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MEDICINE & SURGERY

VOL. XVIII

HALIFAX, NOVA SCOTIA, MAY, 1906.

No. 5

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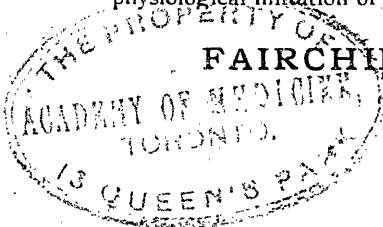
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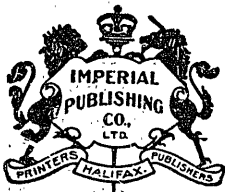
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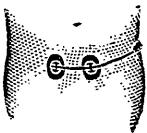
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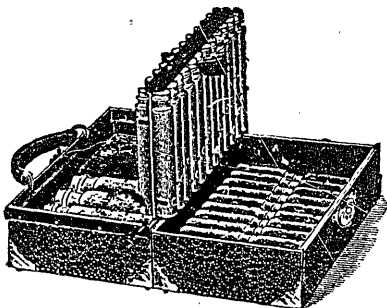
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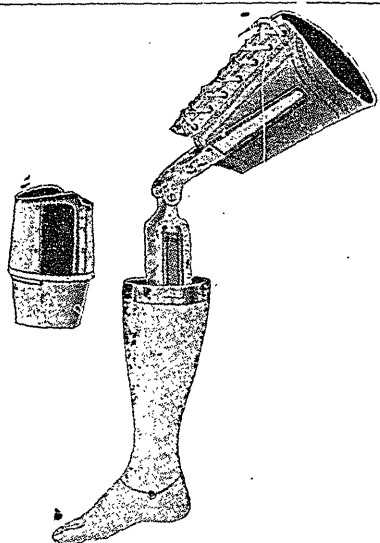
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THE MARITIME MEDICAL NEWS is a monthly magazine devoted to the interests of the medical profession. Communications of general and local professional interest will be gladly received from friends everywhere. Manuscript for publication should be legibly written in ink (or typewritten, if possible) on *one side only* of white paper. All manuscripts and correspondence relative to letter press should be addressed to The Editors, **MARITIME MEDICAL NEWS, P. O. Box 341, Halifax, N. S.**

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THE MARITIME MEDICAL NEWS

VOL. XVIII., MAY, 1906, No. 5.

A Royal Ophthalmologist It is stated that His Royal Highness, Duke Carl Theodor of Bavaria, recently performed his *five thousandth operation for cataract*.

Medical Women Out of a total of 138 women who matriculated in the German universities during the last winter semester, no less than 73 are students of medicine. During the last year 79 theses for the medical doctor's degree were presented to the Universities of Geneva and Lausanne, of which no fewer than 42 were offered by women, the majority of whom were Russians and Poles.

Deaths Among Doctors According to the statistics, very carefully compiled, of the *Journal of the American Medical Association*, there were 2045 deaths of physicians in the United States and Canada during the year 1905. As the estimated medical population in the two countries is 215,000 the mortality rate for the year was 16.36, as compared with 14.74 in 1902; 13.73 in 1903 and 17.14 in 1904. The oldest practitioner whose death was recorded was aged 104; the youngest, 23. One had been in

practice seventy-five years, and five others for more than seventy years. The average length of practice was thirty-one years and one month. Among the causes of death, heart disease in various phases was responsible in 202 instances; cerebral hæmorrhage in 153; pneumonia in 141; tuberculosis in 102; nephritis in 100; senile debility in 80; accidents in 72; suicide in 46.

Anent Euthanasia After the number of recent journal references, and more particularly the hysterical utterances of the lay press, throughout the United States, advocating a legalized destruction of sufferers from incurable diseases, it is amusing to learn that a Bill has been introduced into the New York Assembly, providing that any person "who by word of mouth, or by written or printed circulars, message, letters, documents, pamphlets, newspaper or magazine articles or publications of any kind, made, issued or circulated by him or his authority, advocates or teaches the duty, necessity or propriety of putting to death by legal sanction or otherwise, persons affected with an

incurable mental or physical disease, because of their said condition, is guilty of a felony." This looks like a serious attempt to introduce a muzzle into the land of the free. It also leads to reflection upon the extremes to which unthinkingness will lead men.

✱

A Soap for Painters and all Workers in Lead others who require to work with materials containing lead, are very prone to suffer from poisoning as a result of absorption from contaminated cutaneous surface, no matter how carefully cleansing is attempted. Ordinary soap is apt to increase rather than lessen the absorption of lead from the skin. In view of this fact it is interesting to note that a soap has been invented which acts chemically upon lead to render it harmless. Speaking of it, the *Scientific American* says:—

"The particles of lead are changed into non-poisonous sulphide of lead by the simple process of washing with this soap. The chemical principle underlying the use of this soap is simple enough. It consists simply in producing sulphureted hydrogen, which transforms the lead into harmless sulphide of lead, and renders it possible to cleanse the skin thoroughly. In washing the lead-stained hands with the soap, the skin becomes brown—evidence of the presence of lead. The brown color is readily removed by a thorough cleaning with the brush, and the skin loses the odor of sulphureted hydrogen. The soap itself is agreeable to the smell. To the chemist it is obvious that a soap of this kind ought to be effective, not only for the purpose of preventing poisoning from lead, but from copper, mercury, and arsenic as well; for these, too, can be converted into innocuous sulphides."

The Blood in Epilepsy We recently abstracted an article by Onief in which he dealt with the possibility that epilepsy may never be really idiopathic. In the February number of the *American Journal of the Medical Sciences* there appears an article written by this writer in conjunction with Loquasso, dealing with observations they have made upon the blood of epileptics, both during the intervals and at the time of the seizures. Due account was taken of the influence of meals, fatigue, change of habits, etc. During the intervals there was little variation in the hæmoglobin and erythrocyte determinations, while the leucocyte variation was greater although not abnormally so. The observations at the time of the seizures showed little change in the red cells, but pronounced disturbances in the white cells count. While leucocytosis does not bear a strict parallelism to the seizures, it would appear to be in some way associated with them.

✱

The Neurons Dr. Lewellys F. Barker has recently contributed to the *Journal of the American Medical Association* (March 31 and April 7, 1906) a succinct review of the history of the neurone concept and of the present state of our knowledge of the subject. In considering the various theories which have been set forward in opposition to the doctrine of the neurones, he declines to admit that

there has been any "demonstration of the existence of a real continuity among the nerve elements." The neuronists admit only that which is demonstrable, and inasmuch as intracellular anastomoses are not demonstrable can see no reason for believing in their existence. The anti-neuronists confess that the neurofibrils are not to be demonstrated by methods yet available, but argue that they ought to exist, and that continuity is *a priori* so probable that their opponents should prove the impossibility of their theory. Reference is made to the possibility of nerve conduction apart from the cell-body, but, while this is not denied, no positive opinion is expressed. The same is to be said of Barker's reference to the theory of auto-regeneration of nerve. In discussing the problem of unicellular or pluricellular origin of the neuron, due credit is given to Ross Granville Harrison's demonstration that motor nerve fibres develop as processes of the anterior horns instead of from the neurilemma cells along their course, which is stated to be one of the most important of recent contributions to our knowledge of the subject. Barker claims that even if the pluricellular origin of the neuron could be demonstrated, it would still be an anatomic unit, though as an organ rather than a cell.

Rectal Feeding A careful experimental study of the value of rectal feeding is contributed to a recent issue of the *Scottish Medical and Surgical Journal* by Dr. Francis D. Boyd and Miss Jean Robertson, L. R. C. P. and S. The methods adopted are fully described and appear to have been very thorough and well conceived. Loss of weight was a feature in every case studied. It was learned that proteid food, even if predigested and combined with salt, is absorbed in very small proportion when administered by bowel. Egg albumen also is absorbed in but small amount. On the other hand a very fair percentage of fat is absorbed, averaging, in the experiments, 33. Sugar (a pure dextrose was used), was found to be practically all absorbed.

It is pointed out that the absorption of fat is important because it saves the waste of tissue nitrogen. In the cases experimented on, loss of weight was in inverse proportion to the amount of fat absorbed. The yolk of egg was found to be the best form of fat. Pure dextrose causes no irritation of the bowel, but an impure article might act as an irritant.

The authors suggest as a formula for a good nutrient enema, the yolks of two eggs, 30 drams pure dextrose, 0.5 gram common salt, and pancreatized milk to 300 c. c. The enema should be slowly introduced to the bowel through a

soft tube to which a small funnel is attached. A syringe should not be used.

The fact that the introduction of nutrient material to the rectum reflexly excites gastric secretion should not be overlooked. In cases of gastric ulcer, etc., rectal feeding might, for this reason, prove more injurious than if a moderate amount of properly selected food were allowed by the mouth. Rectal feeding, moreover, does not sufficiently nourish the patient, so it would appear to have a rather restricted field of usefulness.



Proprietary Medicines. G.H. Simmons, Chicago (*Journal, A. M. A.*, May 5), discusses some general considerations of this subject. He calls attention to the fact that proprietary medicines are generally mixtures controlled by copyright or trade names, and are often secret or semi-secret in character. He states that while there is no objection to proprietary preparations *per se* the commercializing of the literature relating to materia medica is against all true scientific spirit and is demoralizing to both pharmacy and medicine. He explains in detail the difference between "patent" and proprietary medicines. Dr. Simmons says that whatever is secret is suspicious, and states that secrecy and mystery are the bulwarks of quacks and charlatans. He declares that a physician not only has a right to

know what he is giving his patient, but that he has no moral right to prescribe a preparation of which he does not know the exact composition. He refers to the need of legislation on this subject and to the necessity for examination of various medicines and foods. He discusses the reliability of manufacturers and the exaggerated statements made by some in regard to the articles manufactured by them.



Bacteria in Relation to Pneumonia.

Augustus Wadsworth declares in the *Medical Record*, that experience has shown cold to be a minor predisposing factor in the development of pneumonia. The huddling together of people in close quarters is of far more importance. The treatment of pneumonia in its present stage may be said to be either very easy or impossible. A careful prophylaxis against disturbances of the digestive tract is of the greatest importance. Many ways of attaining the same results present themselves, and the choice in great measure rests with personal experience. The hope of definite results lies in the production of an efficient and specific antiserum. It is known that poisonous substances are elaborated by the pneumococcus, but so far the production of an antitoxin corresponding to that used in diphtheria has not been attained. Pneumonia, however, is a bacteremic disease and as yet in

none of this type have satisfactory results been secured in relation to antisera. The hope of success, nevertheless, is gradually growing brighter.

Boston Session American Medical Association. It would seem that the medical profession of

Boston intends to have the approaching session of the American Medical Association one long to be remembered for the high grade of its scientific proceedings, the cordiality of its entertainments and the elaborateness of the clinical and exhibition features. THE JOURNAL of the American Medical Association, May 5, devotes over 20 pages to the session, giving railroad rates, lists of hotels, meeting places, headquarters, lists of entertainments, excursions and programs, etc. The preliminary programs of the twelve sessions show that the scientific proceedings are to be of great value, and that many distinguished foreigners are to be among the speakers.

