blood with an immediately appropriable form of its vital metallic elements, iron and manganese. The vital stimulus thus imparted is often the one thing needful to initiate the substantial systemic "building up" process which must precede the desired recovery from neurotic disorders.

GLYCO-THYMOLINE.

Description.—Glyco-Thymoline is a deep claret colored fluid with the taste and odor of thymol and eucalyptol.

Formula.—This preparation contains benzo-salicylate of soda, methyl salicylate from *Betula Lenta*, eucalyptol, thymol, *pini pumilionis*, glycerine and solvents. The alcoholic content is 4 per cent.

Action.—A solution composed of Glyco-Thymoline, one part, water three parts approximates the alkalinity and salinity of the human blood, thus harmonizing with the secretions of tissues treated. When applied slightly warmed to the mucous membranes of the nose and throat it is soothing, solvent, mildly antiseptic, exosmotic and anesthetic. It promotes aseptic conditions and favors the restoration of normal functions of the mucous membrane. Internally Glyco-Thymoline is antacid, carminative, and anti-fermentative.

Uses.—This preparation is recommended in the treatment of all catarrhal diseases of the mucous membrane, particularly of the upper respiratory, utero-vaginal and rectal tracts, as a solvent, soothing, antiseptic and alkaline wash. Internally it has been successfully employed to overcome gastric hyperacidity, gastro-intestinal fermentation, summer diarrhœa of infants, etc. In obstetrical and gynecologic practice it has also proven useful. Its mild, non-irritating properties will suggest its use whenever and wherever an alkalin antiseptic solution is desired. In dentistry it has also been extensively employed.

Dosage Externally.—Glyco-Thymoline may be used in solutions ranging from 10 p.c. to full strength. *Internally*—It may be used one-fourth to two teaspoonfuls in water as indicated.

Special Consideration.—The selection and quality of the ingredients, the methods employed in their combination, the formula itself and the constant unvarying uniformity of the finished product.

L. Vernon Briggs, M.D., Boston, Mass, Boston Med. and Surg. Jour., April 19th, April 26th, May 3rd, 1908.

J. C. Montgomery, M.D., Charlotte, N.C., Charlotte Med. Jour., March, 1897.

W. R. D. Blackwood, M.D., Philadelphia, Pa., Medical Summary, March, 1905.

Prof. B. S. Arnulphy, M.D., Paris, France, The Clinique, Sept., 1897.

David Walsh, M.D., London Med. Press and Circular, London, J. 1. 4th, 1905.

Seth Scott Bishop, B.S., M.D., D.C.L., LL.D., Chicago, Ill.

M. E. Chartier, M.D., Faculty of Paris, France, June 12th, 1904.

H. McNaughton Jones, M.D., R.U.I., M.C.H., M.A.O., F.R.C.S. I., F.R.C.S., L.M.R.C.P.I., London, Eng., 3rd Edition, 1902.

Manufacturers.—The Kress & Owen Co., New York City.

TREATMENT FOR INFLUENZA.

It is well known among medical men that rest, simple rest in bed, will cure a great many cases of influenza. Symptomatic treatment, however, gives the best results. The pain should be relieved by an anodyne. Quinine should be administered all through the attack, as it has a stimulating effect and antipyretic action and seems to destroy the bacillus. When the pain is severe, two antikamnia tablets every two or three hours will give much relief. To relieve the cough, when it is accompanied with a great deal of pain, one antikamnia and codeine tablet every two or three hours dissolved on the tongue, acts very promptly and successfully. That codeine had an especially beneficial effect in cases of cough, and that it was capable of controlling excessive coughing in various lung affections, was noted before its true physiological action was understood. Later it was clear that its power as a calmative was due, as Bartholow says, to its special action on the pneumogastric nerve. Codeine stands apart from the rest of its group, in that it does not arrest secretion in the respiratory and intestinal tracts. In marked contrast is it in this respect to morphine. Morphine dries the mucous membrane of the respiratory tract to such a degree that the condition is often made worse by its use; while its effect on the intestinal tract is to produce constipation. There are none of these disagreeable effects attending the use of Antikamnia and Codeine Tablets.

THE BLOOD DYSCRASIAS OF PREGNANCY.

It is evident that the female economy undergoes profound alteration during pregnancy. The whole organism is subjected to unusual strain and the necessary changes in the general metabolism invariably increase the tax, not only on the constructive forces of the body, but on the eliminative functions as well. The slightest failure to throw off either the waste products incident to the necessarily increased physiological activity of the mother, or those resulting from the establishment of the more complex metabolistic processes in the fetus, always tends to create a vicious circle of blood dyscrasia that is not infrequently fraught with great danger. For instance, faulty elimination means embarrassment of the hematogenic function, with hemolytic changes more or less severe, and these conditions in turn not only coincidentally increase the amount of waste substances to be excreted, but directly lower the eliminative capacity as well. In other words, the initial effect tends to exaggerate the pernicious influence of the primary cause, and the accumulative result is therefore the most dangerous feature.

Hence, it is little wonder that slight deviations from the normal during pregnancy often assume certain serious aspects that are out of all proportion to their first importance. All this teaches that comparatively slight ailments are unknown quantities when met in connection with the pregnant state, and should be treated not on the basis of their apparent significance, but on the basis of their possible dangers.

The blood dyscrasias, particularly the anemias, because they are most easily demonstrable, call for early correction in pregnancy. It requires no argument to show that much depends on the physiological activity of the cellular elements of the blood, and any deficiency in their number or functioning capacity is always portent of evil. Vigorous treatment is necessary and among the really effective therapeutic measures at the command of the profession, Pepto-Mangan (Gude) is especially worthy of prominence. This widely known and widely used product possesses marked hematopoietic properties, and its effect on the increment of new blood cells gives valuable aid in promoting rapid and effective elimination.

Extensive experience has shown therefore that in no condition is Pepto-Mangan more useful or prompt in its results, than in the blood dyscrasias of pregnancy. Its immediate action is not only satisfactory, but its extensive use for some time previous to delivery, as well as subsequently, favors rapid convalescence during the trying post-labor period, with very noticeable effect on the local phenomena of involution.

Briefly stated Pepto-Mangan (Gude) is a tonic hematic, unusually potent for good, and absolutely free from harm. Its more than substantial success in this class of cases is the most convincing argument for its continued use.