Proprietary Medicine Legislation After the fate met with by the so-called "patent medicine bill"

in the Nova Scotia Legislature, the progress of legislation in the Dominion Parliament will be watched with unusual interest. An Ottawa telegram to the daily papers, dated May 5th, reads as follows:

"It is understood that the Government has decided on a course of action on the patent medicine question. Mr. Bergeron's measure, which is to provide

that proprietary or patent medicines must have the formula printed on the label, will be rejected, but Dr. Stockton's motion to form a special committee to investigate the situation with regard to these remedies, will be accepted. It is not expected, however, that the committee, at this stage of the session, will be able to do anything beyond take evidence, thus leaving the matter as a legacy to the next session."

Prevention of Tuberculosis. The sixth annual meeting of the Canadian Association for the Prevention of Tuberculosis was held at Ottawa on the 28th of March, under the presidency of Senator Edwards. The Secretary, Rev. Dr. Moore, reported that considerable progress in the educational movement had been made during the year. Sir James Grant advocated the general adoption of medical inspection of schools. Earl Grey took part in the proceedings, making an excellent and practical address. Dr. Richer contributed a lecture illustrated by stereopticon views, dealing with sanatoria. It was decided to approach the Dominion Government for an increased grant (\$5,000 a year), to be used mainly for the dissemination of literature.

The officers for the ensuing year were elected as follows: President, Hon. W. C. Edwards, Rockland, Ont.; Vice-Presidents, Dr. Thorburn, Toronto; Dr. Bayard, St. John; Sir James Grant, Mr. Perley, M. P., Mr. James Manuel, Ottawa; Treasurer, Mr. J. M. Courtney, C.M.G., Ottawa. The Executive consists of one representative from each province.

A British Alien Act.

For many years it has been the proud boast of the English people that in the land of John Bull the distressed and oppressed of all nationalities have found a haven of refuge. From every quarter there have flocked to Britain's shores all sorts and conditions of men, in search of a larger freedom than the land of their birth and of their ancestors permitted them. They have been received without question, and in due time most of them have been accorded all the privileges of British citizenship. Many of these have given large return to their foster-land, and have contributed much to the upbuilding of that cosmopolitanism which is so distinctive of the British character to-day. Possibly until within quite recent years immigrants to Great Britain were principally of the more intelligent class—those who rebelled against the restrictions imposed upon them by the systems of government which obtained in their home-lands, and who really represented the manhood of the countries in which they had origin. But there have always been a certain proportion of undesirables, of physical, mental and moral weaklings, who have been attracted to the mother of nations by the comparative ease with which existence is there found possible.

The tremendous flow of immigration westward has influenced the character of immigration to

Britain in various ways. New countries, offering the same liberties as England and governed in substantially the same manner, free from the evil results of overcrowding, and temptingly full of possibilities, have not only attracted the types which formerly invaded England, but have been as a lodestone to every class and every condition. All men know how phenomenal has been the rush of immigrants to Canada and the United States during the past few years. Amongst them have been a large percentage of the class which formerly recognized Britain as their Mecca.

We of the west have not dealt so open-heartedly with the immigrants as was the wont of England. While welcoming the desirable types, we erected barriers to exclude the defective classes—those who might become burdensome to us. In consequence many foreigners, after selling their all to secure funds to bring them to our land, have been returned to the port from which they sailed, disappointed, branded degenerate, perhaps penniless, with little heart to return to their former homes and renew the hopeless struggle for existence amidst the taunts and jeers of their old time neighbors. Little wonder that in looking for a chance for escape, many such have turned their eyes towards England and have contributed no small proportion of the body of recent immigration in that country.

It is not a matter for surprise that British statesmen, having become convinced of the danger of a continuation of the policy in which they gloried for so long a time, have reluctantly concluded to impose restrictions upon immigration somewhat similar to those with which we have ourselves evolved. The diseased, the defective and the criminal may no longer gain entrance to English soil without question or protest. In spite of strong sentimental objections, raised in all quarters, an Alien Act has been enforced which, while not nearly so sweeping as ours, will nevertheless prove a safeguard against undue contamination by the worthless and degenerate of other lands.

The immediate result of the operation of the Act is a marked diminution in the number of immigrants suffering from trachoma, a condition which was previously very common in those seeking admission to England. A peculiar feature in the experience of the immigration physicians has been an unusual percentage of "candidates" the subjects of valvular disease of the heart.

There can be no doubt but that the enforcement of the Act will lead to improvement in the class of immigrants admitted to Great Britain. It will be interesting to note what effect the introduction of the system in England will have upon immigration to this country.

The Evolution of the Nurse.

A generation ago we were just beginning to take the trained nurse seriously. We were being shown the advantage of having our patients in the hands of young women of intelligence, in whom we could trust, who could be expected to use common sense and to apply the knowledge they had gained during their term of hospital service. We were being afforded unmistakable evidence of the value of the trained nurse to the hospital in the greater neatness and cleanliness, better discipline, and more economic administration. And we willingly assigned the nurse a place by our side and dubbed her the "complement" of the doctor.

While fully recognizing the advance marked by the establishment of training schools, and appreciating the tendency which was even then manifest to extension and greater comprehensiveness, he was indeed a seer who, twenty years ago, could look forward to the present time with anything like an accurate estimate of the wonderful development of the training school idea which so short a term of years would witness. The number of hospitals with training schools attached has multiplied prodigiously, so that in 1904 there were, in the United States alone, 867 such schools, having 21,844 pupils. At the same time the nursing curriculum has been greatly extended, so that

now comparatively few of the larger schools require less than a three years course, while some demand four years. Coincidentally there has sprung up a large literature, especially designed for the nurse, and it is even stated that a publishing concern is being promoted to be devoted entirely to the publication of literature on nursing. So elaborate has the course in nursing become in fact, that the general practitioner whose college experience is a bit remote, views with some concern the advent of a trained nurse in his locality, and feels himself impelled to unwonted decorum in the presence of so awesome a mortal.

There can be no doubt that an understanding of the why and the wherefore adds to the interest of a nurse's work just as it does to that of anyone in any walk in life. But nursing is nursing, and not the practice of medicine or surgery. There is no danger of over-training in the practical work of nursing, but the tremendous burden of theoretical instruction—most of which is quite inapplicable in practice—is not only needless, but doubtless harmful. Every doctor has had annoying instances of interference by nurses whose ethical knowledge has been less in evidence than presumption, and whose heads have been turned by a smattering of such information as need belong to the physician alone. These young women might have been admirable aids had their

training been limited to the really fundamental things, and had they not been distracted and rendered dissatisfied by ill-directed excursions beyond their proper latitudes.

It seems however, that objection is to be urged against the present system of teaching nurses for other reasons than this. There has been a good deal of adverse criticism of late. It is said that nurses are becoming too institutional—too mechanical. The "scientific study" of cases is replacing the gentle touch, the sympathetic interest and the kindly ministrations. And the independent patient demands more heart and less head, in the woman who is to be his nurse, than the hospitals of to-day are supplying.

Of late a new issue presents itself. We have been content to bear good naturedly with the foibles of an occasional ill-balanced member of the sisterhood, because we have come to regard the nurse as a necessary complement to the doctor. But what of this? Quotation from *The Trained Nurse* for January last: "The whole question is this: Is nursing a subordinate profession to medicine, or is it a separate, distinct, and independent profession, which, when it gets old enough, is going to sever every connection with medicine, and set up as an entirely separate science or art?"

We will state this proposition less classically: Is the tail going to wag the dog?

The Lively Case.

The essential facts in connection with the patient Lively, whose death at the Victoria General Hospital some time ago was said to have been caused by improper treatment and negligence, are well known to the profession of Nova Scotia, and the verdict of the court of inquiry is not wholly unexpected. The result of the inquiry may be of interest elsewhere, as the charges were preferred in a very sensational manner in a leading Halifax newspaper during the meeting of the Canadian Medical Association in this city last August. The people of Halifax were humiliated when an institution in which they took some pride, was so represented to distinguished professional men from other provinces of Canada and from abroad.

While no one seriously disputed the right of the press to assail the management of the hospital it was universally felt that a mistake had been made in preferring the charges at that particular time, not to speak of the manner in which it had been done. The promise by the government of a thorough investigation quieted the public and restored confidence.

The promise made has been amply fulfilled. The investigation was conducted by the Hon. W. T. Pipes, commissioner of public works and mines, and the official head of the institution.

The inquiry was open to the public, reporters were present, able lawyers represented different interests, in short every facility was provided to make the investigation as thorough as possible. Recently the judgment of the commissioner was submitted to the legislature, and has been published in the lay press. He has gone very carefully over the mass of evidence submitted, and finds nothing to justify the statement that the patient Lively either had improper treatment or suffered from negligence on the part of the attending surgeons or nurses. We congratulate Drs. Chisholm and Murphy and others concerned, on the results of the inquiry. Some defects in the management of the institution were disclosed but none of a serious character.

The most deplorable circumstance revealed was evidence of lack of harmony and good feeling among the members of the surgical staff. It is unfortunate, to say the least, that patients admitted to a public institution cannot command the combined skill and ability of the attending staff of physicians and surgeons. In the course of hospital practice many emergencies arise which demand something more than individual effort, and the relations existing between members of the staff should be of such a character as to ensure combined action when required.

A surgeon or physician who will not consult with his associates,

who declines to render them assistance in difficult operations, or who refuses to co-operate in the general work of the institution—is of questionable advantage, no matter how great his professional attainments may be.



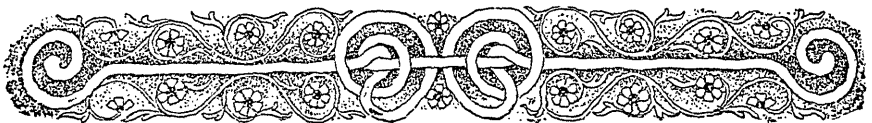
Victoria General Hospital.

The annual report of the Victoria General Hospital contains some features deserving of comment. There can be no better evidence of the growing popularity of the institution than the urgent demands of the medical board for greater accommodation. The crowded wards are the best evidence that the institution commands the confidence of the public and the profession.

The Superintendent notes: "Inability to accommodate promptly those applying for admission still continues." The medical board is more emphatic: "As in previous years, owing to want of accommodation, great difficulty was experienced at times in securing speedy admission of applicants. This want was especially felt respecting acute and urgent cases,

which if not admitted at once, are compelled to undergo great hardship. Less urgent cases have often been compelled to wait for weeks, before finally securing admission." We gather from the report, that the accommodation for private patients is altogether inadequate. No provision exists for convalescents, a better and safer classification of surgical cases is required, better quarters for the *internes* is called for, and an additional operating theatre is now necessary.

These facts constitute a strong plea for a liberal expenditure on the part of the government to provide for the many and growing wants of the institution. The truth of the following statement cannot be seriously questioned: "The value and importance of hospital treatment is becoming more fully recognized by the public, and the demand for a larger and more thoroughly equipped central institution will greatly increase, and that demand instead of being lessened will be powerfully promoted by the organization of hospitals in the smaller centres of population."



CEREBRO-SPINAL MENINGITIS.

A BRIEF ACCOUNT OF THE EPIDEMIC IN LUNENBURG COUNTY IN 1905.

By *H. K. MACDONALD, M. D.,*

Lunenburg, N. S.

[Read before Halifax and Nova Scotia Branch, British Medical Assoc'n, Jan. 31, 1906].

WHEN your President asked me to contribute a paper on cerebro-spinal meningitis had it not been for the fact that I, in common with the majority of the profession in our county, recently passed through an epidemic, I would have felt like suggesting a paper on something which we meet with more commonly; but on consideration I thought that a history or a short account of the epidemic as we saw it in Lunenburg County, would be of some interest to you and the profession. It is therefore not my intention to discuss the disease so much from a scientific standpoint alone, as from a clinical standpoint, or the standpoint from which the majority of the profession in our county viewed it.

At first, and, with some members of the profession, throughout the epidemic, great doubt as to the exact nature of the disease existed. And this was not without some foundation, as the mildness of the attack in many cases, the low death rate and the absence of certain clinical symptoms led some to think that it was not cerebro-spinal meningitis. All doubts concerning the epidemic

were gradually dispelled and the finding of the diplococcus intracellularis finally settled the matter.

It is my intention to give a general history of the epidemic: method of appearance, chief clinical symptoms and features, therapeutic and other means adopted, and the result of the epidemic temporary and permanent; and afterwards to report several cases occurring in my own practice and in that of other physicians.

GENERAL HISTORY OF THE EPIDEMIC.—During the month of July 1905 (i. e. during the heat of summer) the profession in various parts of the county almost simultaneously were confronted with a disease which in a few days became epidemic, and which in a great majority of cases presented symptoms of a meningeal nature, attacking children and very young adults almost exclusively.

The attack was limited in some cases to one member of the family, while in other cases two, three or even four members of the same family were simultaneously affected, the disease varying markedly in severity and duration. In some cases, the affected ones were sick from a few hours or days to several

weeks, making in some instances a rapid recovery, in others a slow, tedious and partial recovery. Some cases, in which death ensued in a few hours, presented a clinical course of great irregularity. The disease was epidemic to so marked a degree in some districts that almost every child in the community was affected. It was hard to estimate the exact number of cases but from information received from various courses I have reason to think that over two hundred cases occurred, with a death rate of not more than seven or eight per cent. In twenty or twenty-five per cent. of the non-fatal cases, temporary or permanent paralysis followed.

The rate of mortality varied greatly in different districts and with different physicians; some having thirty cases and only one death, others a little larger percentage. I had two deaths in about forty cases. The percentage of paralysees and the various parts affected, whether a limb or a set of muscles, also varied greatly with different physicians.

There have been several theories advanced as to the method of conveyance of the contagium of the disease to our county, but nothing definite has been arrived at and we are still in doubt as regards that point. The epidemic was not confined to the homes of the poor, ill-fed and badly nourished but was rampant in the homes of the well-to-do and prosperous.

As to the district visited, the epidemic did not extend beyond a radius of eight miles with few exceptions. This corresponds with the views of the best authorities in the text books.

ETIOLOGY.—The disease in our county was epidemic and localized, a radius of eight miles covering the area affected. In the thickly settled country districts, particularly up and down LaHave, the disease was very prevalent, and some of the most severe cases in the outbreak were in this district. The exciting cause was of course the *diplococcus intracellularis*. No predisposing cause was known to exist; it was most prevalent where sanitary conditions were good. I know of no case where the disease occurred twice in the same individual during the epidemic, but one or two cases in which relapse occurred are reported. Contrary to text books, all the children of the family were affected in the majority of cases. Without a bacteriological examination of the cerebro-spinal fluid or an autopsy in fatal cases one could not be positive of the exact cause.

SYMPTOMS.—The most noticeable feature of the epidemic was the great irregularity of the clinical symptoms. I have found cases in my own practice so mild, that, had I not been on the lookout for the disease, I would have passed it over as a slight indisposition. But upon careful examination of these mild cases some character-

istic symptoms could be elicited by which a diagnosis could be made. In other cases the symptoms were so severe that death resulted in a few hours, or days at the longest. Between the two extremes all degrees of virulence of the disease could be found. This was not only the case in my practice, but was the experience of most of those of the profession who came in contact with the disease.

Taking first the severe cases. When called to see one of this type a history like the following would be given: In the case of the young child, the parents or parent would notice that something was wrong, perhaps for a few hours before serious symptoms would develop. The child would become very irritable and hard to manage, or a bright and active child would become dull and languid, or the onset would be more sudden. The child would at once complain of headache and pain in the muscles of the neck. Nearly always there was vomiting and the patients were always markedly constipated. Parents would become greatly alarmed in some cases on account of the appearance of the child. In other cases a convulsion occurred, although this was not common. Loss of appetite and deafness were prominent features. On examination there would be a rise of temperature to 101° or 102° F., and in some cases much higher, a quickened and irregular pulse, full

and bounding at first, and decidedly intermittent in character. This feature of the pulse was often noticeable even in mild cases, while in others it was slow at the onset. Delirium was not present in most cases, and was not a prominent symptom in my cases at any stage of the disease. Patients were very troublesome and the young children very restless. Another prominent and early symptom was tenderness along the spine, extending up to the neck and back of head. Any movement of the head would produce marked pain, and percussion along the spine would produce a like effect. The spleen was unusually enlarged. Albuminuria was not a prominent symptom at the onset. The knee-jerk in nearly all my cases was exaggerated at the onset.

In young adults the same symptoms presented themselves, but in most cases a chill was complained of. Photophobia was uncommon but patients were easily disturbed by slight noises, etc.

The above is a fairly good picture of the onset. In the course of two or three days the symptoms became more alarming, the patients became very somnolent, but could be easily aroused for a short time. Temperature varying greatly, but was usually above 101° F. The pulse lost its bounding character, but still continued rapid and intermittent.

Usually there was great aversion to food, and the bowels continued constipated. Knee-jerks, exaggerated at first, were in a few days entirely absent, and marked loss of power would be discovered, affecting in some cases both arms and legs; in some the arms alone or the legs alone, or it might be an arm, or a leg, or, in others only a group of muscles. Involvement of the sphincters was not a prominent symptom, except in fatal cases.

After a period varying from ten days or two weeks to three or four weeks or longer, the temperature would gradually subside and perhaps become subnormal, pulse would become more regular and lose its intermittent character—although in some cases this would persist for days after temperature was normal. The constipation would be relieved, the appetite would improve and the patient would gradually return to a normal condition except that the paralysis would remain, and a period of convalescence would be entered upon.

In fatal cases the symptoms would gradually increase in severity, retraction of the head would become more marked (opisthotonus in one case), convulsions would develop, and paralysis would become more general until some vital centre would be affected and death would rapidly ensue. All the cases were not of this type, however; in fact the great majority were of a much milder type.

In some families one child would suffer from a very severe attack, while perhaps two or three others of the same family would suffer from a mild attack, varying in duration from a few hours to two or three days. In these mild cases the temperature would not be very high, and nervous symptoms not prominent, but one or other of the characteristic symptoms would be present and enable us to diagnose the case. The pulse in these mild cases was particularly significant, the intermittent and irregular pulse usually being present.

Authorities speak of an abortive type, and this was not uncommon among our cases. The attack might set in with great severity, all the prominent and important symptoms being present, but in the course of a day or two the symptoms would subside and a rapid convalescence would be entered upon, so that in the space of a week the child would recover and be none the worse for its experience. In a great majority of these mild and abortive cases, the condition would not have been diagnosed had not the epidemic existed. In my case reports, to which I will refer later on, typical examples of the three types can be found.

The cutaneous symptoms mentioned in text books were not prominent. In only a few cases did any rash exist, but herpes about the mouth and face in severe cases was fairly constant.

DIAGNOSIS.—As in diphtheria a positive diagnosis could hardly be made without the isolation of the specific organism. In some of our cases a coccus answering the description of the diplococcus intracellularis of Weichselbaum was found in the cerebro-spinal fluid. The bacteriological examination of the fluid was not as general as I would have desired it, for various reasons. The mildness of the attack in a great many of the cases did not demand lumbar puncture for relief, and the operation was not justifiable for purely scientific reasons; while in many of the severe cases where the operation was indicated the prompt refusal on the part of the parents to allow even so mild a surgical procedure prevented us from obtaining the cerebro-spinal fluid. The greatest difficulty in diagnosis was at the onset, in differentiating between cerebro-spinal meningitis and acute anterior poliomyelitis. Some of the profession whose cases were mild are still in doubt on this point, and here of course the bacteriological examination was important and desirable.

The headache, pain in the neck, retraction of the head, stiffness in the muscles of the neck, and exaggerated knee-jerks at the onset, were all helpful in diagnosing the condition. I found Kernig's sign, spoken of as valuable by the best authorities, extremely helpful in making a diagnosis. It was present in nearly all my

cases, thus showing that irritation of the spinal nerve-roots was present even in the very mild cases. Some authorities claim that this symptom can be elicited in healthy individuals, and is therefore of not much clinical importance, but this has not been my experience. Flexing the thigh at right angles to the spine and then extending the leg upon the thigh, would cause in nearly all my cases painful contracture of the flexor muscles, and the resultant extension of spine would cause severe pain. The diagnosis from tuberculous meningitis, from acute articular rheumatism, and from typhoid offered no special difficulties.

PROGNOSIS. In our experience we found it profitable and wise to be very guarded and careful in prognosis. Some cases apparently mild at onset developed grave symptoms in a few hours, followed by complete and extensive paralysis, and in some cases death following rapidly. And again cases presenting severe symptoms might soon moderate and recover rapidly. In some cases where paralysis was very marked, power and sensation would gradually return and the function of the limb would be wholly restored, while in other cases the recovery would be incomplete. In some instances where two or three of the extremities were involved, marked improvement took place in two of the extremities and their function was

wholly restored, while one of the extremities remained paralyzed, or only slightly improved, function being restored to a certain point, but not completely. A good prognosis, or a decided prognosis, in such a variety of cases, was impossible. In a number of instances, particularly in the severe cases in my own practice, mild and extensive paralysis exists to the present time; in some a slight improvement, in others practically no improvement, has taken place, as my case reports later will show. Just what the resultant or permanent conditions in these cases will be I consider it impossible to say even at this time, but I am inclined to think that where no evidence of gradual improvement is now present the condition will be permanent. One or two of my patients have consulted eminent neurologists in other cities, and have received little encouragement as to complete restoration of function of limbs. One of my most severe cases, in which the functions of upper and lower extremities were completely lost, in which the patient was delirious for days, and in which the prognosis was extremely bad, made a complete recovery after a period extending over seven weeks. In view of these facts you can readily understand how guarded and careful the medical attendant had to be, anything like a decided prognosis, good or bad, being out of the question.

PROPHYLAXIS.—On account of the nature of the contagium not being thoroughly understood, and the authorities on the disease having very little to offer in this respect, we thought it wise to isolate as much as possible and particularly in those instances where only one or two members in the family were affected. As far as the isolation of the family from other families in the neighborhood was concerned, we met with no difficulty. The different boards of health thought it wise to discontinue public meetings for a time, and this was carried into effect with marked misgivings on the part of the laity. Were an epidemic of a similar nature to again visit us I would recommend isolation of cases and the early discontinuance of large gatherings, particularly of children.

In the case of the sick-room, the bed-linen, etc., practically the same directions were carried out as would be advised in typhoid fever.

TREATMENT.—The treatment was entirely symptomatic. The sick-room was kept quiet, darkened and well ventilated. Diet was light and nourishing. Sponging with tepid or cold water was resorted to when temperature indicated it. I made it a practice to keep an ice bag to the head constantly. This relieved the headache, quieted the nervous system, induced sleep, reduced temperature. When first called I

almost invariably ordered a good large dose of calomel, and followed it by a saline and an enema when necessary. To move the bowels effectively required good stiff doses of calomel, and after the initial dose I usually continued it in repeated small doses, say one-tenth grain every two hours. For counter-irritation to the spine and back of neck, mustard was usually employed; also rubbing extremities with mustard water or some stimulating liniment.

Morphine for the restlessness, insomnia and spasms, and for the pain in the extremities which was a prominent symptom of convalescence, was most valuable.

Calcium sulphide was prescribed and found beneficial.

During convalescence potassium iodide, for its absorbent and alterative actions, and strychnine in small doses, for its tonic effect, particularly in cases where paralysis existed, were prescribed and found useful.

General tonics including iron, the hypophosphites and the glycerophosphates with lecithin, were largely used and with markedly beneficial results. Lumbar puncture, advocated by many authorities but not too enthusiastically, is a measure certainly indicated in selected cases. The few instances in which this procedure was carried out in our county yielded good results. The aversion to it on the part of the parents prevented its more general adoption. In my estimation it is not indicated in all cases. Had we had a more malignant type of the disease to contend with, it would no doubt have been performed much oftener.

For the resulting paralysis massage, systematically and persistently followed, is probably the best and only treatment of avail.

Electrical treatment promises little, although cases are reported where improvement followed its use. In my own cases practically no benefit followed the use of electricity.

REPORT OF CASES.

CASE I.—(*Mild type*.) E. K., male, aged 5 years. Attention called to child while in attendance upon another case in same family, on the morning of August 7th. He complained of headache, vomiting and feeling very sick, pain in back and neck. No convulsions, but an indefinite history of a chill, constipation.

On examination temperature was found 103° F., pulse 120, respirations, 28; tenderness over back of neck and down spine; was sleepy and dull; lost appetite; did not want to be aroused. Reflexes remained normal. Was kept in bed with ice bag on head. Large doses of calomel were prescribed and plenty of milk and water

allowed. Following day same condition, except that temperature and pulse had dropped somewhat. Temperature 101.4° F.; pulse 108; respirations 27. Pulse a little irregular. Kernig's sign not well marked. Afternoon temperature 103°; pulse 108; respirations 26. Calomel grain 1-10th prescribed. On morning of third day temperature was down to 100; pulse 90; and evening temperature 98. ; pulse 70, but very intermittent in character. Fourth day, morning temperature at 99°; pulse 80. Evening temperature 98.4°, pulse 78.

On the evening of the fourth day the patient was seen in consultation by Dr. M. Chisholm of Halifax, who agreed with my diagnosis, being particularly impressed with the intermittent pulse, which he considered diagnostic. Kernig's sign still absent. Patient was feeling better, was developing an appetite, and wanted to get out of bed. No paralysis or weakness of any muscle or set of muscles was apparent.

Patient's temperature remained between 98° and 99°, and in a week's time, with the exception of being somewhat anæmic and weak, was up and around as well as ever, making a good and complete recovery.

CASE II.—(*Abortive, with paralysis.*) Occurred in the same house as case one, and was also seen by Dr. Chisholm in consultation on

the evening of the seventh day. V. K., female, aged 3 years. Called to see patient about 7 a. m. While mother was dressing her in the morning the patient seemed to faint, became very weak and lost consciousness for a few seconds. Mother became alarmed and sent for me at once.

Child had retired evening before feeling apparently well. Upon examination temperature was found subnormal, 97° F; pulse 144, very rapid and weak. Ordered child to be put in hot bath and then in bed and warmly covered up; also ordered hot drinks. Through the day the child improved so much that the mother could not keep her in bed, and in the evening she telephoned me that the child was so much improved that there was no necessity of calling to see her. Calomel was given with good results. Appetite good.

During the next three days, or until the morning of the fourth day, the mother noticed that the child was irritable and easily tired, but otherwise about the same. On the morning of the fourth day mother thought child was feverish, when I was again sent for. I found temperature 101.6°; pulse 120; respirations 30. Tenderness over back of neck and along spine, knee-jerk of left leg exaggerated, head retracted, pupils regular, marked vomiting, pain on movement. Considerable twitching and nervousness. Kernig's sign well developed. Ordered calomel

followed by a saline, with satisfactory results, ice bag to head, and a mild fever and diuretic mixture. Advised that patient be kept quiet. Afternoon temperature 102.6°; pulse 128; respirations 30. Treatment continued, and the following morning temperature was somewhat lower. Temperature 101.4°; pulse 128; respirations 24. Head retracted, pupils contracted, great pain on slightest movement. Kernig's sign very marked. Evening condition still better, exaggerated knee-jerk of left leg disappeared and a decided weakness was apparent.

In three or four days temperature gradually lowered to normal, but pulse at times was fast and nearly always intermittent in character. On the evening of the sixth day Dr. Chisholm saw the patient in consultation, and concurred in the diagnosis and treatment. From then on patient made an uninterrupted recovery, except that she suffered greatly from pain in the lower extremities and the paralysis persisted. Pain gradually subsided, massage was kept up, tonics given.

I saw the case just a few days ago and practically no improvement had taken place in the affected limb. Massage and tonics are still being kept up and patient is wearing a splint to overcome any deformity which might develop.

CASE III.—(*Severe case, complete recovery.*) H. S., male, aged 11

years. Saw patient on morning of July 15th, 1905. Had attended four other children of the same family for the same condition. Child had been sick for two days; complained of severe headache, vomiting irrespective of the taking of food, severe pain in the back of neck extending down the spine. Mother said the child had had a decided chill two days before I was called and had been constipated for four days. Upon examination child was found lying with head retracted, complaining severely when any attempt was made to move, arms and legs were stiff and knee-jerks both exaggerated. Kernig's sign well marked. Child had some difficulty in swallowing liquid, but had a fairly good appetite. Pupils were both markedly contracted, but still reacted to light. Photophobia present and the slightest noise or jar on the part of the other children or attendants disturbed patient greatly.

Temperature, 103° F.; pulse, 124; and respirations 30. Patient was restless and hard to control. I at once ordered a soap-suds enema, then calomel and a saline; also a tepid bath, and ice bag to head. Gave morphine and bromides to quiet patient and produce rest. The following day the condition was not much improved, and I suggested lumbar puncture. The parents would not hear of anything like a surgical procedure. This condition continued for

about ten days, when the stiffness and rigidity of muscles began to disappear, and in about three weeks this was followed by paralysis of all the extremities. The vesical sphincter was affected but sphincter ani was not affected. Nocturnal delirium in this case was particularly marked; the patient would start up suddenly and then would wake up and complain of severe pain in extremities requiring morphia for relief. Temperature followed an irregular course for four weeks. Pulse remained intermittent in character. At about the end of the fourth week some slight improvement was noticeable in the arms. This continued so that at the end of six weeks the paralysis had almost completely disappeared, and to-day, six months after the attack, the patient is almost as well as ever. This was one of the most severe cases I had.

CASE IV.—(*Severe, with death.*) Another case in the same family; female, aged seven months. Illness began with a convulsion which was followed for just twenty-four hours by marked twitchings, general all over the body. Retracted head, contracted pupils and exaggerated knee-jerks, Kernig's sign. At end of second day paralysis developed, child became somnolent, hard to arouse and death occurred at the end of the third day from involvement of respiratory muscles.

CASE V.—(*Diagnosis questionable.*) The following case occurred in Dr. Burrell's practice. On evening of October 7th, was called to see a child, a female, twelve years of age; had been sick for two days, with pain in head and vomiting. On examination temperature was 99°; pulse, 90; and respirations, 20; pupils dilated but regular, reacted to light but not to accommodation; no photophobia. No chill, head not retracted, but a marked weakness of the neck muscles, so that head would roll from side to side; flaccid paralysis. Reflexes absent. Kernig's sign absent.

October 8th, 9 a. m., temperature, 98.4°; pulse, 100; respirations, 20. Marked involvement of upper extremities, paralysis developed rapidly, extreme constipation, difficulty in swallowing. Oct. 9th, 9 a. m., deepening of cerebral symptoms, temperature, 97; pulse, 120; respirations, 20. Involvement of lower extremities and of vesical sphincter.

Oct. 10th. Temperature, 96.2; pulse, 140; respirations, 30. Cheyne-Stokes breathing. Total paralysis. Death at 10.30, 64 hours after onset. Considered first cerebro-spinal meningitis, but later anterior polio-myelitis,

CASE VI.—(*Case showing contagious character.*) Dr. W. H. Macdonald, Rose Bay, had an important case so far as period of incubation is concerned. A male, fourteen years of age, returned

from fishing on the Grand Banks, but previous to his return several members of his family were affected with the epidemic. He returned from fishing on August 11th, and to his home August 12th. On August 24th he was taken ill with cerebro-spinal meningitis, which ran a severe course ending in recovery. In this case the patient was exposed to contagion on the 12th of August, and on the 24th, twelve clear days afterwards, the disease developed. This suggests the contagious character of the disease and a period of incubation of not more than twelve days.

CASE VII.—(*Abortive Type.*) In Dr. W. H. Macdonald's practice. Willis C., aged 9 years. Healthy, well developed, well fed school boy. Feeling perfectly well until the morning of August 2nd, when he began to feel unwell. This feeling increased until 10 a. m., when he was so ill he could not stand and went to bed. Seen at 1 p. m., temperature 103°, Pulse 130, respirations 30. Severe pain in head and back of neck, also pain in legs, particularly when he attempted to stand. Head somewhat drawn back; could not be bent forward without severe pain. Back of neck painful on pressure, very much so when percussed. Spine tender on percussing down to lower dorsal region. Knee-jerk exaggerated. Kernig's sign present. Patient vomited several times, was very drowsy, no appetite, bowels constipated.

Gave cocaine by mouth to help patient retain large dose of calomel. Ice bag to head. Counter-irritation to nape of neck and spine.

August 2nd, 7 p. m. Patient about the same.

August 3rd. Had a good night, bowels moved freely, no vomiting. Pains greatly relieved. Feeling comfortable.

August 4th. Almost well. Not much pain, can stand but cannot walk well. Head moves on neck without pain.

Seen August 28. Since attack occasionally has had some pain in neck, back and legs; otherwise well.

Seen again January 5th, is perfectly well.

CASE VIII.—(*Severe form, with death.*) Dr. W. H. Macdonald's practice. Milton L., 7 years, school boy. Spent evening of August 3rd with friends, feeling well until on retiring when he complained of feeling ill. Slept pretty well. On rising complained again of illness. About two hours after began to get very sick. Pains in head, neck and back, vomiting and chills. Knee-jerk increased. Constipated. Examination of lungs and abdomen negative. Doctor called at 11 a. m. and prescribed. Treatment gave relief until about 2 p. m., when he became worse, but when was seen again his condition did not appear grave.

Improved somewhat again until 7 p. m., when patient became

worse, pain increasing; delirious; spasms of muscles of face and back. Seen at 10 p. m.; patient breathing 25 to minute with grunting expiration; pulse irregular at 130; expression anxious; fairly clear in head. Muscular contractions, approaching opisthotonus. Complains of pain.

Pulse became weaker and respiration more laboured until death relieved him about 12 p. m.

CASE IX.—*Severe form Recovery with paralysis.*) Dr. W. H. Macdonald's practice. Robbie M., aged 4 years. Previously healthy. Aug. 12th. Found patient quite sick with pain in back of neck and dorsal spine, and headache. Head markedly retracted: cannot be bent forward; vomiting; inability to stand. Knee-jerks increased. Temperature, 103°; pulse, 120; respirations, 30. Constipated. Treatment: calomel, mustard to spine, ice bag to head, etc.

August 13th. Somewhat better. Temperature 102.5°; pulse, 120; respirations, 26. Bowels did not move. Gave calomel and salts. Kernig's sign present.

August 14th. Feeling about same. Having considerable pain in neck. Bowels moved freely. Marked loss of power in right arm and possibly some loss of power in left leg. Temperature, 102°; pulse, 115; respirations, 26. Passed several round worms.

August 15th. General condition about same. Temperature, 99°; pulse rapid, 135; respirations, 25.

Almost total paralysis of right arm, and marked loss of power in left leg.

August 16th. Condition unchanged, but sleeping more soundly. Temperature, 97°; pulse, 120; respirations, 24.

Seen again on 18th, 22nd, and 26th. General condition gradually improved. Temperature dropped to normal on 15th, and was sub-normal for several days. Pulse dropped to about 88. Patient got up on the 24th. Gradually regained strength and use of left leg, which was never totally useless. Right arm improved somewhat, but shoulder muscles (deltoid) are still paralysed and there is very little power in forearm.

At present patient feels well, has a good appetite, and plays about, but arm shows no improvement under massage, etc.

SUMMARY.

In reviewing the history and course of the epidemic, there are a few points which stand out prominently.

1. *Stage of Incubation:* The latest authorities place the incubation period at from one to four days. Bouldon and Goodwin in their report of 144 cases say the incubation period is short, not more than four days. Careful observers in our county thought the incubation period not less than ten or twelve days, as in the case VI. (Report of Dr. W. H. Macdonald, of Rose Bay).

2. *Contagiousness of Disease* : The best authorities to-day consider the disease contagious and communicable from one to another; and this was certainly the opinion of the profession in our county. A recent article in the *New York Medical News* claims that the specific organism can be found in the nasal secretions and nasal cavity of 50% of affected persons, during the first week of the disease. The same authority claims that the organism is found in ten per cent. of healthy individuals during an epidemic, and advises isolation of cases and the use of antiseptic sprays in nasal cavity, and thorough fumigation. This I might say was the opinion of the profession in our county, and isolation and fumigation were carried out as carefully as possible.

The low death rate was due to a number of causes. The extremely high death rate in city and hospital practice occurred among the poor, ill fed and badly nourished and among a class living in unsanitary surroundings. In the recent epidemic the reverse was the condition of affairs; the sanitary condition was good; the

affected ones were those of well-to-do parents in the majority of cases, but probably the great feature contributing to the low death rate was the mild nature of the infection. The organism was not of a virulent type. As compared with a recent epidemic in one of the American cities, in which 20 cases were reported with 17 deaths, our epidemic was mild indeed.

3. *Season of the year* : Another unusual feature was that the epidemic occurred in the middle of summer; this is noteworthy as epidemics usually occur in fall and winter.

The disease was fully discussed by the profession in the county, and here is one of many instances, where our County Medical Society was a great benefit. The profession at several of our recent meetings had the subject under discussion, the experience of the various men, the mode of treatment and the results were all compared, with benefit to ourselves as I trust that it has been to you, gentlemen, the members of the Nova Scotia Branch of the British Medical Association.



RUPTURE OF URETHRA WITH EXTRA- VASATION OF URINE.

OPERATION. RECOVERY.

By J. W. T. PATON, M. D.,

Truro, N. S.

(Read before Canadian Med. Assoc., Aug., 1905.)

ON February 23rd, 1905, I was called to see C. B., æt 52, who complained of difficulty in urinating. He had suffered more or less with this trouble for the past 15 years, and repeated attempts had been made by different physicians to pass a catheter, but without success. An attack of gonorrhœa in youth was admitted. In addition, there was a history of steadily increasing difficulty in micturition, abnormal prolongation, and undue frequency of the act,—the patient having to rise six or eight times each night. From these symptoms, a diagnosis of urethral stricture was made.

On examination of the patient, a prominent, hard swelling was noticed about the centre of the penis on its under side, and a soft swelling about the size of a gage plum near the centre of the perineum. This latter swelling was evidently an abscess—in fact pus was beginning to ooze through its thinned out wall, and handling it caused enlargement of the opening with the discharge of extremely foul pus. Here was a periurethral abscess,—the communication with the urethra, for

the present at least, being cut off, for no urine came through the abscess opening. The patient said this swelling had been there for some years, but had increased in size more rapidly during the past month or two. The abscess was dressed and the patient given salol and boracic acid to improve the condition of the urine and bladder preliminary to attempting the passage of a catheter. Urine was passed with much difficulty, and the stream was very small. The patient was told to apply moist heat to the perineum, and if necessary to sit in a tub of hot water to assist micturition.

About 2 o'clock on the morning of March 4th, I was hurriedly summoned to see the patient, who told me on my arrival that while sitting in a tub of hot water straining hard to urinate, he felt something "give away," with a feeling of great relief, followed immediately after by a burning pain in the perineum, scrotum and penis. I saw the patient about an hour after this had occurred, and the scrotum and penis were greatly swollen and œdematous, and there was considerable burning pain. I succeeded in passing a very small

gum-elastic catheter, which I tied in position to drain off the urine. I saw the patient again at 9 a. m. and obtained his consent for an operation. Temperature 100 $\frac{4}{5}$, pulse 96. At 2 p. m., when I had obtained assistance, and had made ready for operating, a gangrenous patch was beginning to appear on the right side of the scrotum. Temperature 102 $\frac{2}{5}$, pulse 120.

Under chloroform anæsthesia, perineal section was done, the incision being made through the abscess opening, and the catheter in situ utilized as a guide to the urethra. By making the section as I did, I hoped that as granulation occurred, the abscess would heal without leaving a fistula. (This fortunately was secured.) Free incisions were then made in the tissues of the scrotum and penis. The condition of the abdominal wall seemed so good that it was thought no incisions there might be required, and none were made. This mistake had afterwards to be corrected. The wounds were left open, dusted with iodoform and packed with gauze. Hot fomentations of carbolic acid, 1-100, were applied and changed frequently, and the patient given large doses of quinine, tr. ferri perchloridi, and whisky practically ad libitum.

On March 6th there was evidence of cellulitis in the abdominal wall, and it was freely incised, the connective tissue at the bottom of the incisions showing signs of gangrene.

Without detailing the further progress of the case, it will suffice to say that considerable sloughing occurred. A portion of the right side of the scrotum sloughed away

(exposing the testicle), and also the connective tissue behind the testicle, as well as the entire fascia and connective tissue of the pubic region and abdominal wall as high as the incisions that had been made, so that I could syringe freely through these openings, and out through the opening in the scrotum. The scrotal septum remained intact and the left testicle was not involved.

Though several times a fatal ending seemed imminent, the case progressed favourably, and, by March 18th, the sloughs had all separated, and temperature and pulse become normal.

By March 27th, the perineal opening had almost closed, and internal urethrotomy was done,—two strictures being encountered, one in the penile, the other in the bulbous urethra. After division, these strictures were rapidly dilated to 24 F, and afterwards, at intervals, were kept dilated by graduated bougies.

As a result of the extensive sloughing in the scrotum, a urinary fistula developed. As these strictures became more fully dilated, and urine was passed more freely along the natural passage, this fistula and the one in the perineum closed. The various incisions healed by granulation, recovery being slowly progressive. The patient now passes urine freely, not having to rise once at night, a comfort he has not enjoyed for 15 years past.

In the treatment of this case, two very palpable errors were made: (1) Too much time was allowed to elapse before operating. (2) The abdominal wall should have been incised at the time the other tissues were.

ACUTE OTITIS MEDIA AND ITS TREATMENT.

By R. EVATT MATHERS, M. D.,

Halifax, N. S.

(Read before Halifax, N. S., Branch British Medical Association, Dec. 6th, 1905.)

MY apology for reading a paper on this apparently common-place disease is that so few of us seem to realize what a grave disorder acute otitis is, and if not properly treated, mastoiditis, brain abscess and even death may result. Acute otitis, as we all know, usually follows an acute coryza, scarlet fever, measles, etc., or may be caused by the introduction of fluids into the middle ear through the eustachian tube while bathing or using the nasal douche. Abnormal conditions of the upper air passages, such as adenoids and enlarged tonsils predispose to the disease. (I might here say that very often when prescribing a nasal douche, the physician often neglects to warn his patient against blowing the nose hard after its use. I have had patients who have thus contracted acute otitis.) The symptoms of this disease of course vary according to age. In the adult, the first symptom may be a feeling of fulness in the ear, or, as patients often express it, "a feeling as if the canal was filled with cotton wool." This, of course, is due to the congestion of the eustachian tube. The ear

throbs and pulsates. The full feeling is followed by pain, usually localized, and not a diffuse pain. This is worse when lying down. Hearing is slightly impaired at first, gradually increasing to a high degree. Tinnitus manifests itself quite early. There may be a clicking in the ear, or, as one little girl expressed it "a hiccough in the ear," the expression being very appropriate. If the otitis is of an acute catarrhal nature, the temperature is seldom elevated. Unless there has been an incision of the drum or spontaneous rupture the lining membrane of the mastoid cells may become involved. There is then generally elevation of the body temperature. In the purulent otitis, the pain is more severe, and we have decided elevation of temperature— 101° to 103° . Sometimes vertigo, constipation, general depression and even delirium may be present. The high temperature in the purulent otitis is usually an indication of the more severe constitutional infection. In the milder catarrhal otitis, spontaneous rupture of the drum membrane usually takes place (if the ear is not properly treated) in twenty-four to forty-eight hours, and the patient

then has immediate relief. The discharge may cease of its own accord, or it may continue, become infected and change from a sero-mucous to a purulent secretion, and run the ordinary course of a purulent otitis. In the acute purulent otitis, the pain may continue for some days unless the inflammatory products are evacuated by the drum bursting, and even then it may still continue as the opening may not be large enough. If involvement of the mastoid cells occurs, there is increased pain, and the general symptoms are more marked in severity. If infection from the middle ear or the mastoid makes its way to one of the large sinuses of the dura, pyæmic symptoms appear, such as sudden high temperature— 105° to 106° —with sudden return to normal, rigors and sweating.

If the disease extends to the labyrinth, there will be sudden dizziness, nausea and deafness. In the child, the symptoms of acute catarrhal otitis may be very severe. The infant is restless, throws its arms over its head, usually toward the affected side. The child gives evidence of great suffering, and has short periods of disturbed sleep. The temperature is frequently high in this form of otitis in the infant, although not in the adult. The ear being the least suspected organ, the physician may be in ignorance of the rise in temperature until after some hours

a sero-mucous discharge appears in the auditory canal. In some cases the attack may first begin with vomiting and convulsions. As the drum of the infant is thin, rupture takes place early as a rule even before the inflammation in the middle ear has ceased, so that even though the pain has stopped, there may still be an elevation of temperature for a few days after the appearance of the discharge. The discharge is usually more profuse in the child than in the adult. If the rupture is not of sufficient size, it may become occluded with the discharge and the symptoms reappear. In the purulent form of the acute otitis, the symptoms are more marked, and general convulsions more frequent. In the tuberculous form of otitis, the disease may be very insidious and often painless.

In considering the treatment of acute otitis, it is necessary to divide the subject into before and after the perforation has occurred. I cannot condemn too strongly the very trifling way in which this disease is considered and treated by the laity, and sometimes even by the profession. Parents frequently tell us that the child has only had an earache, and that they dropped a little warm sweet oil, or hot melted butter in the ear. These, I presume, are dropped in for the heat they contain. How much good, or rather, how much harm, do they do, and how long is the heat retained? Being greasy

and sticky; they collect germs in the auditory canal, and if the drum membrane ruptures, there is then much greater chance of infection in the middle ear. The laity are also very fond of inserting the core of an onion in the canal, blowing in tobacco smoke, applying a linseed meal poultice, or dropping in sweet oil with *laudanum*, etc.

If an adult complains of ear-ache, first examine the drum. If this is not inflamed, or if there is no sign of disease of the auditory canal, then examine the teeth and you will occasionally find the trouble there. Personally, I do not believe in the various anodyne installations recommended for the external auditory canal, and have only used them on one or two occasions, when compelled to. The first indication is the relief of pain. If possible, the patient should be put to bed, and a saline cathartic administered so as to get a free and watery evacuation of the bowels. The diet should be light but nutritious. If an adult, alcohol, tobacco and coffee should be stopped. It may be necessary to give a narcotic while we are trying to abort the disease. Local blood letting is often of great benefit. Leeches may be applied in front of the tragus, and two to four ounces of blood drawn. This, of course, should not be done in weak patients. Very gentle politization, using great caution, may be tried early in the disease, and

may give considerable relief by opening the eustachian tube. It should only be done after the nasopharynx has been cleaned. The application of dry heat by means of the hot water bag is certainly of great benefit. A poultice should not be used; if moist heat is used, an antiseptic douche for the ear should be employed, and the auditory canal thoroughly dried afterwards by means of absorbent cotton wound on a probe. Moist heat is not as favorable as dry, as it softens the tissues and is apt to cause tissue necrosis. I have lately used the thermolite bag and found it of great service. Failing to abort the attack by these means, incision of the tympanic membrane is indicated after first thoroughly cleaning the auditory canal and rendering it aseptic. Incision, as a rule, is put off too long, and the drum membrane bursts from the pressure within the middle ear. It is much harder to heal a drum that has been allowed to rupture, than one which has had a clean incision done with antiseptic precautions, as the tissue of a ruptured drum is somewhat necrosed from pressure of the fluid in the middle ear.

After incision of the drum, the canal should be thoroughly cleaned of its discharge by means of a cotton wound applicator, and a very small amount of some antiseptic powder such as boric acid, boro-chloretone, etc., may be insufflated. The ear should be

dried every three hours or so. If the ear does not do well under this form of treatment, then syringing the ear with a warm boric acid, or bichloride of mercury solution should be tried, and the ear thoroughly dried after each syringing. It may be necessary to syringe six or seven times a day. In choosing a syringe, a soft rubber ear and ulcer syringe should be prescribed. After syringing, a 2% silver nitrate solution, or 25% argyrol solution may be instilled, with good results. Gentle inflation with the Politzer bag, or better with the eustachian catheter using the Dench vaporizer with an alcoholic solution of menthol will hasten recovery and relieve the deafness. If the tinnitus continues it is well to give acid hydrobromic

dil. in half dram doses three times daily. When adenoids or enlarged tonsils are present we find the case is apt to relapse and it is advisable to operate, as an otitis media should not influence us against their removal. In conclusion I would quote from a work I have recently read.

“In diphtheria and the exanthemata the only way to be sure that an acute otitis is not developing, is by daily inspection of the tympanic membrane. Inasmuch as this is impracticable, it would seem wise to have the canal sterilized daily by irrigations with a 1 to 1000 bichloride solution in order to avoid infection in those cases where spontaneous rupture occurs without warning symptoms.”



THE LATE DR. CHAS. HOLDEN.

DR. CHARLES HOLDEN died in Saint John on Wednesday, the 2nd inst., of an acute attack of pneumonia, to the great sorrow of his friends, and the community in which he was known from his birth and esteemed in the highest degree.

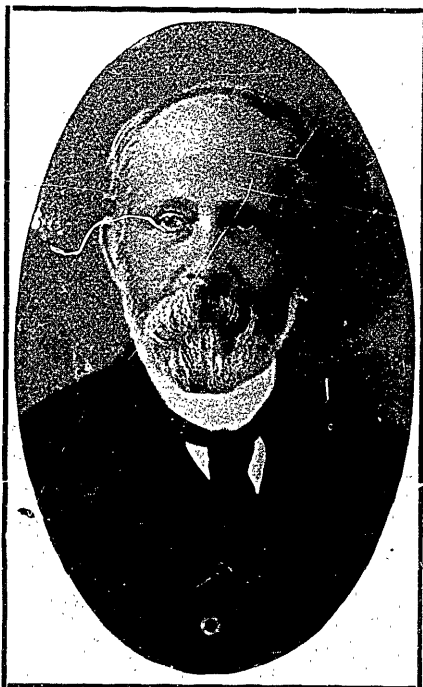
Of a loveable, genial and happy disposition, kindly sympathetic as well as keenly appreciative of the humorous, he was a great favorite with his patients, who were always cheered by his bright smile and encouraging words, and was successful in winning and holding the esteem of those whom he treated and who trusted him.

His fine education, thorough training, and keen observation made him very reliable as a consultant, which relation to his brethren he had largely attained of late years.

But it was not only as a physician purely, that he was so esteemed, for on the surgical

side of practice he was equally well abreast of the most modern and latest advances and recently a large part of his work has been done in the more important operations performed in special hospitals. In these he was prompt in action, fertile in resource and acted with sound judgment in the interest of his patient alone.

Although so well gifted in practical work and a mind stored with the good judgment of a long and active experience, he did not take a very active or prominent part in the medical societies; for although well able to discuss all medical subjects, he was not gifted with the faculty or desire of speaking in public with ease, or if



he was, he did not care to cultivate it, yet he often attended the more important meetings held in his vicinity, and was a highly interested participator in the meeting some years ago of the British Medical Association in Montreal, and looked forward with much prospective eagerness to the coming one in Toronto.

In Edinburgh he had many friends among the eminent men there, especially the Professor of Surgery, John Chiene, and the Professor of Medicine, John Wyllie, with whom he enjoyed an intimate and warm friendship.

He delighted in all forms of music, but his professional work prevented him from continuous cultivation of the art.

He was the centre of a happy and accomplished home circle, where his parents, wife, children and grandchildren came together for mutual enjoyment and delight at the festive seasons.

To those his passing away is stunning and irreparable. To the writer of this, who enjoyed his warm friendship for forty years, the recollection of his kind, generous and sunny character and association will always remain a grateful and happy remembrance.

The people of St. John manifested deep and painful interest in his illness, and when the moment came of the announcement of his death many were affected to tears throughout the city.

To the bright, loveable spirit which has gone, hosts of friends while sorrowing, will join in the old Roman salutation to the departed: "Hail and Farewell."

Dr. Holden was born in St. John sixty-one years ago, a son of John Holden, a very well known citizen. He first studied at King's College, Windsor, (N. S.) and graduated in arts from there about 1863. From there he went to Edinburgh, where he took his M. B. degree with honors in 1867 and M. D. in 1869. He came to St. John the same year and began practice.

Soon after his arrival here he was appointed to take charge of the smallpox outbreak and he himself contracted the disease. In 1875 he married the eldest daughter of the late Judge Wetmore and in that year Dr. Holden was burned out in the St. John fire, after which he built the home in Charlotte Street where he since lived and where he passed away.

He leaves six children, four daughters and two sons. The daughters are Mrs. Phillipse C. Robinson, of Canning (N. S.); Mrs. A. G. Blair, jr., of Ottawa, and Misses Elsie and Kathleen, at home. The sons are C. P. Holden, who has been studying medicine at McGill College, Montreal, and John, who is a civil engineer at Brandon. Dr. Holden, besides his father and mother, also leaves two sisters—Mrs. John Stewart, of Ottawa, and Mrs. John Gardner, of London (Eng.)

Followed by a lengthy procession, including representatives of all walks of life, the remains of Dr. Charles Holden were conveyed to Trinity Church. A short service was first held at his late residence, 64 Charlotte Street, after which the remains were removed to Trinity, where the Church of England service was conducted by Rev. Canon Richardson, assisted by the choir. A large number of the Medical Society's members walked in a body, after whom came the general public. The pall-bearers were Hon. J. G. Forbes, Dr. J. R. McIntosh, and Messrs. W. H. Thorne, D. C. Clinch, Geo. McAvity and H. C. Rankine. Burial was in Fernhill. Among the floral pieces was a bouquet from sympathizing friends in Montreal.

THE LUNENBURG CONVENTION OF THE MEDICAL SOCIETY OF NOVA SCOTIA.

THE Medical Society of Nova Scotia has for long been considered one of the best attended and most active medical organizations in the Dominion. The meeting this year at Lunenburg on the fourth and fifth of July promises to be one of unusual interest, as matters of the greatest import to the provincial profession are to come up for deliberation and decision. These meetings are primarily for business purposes and mutual improvement along professional lines. The services of several eminent men from beyond our borders have been secured, which together with the promised aid of our best Nova Scotian talent, will make a programme both interesting and profitable.

Lunenburg is one of the most beautiful and progressive towns in a province where such abound, and is plethoric with historical interest. Situated upon what the aboriginal Miemac called Merleguish, now called Lunenburg harbor, out of which sails the finest and largest fishing fleet in the Dominion of Canada, accessible by rail as well as water, with a history dating back over a century and a half, it cannot fail to interest all who contemplate coming to participate in its hospitality on this occasion.

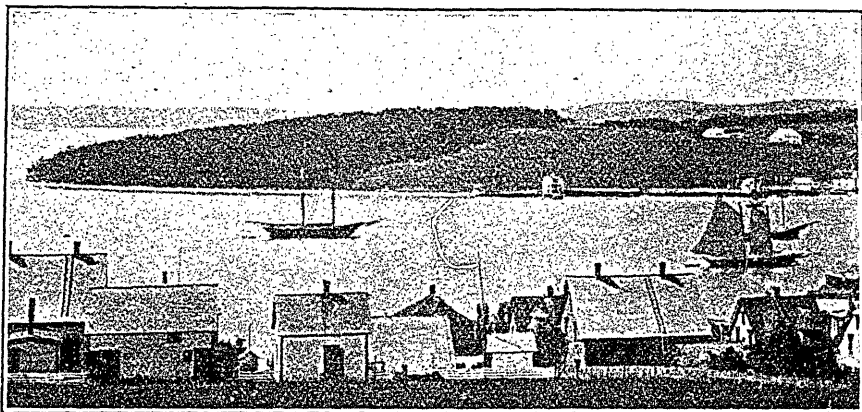
An elaborate entertainment has been arranged, consisting of an excursion to Bridgewater by rail and a moonlight sail upon the La Have River. It is hoped that as many as can will bring their wives and daughters, "sisters, cousins and aunts" with them, as provision will be made to accommodate all

upon these excursions. Other entertainment features will add to the pleasure of the occasion.

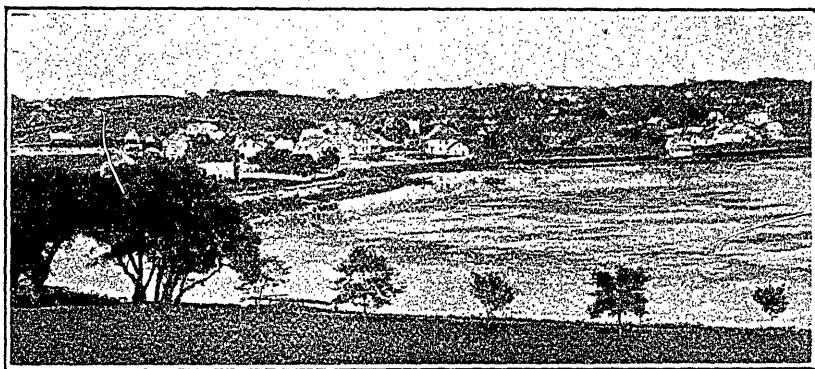
A rare opportunity is herewith presented to members of the medical profession, their wives and families to enjoy an outing upon the famous Southern Shore of Nova Scotia at a very small expenditure, for which the Medical Society meeting alone will be value received. First class hotel accommodation is obtainable at reasonable rates.

Lunenburg is now much more accessible than formerly, owing to the fact that the Halifax and South Western Railway, with which connection can be made at Halifax or Middleton, is now in operation and visitors coming from Intercolonial and Dominion Atlantic points can come through very comfortably. The route of the Halifax and S. W. Railway along the shore from Halifax is very picturesque and travel this way will give the visitor much delight and satisfaction.

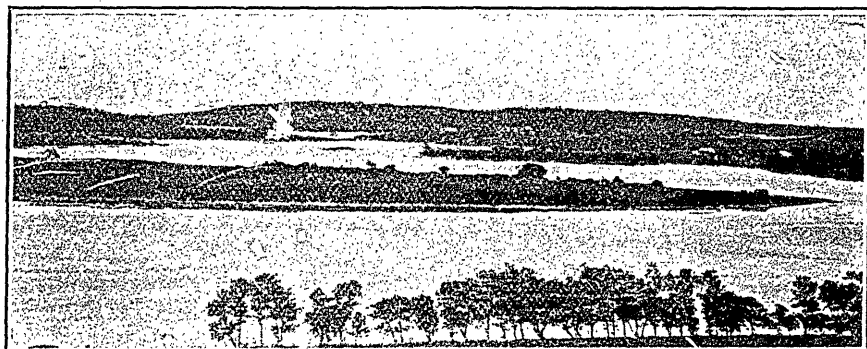
Our provincial men should make strenuous efforts to attend this meeting. It means to us far more than does the meeting of the Canadian or British Medical Association. This is our own Society, through it we can only hope to work out the future of the profession in our province in the best interests of the profession and people. We live in a world of organized effort in all directions, and if we fail to recognize our opportunity and make the most of it the profession must lose prestige and the people at large suffer in consequence.



A Glimpse of Lunenburg Harbour.



The Beautiful Back Harbour of Lunenburg.



Lunenburg Harbour from Cannongate Park.

THE INSPECTION OF MEATS.

EDITOR'S NOTE.—Under this caption we republish two articles from the *Maritime Merchant*, one being a resume of an article in the *World's Work* on the inadequate inspection of meat products, and the other some editorial comment on the local aspects of the subject. We do not need to add anything to the discussion just now. Our readers will be in full accord with the *Merchant's* contention that we should have a thorough and rigid system of meat inspection.

A PICTURE OF MEAT INSPECTION.

IN "A Picture of Meat Inspection," the *World's Work* shows that diseased meat products are sold on the American market—meat that is *known* to be diseased—and that the imperfect national inspection law has been used to give the false impression that products sent out by some packers have had thorough government inspection, which have not had such inspection, and that the local inspection in Chicago has always been inadequate and at times corrupt. The author of the article is Dr. W. K. Jacques, a physician who was once head of meat inspection at the Chicago stock yards, and who tried, amid great difficulties, to secure a thorough discharge of duties on the part of the inspection staff, and who retired at length after having succeeded measurably well, and with a thorough knowledge of the influences working against the protection of public health in the United States and perhaps elsewhere.

Two things must be understood by the reader at the very commencement of this article: (1) While Chicago is the text for the article, the crime of putting diseased meat into consumption is not committed only in Chicago. There are butchers and packers elsewhere who by

ignorance and by design put bad products on the market. Then (2) not every packer is necessarily guilty; there are some who produce only honest goods, but there are others who will go to the very limit to obtain diseased and emaciated material to convert into food products for sale.

The very nature of the great packing industry requires conscientiousness on the part of the packers, if the consumers—and *they* are everybody—are to have fair play. The question is a very serious one indeed. Not long since we had—and even yet have—people going into hysterics over the control of prices by a trust. This is a far greater question. "The few cents which illegal combination can place on a pound of meat is of small importance compared with the danger to the public, if that meat is diseased or contains poisonous toxins."

The trouble of course begins on the farm where the cattle are raised. The packer is after all only one of a large class handling meat on its way to the consumer. If *he* sells diseased meat, he only passes on what the farmer and stock-raiser have sold to him. He does not regard it his concern or his duty to search for disease in the animals he

kills. He is in business simply to buy as cheaply as he can and sell at the highest price he can get. It is the public's business to see that they get the kind of meat they want. Nevertheless packers have a moral obligation, and perhaps many of them would discharge it, "if they could afford to;" but with the pressure of competition on the part of packers who have no scruples, they yield to the necessities of the case, and, aided by a bad system of inspection, turn out for consumption meat that should not on any account be used as human food.

Taking Chicago as an example or a packing centre, the inspection is bad for four reasons: (1) because some inspectors are dishonest, (2) because the inspection staff is undermanned, (3) because the standards of inspection are not uniform, (4) because there is laxity in safeguards, and so on.

As an example of the first, the experience of the author during his term of office will explain. During the first month one inspector made only one condemnation, and that of an immature calf. Another made no report at all during the whole term—fourteen months—and could not be compelled to *because of his political backing*. Another was in the pay of certain packers and made a business of picking out the finest animals, having them quarantined and killed, after which those in whose employ he was would bid the meat in for about half its value, which they were the better enabled to do because bids were not open but by written tender.

The inadequacy of the inspection, even supposing it to be honest so

far as it goes, is illustrated by the fact that usually but one government inspector is on duty at the killing sheds of each packing house. The accuracy and thoroughness of the work as a whole may be judged when it is estimated that from 1,600 to 2,200 cattle are often killed under the eye of a single inspector in a day of from eight to ten hours. Walking back and forth through the killing sheds, the inspector can give only the briefest glance at the animals that are being converted into food. In this glance he is supposed to detect evidences of disease which pathologists may require hours to find. The government employs about one hundred and seventy people. Of these about fifty are skilled animal pathologists, capable of inspecting meat. There have been received at the stock yards in a single day, one hundred and fifty thousand animals. The slaughter of fifty thousand is not an unusual day's work. And yet the packers and the government inspectors say that every animal is "government inspected."

Another element favorable to the palming of bad meat upon the public, is the lack of a definite standard for condemnation. One may declare that when any part of the animal is diseased it should go to the fertilizer tank; another that only the diseased part need be cut away; while a third may pass all meat 'if well cooked'. The present health commissioner's recent decision is that if the disease is localized, only the diseased part need be cut away. "I will venture the assertion," writes the author, "that though the commissioner of health will allow

the flesh from an animal that has localized lumpy-jaw to pass into the public food supply, he would not permit his family to eat an ounce of it, if he knew it. The men who kill and handle this meat will not eat it," and as for tuberculosis, no physician would eat beef cut from an animal which had a small localized tubercular area, for even if well cooked it is doubtful if such meat would be rendered safe as food.

Still another element is the ease with which the government stamp, which is put on all cattle passed, can be duplicated, and added to that the difficulty after a stamp is put on of proving who put it there. Then the condemnation tag is fastened to meat by a wire as easily pulled out as it is shoved in, so that the difficulty of proving anything against a man who might remove a condemnation tag and put on a bogus approval stamp, seems to be very great.

In Chicago, the city alone is fully authorized to condemn and destroy diseased meat, and the exercise of this authority was withdrawn for a period of two years. A change of administration August 7, 1905, resulted in the resumption of meat inspection. With two regular and some temporary inspectors, in less than five months more than \$300,000 worth of diseased and rotten meat, much of which had already been passed by government inspectors, was destroyed, a striking contrast to the small amount of the year before. This enormous amount was condemned in less than five months, by a force of inspectors which could have seized but a frac-

tion of what should have been taken. For twenty-two months previously this inspection was withdrawn; if it had been maintained during that time, more than a million and a quarter dollars worth of food might have been condemned, but was not, and must have gone somewhere. Where did it go, if not to the public?

The following story is told by Dr. Jacques, and if the reader reads between the lines for himself it will not be necessary for us to make any comment.

I sent one of my inspectors to a slaughter house to kerosene all meat he found unfit for use. He returned in a state of great indignation and excitement, saying that the men fought hard and long to keep him from using the kerosene.

"Why," said he "I drew out seven hogs that were diseased with cholera, and went to get my kerosene can. When I returned there were only two left. . . . 'Where are the other five,' I asked, and the man replied, 'Oh, they are in sausage by this time'."

The same inspector, who was a doughty little German, who was graphically described by another who was sent to help him, as being found, "at one end of a hog pulling with all his might towards his kerosene can, while at the other end was a little Jew, pulling just as hard towards a sausage room." To the inspector it was a matter of duty, to the Jew it was a question of money.

One other incident would go to show that sausage advertised as "government inspected" is rather

an uncertain article. Immediately following the passing of the meat by the government inspectors, the beef trimmers cut off all unsightly portions, bruised or injured places, enlarged glands or abscesses. I asked the inspector what was done with these trimmings. "Sausage" was his laconic reply. Can an inspector guarantee all the component

parts of sausage when he examines the finished product?

There is much more that is interesting in Dr. Jacques' article, but even this resume is now getting too long. He suggests a remedy, with which we have nothing to do here. The main point is that under the present conditions it is impossible to say how much diseased meat passes through packing houses.

WHAT KIND OF MEAT DO WE EAT?

THE article on meat inspection in Chicago, published in this issue, is condensed from a longer one which may come home more to the people of the United States than to the people of this country. Nevertheless it may be of great enough importance to our people, for large quantities of barrelled meats are imported into this country from the United States and sold both in bond for ships' stores and to the local trade. We do not mean even to hint that all this meat is diseased, but when such a state of affairs exists at the packing houses, isn't it possible that some of it at least must be diseased? The fact that the barrelled article is only a by-product of the butchering business only makes it the more likely. And if it is even remotely possible that such diseased meat is coming into this market, isn't it the business of someone to find out? And isn't it the duty of the business man who handles barrelled meats to find out something about the case?

Now, lest there be misunderstanding on the subject, we want to say this: There are many packers in the United States, and

some of them are honest; their names stand for something, and we would not be afraid to say that the products they send out are free from disease. Perhaps our readers know some of these names, and they may feel satisfied, until they learn something else, that it is quite safe to handle their goods. But it would be strange indeed, if some of the diseased meat which finds its way from United States packing houses does not find its way into this market. Just in case there is, there ought to be some method of preventing the importation of such meat, for certainly the consumer doesn't want to have it, and he should be protected; and just as surely, no business man wants to be part of the machinery that hands it on to the consumer.

Just what safeguards are placed on this business by our authorities we do not know, but when it is well known that some United States packers sell diseased meat, and that some of it is just as likely as not to come this way, certainly it is somebody's duty to look into the matter, and the public has a right to see that this duty is discharged.

We may now ask ourselves if every pound of meat killed and sold in this country is what it ought to be. The provision exists for inspection, but how much inspection is actually done? We do not confine the consideration now to barrelled meats, for while it is for the most part products of this kind which we import from the United States, the larger part of the domestic article is fresh. The main part of the packing business in Chicago and in every packing community is the fresh meat trade, and it is this that the inspection system is designed to serve, perhaps more than the preserved meat trade; for presumably if the former were adequately protected, there would be little need for special protection in the latter case, as it only uses the less marketable product of the former. But to come back to the fresh meat trade at home, which must concern us as intimately as it concerns the people of the United States, let us ask ourselves what inspection is securing for us here? Let us not forget, either, that there are meat packers in Canada, and that it is just as important for their product to be absolutely wholesome as it is that the imported article should pass every test. Be it observed, however, that we do not insinuate anything regarding the product of Canadian packers. Nevertheless, we would like to be satisfied about the severity of the inspection to which it is put. We can imagine it possible that packers might be putting diseased meat on the market without knowing it. We feel too that they would not put such meat on the market if they could help it, and would approve

the inspection which would aid them in supplying the very best article possible.

But how about the fresh meat supply? Once in a while we hear of small quantities of meat in butcher shops being destroyed as unfit for food, and if enquiry were to be made as to the way in which these movements come about, we dare say it would be found to be the result, not of careful and persistent inspectoral oversight, but because of reports which have set the inspectors busy. We cannot think that the system of inspection which prevails here is so good that there is not considerable meat finding its way into consumption which should not. What guarantee have we that the slaughtering done all over the provinces is of animals that are in a perfectly sound and wholesome condition? After an animal is converted into shape for retailing purposes, its meat may have a good enough appearance to the unexpert and still be infected. Who is going to say whether it is really fit for food, unless it be an examiner who goes through all places where meats are exposed for sale and makes careful examination of everything on the premises? Are there such officials in the provinces?

The meat supply of the country should be under control. Instead of there being numerous small slaughter houses, there should be a few centrally located abattoirs, where cattle would be thoroughly inspected before and immediately after killing. This is the time to inspect, not when the meat is distributed to numerous stores.

PERSONAL PARAGRAPHS.

LORD LISTER entered on his eightieth year on the fifth of April. The NEWS extends congratulations and sincere wishes for many more years of happy life.

Drs. J. C. Morrison, of Dominion, C. B., K. A. McCuish and K. A. McKenzie, who have been taking post-graduate courses in London for the past year, have lately returned by the steamer "Carthaginian"

Dr. F. J. A. Cochran, lately of the cable steamer "Minia," has gone back to his former practice at New Campbellton, C. B.

Dr. W. B. Almon has moved from Morris Street to 35 Hollis Street, to the house formerly occupied by Dr. H. M. Hare.

Dr. Wm. Tobin has sold his residence and will sojourn on the continent for some time.

Dr. W. H. Eagar has moved to Dartmouth, retaining an office in the city at 93 Hollis Street.

Dr. Ames, of Harbor Grace, who was under treatment at the Montreal General Hospital has, we are pleased to learn, completely recovered from the severe injuries referred to in last issue.

Dr. E. A. Kirkpatrick had a two weeks sojourn in New York last month, visiting special hospitals.

Dr. W. F. Smith sailed by the last mail boat from Halifax to

take up hospital work again in London. Last year the doctor spent some six months in the great metropolis.

Dr. H. L. Dickey has moved his office and residence to 207 Pleasant Street, formerly occupied by Dr. L. M. Murray.

Dr. E. V. Hogan, after his long, serious illness, has gone on a trip to Washington, accompanied by Mrs. Hogan.

Dr. H. M. Jacques, formerly of Canning, has been attached to the Permanent Army Medical Corps for duty.

Dr. J. A. Sutherland, of Springhill, recently left for London to take up post-graduate work.

Dr. C. D. Murray is confined to the hospital suffering from pleurisy. We are pleased to report that he is progressing favorably after the aspiration of over fifty ounces of serum.

Dr. L. J. O'Shaughnessy recently injured his knee from a fall which kept him in the house for two weeks. The doctor seems particularly unfortunate and we trust his accident policy has not been allowed to expire.

The NEWS extends its congratulations to Drs. G. M. Campbell and A. C. Hawkins in their election to the Halifax City Council. Both were elected by large majorities, Alderman Campbell's being 195 and Alderman Hawkins', 415.

FOR IDLE MOMENTS.

A Small Matter.

“OUI, madam is ill, but ze doctor half pronounce it something very trifling, very small,” said the French maid to an enquiring friend.

“Oh, I am so relieved, for I was really anxious about her,” replied the friend. “What does the doctor say the trouble is?”

“Let me recall. It was something very leetle,” answered the French maid. “Oh, I have it now! Ze doctor says zat madame has ze small-pox.”—*Philadelphia Ledger*.

“All you people of this congregation,” said the self-willed minister, “are entirely too stubborn. You’re regular mules.” “Ah! yes,” replied the mild member, “now I understand why you always addressed us as ‘Dear Brethren.’”

The Scientific Spirit.

Andrew Carnegie admires the scientific spirit—his generous gifts to science are a proof of that. Nevertheless to his keen humor this spirit offers itself as a good prey, and Mr. Carnegie often rails wittily at scientists and their peculiar ways.

“The late—the late—but I won’t mention the poor fellow’s name,” said Mr. Carnegie at a scientists’ supper. “The late Blank, as he lay on his deathbed, was greeted very joyously one morning by his physician.

“Poor Blank’s eyes lit up with hope at sight of the physician’s beaming face. There had been a consultation on his case the day before. Perhaps, at last, the remedy to cure him had been found.

“My dear Mr. Blank, said the physician, ‘I congratulate you.’”

“Bland smiled.

“I shall recover?” he asked, in a weak voice tremulous with hope.

“Well—er—not exactly,” said the physician. “But we believe your disease to be entirely new, and if the autopsy demonstrates this to be true we have decided to name the malady after you.”

A Halt Needed.

When Senator Eugene Hale married the daughter of “Zack” Chandler, the latter, who was a great lover of children, said: “Now, Gene, I have no use for people who don’t increase the census returns. I want you and Mary to raise a family, and I’ll settle ten thousand dollars on every boy you have.” Time passed, and the Hales were so regularly blessed with children of the male persuasion that the frequency with which “Zack” Chandler was called upon to redeem his promise with checks became a jest among his friends in Washington. One morning the President received the following telegram from Senator Chandler: “For God’s sake make Eugene Hale a foreign missionary! His wife has another boy.”

A New Drug.

Stern was the glance which the coroner cast at the quack doctor who had just appeared in the witness-box.

“And, when you were called in,” he asked, “what did you give the deceased?”

“Give him? Well, I gave him ipecacuanha.”

“Indeed!” sneered the coroner. “And I suppose you know, sir, that in the man’s condition you might just as well have given him the aurora borealis.”

“Quite so—quite so, sir,” said the witness, blandly. “It is a pleasure to meet a man of medical education. That is exactly what I should have given him if he had not died.”

Lactopeptine Tablets

A cleanly, convenient and very palatable method of administering Lactopeptine, especially for ambulant patients.

The tart, pineapple flavor, renders these tablets as acceptable as confections. They are particularly valuable as "After Dinner Tablets," to prevent or relieve pain or distension occurring after a heavy meal.

EACH TABLET CONTAINS 5 GRAINS LACTOPEPTINE.

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Combines in a palatable form the antiseptic and anti-tubercular properties of Creosote with the nutrient and reconstructive virtues of Liquid Peptonoids. Each tablespoonful contains two minims of pure Beechwood Creosote and one minim of Guaiacol.

DOSE—One to two tablespoonfuls three to six times a day.

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Borolyptol

A highly efficient (non-acid) antiseptic solution, of pleasant balsamic taste and odor. Absolutely free from toxic or irritant properties, and does not stain hands or clothing.

Formaldehyde, 0.2 per cent.	} Active balsamic constituents.
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Pinus Pumilio,	
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are sent annually out of the Maritime Provinces for drugs, chemicals and allied products... If you like our goods, why not help to keep part of this money at home, at least the Cod Liver Oil part, which rightfully belongs to the Maritime Provinces...

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THERAPEUTIC NOTES.

The Soothing Qualities of Glyco-Heroin (Smith) on the respiratory mucous membrane is well exemplified in the following case under the care of Dr. Justin Herold, of New York:

Chronic bronchitis, asthma, and emphysema.—Mrs. H. D., aged 44, has had asthmatic attacks, every fall and spring, for the past eleven years; not in winter, but only at the beginning and end of seasons. Iodines, senega, squills, digitalis, and cupping gave relief, but with the penalty of a return of more severe attacks. Dyspnea, cough and expectoration in this case was something frightful to witness. In this case, prompt hypodermic injection of 1-8 grain of morphia relieved somewhat, followed by the use of Glyco-heroin, one teaspoonful every hour for three doses, then every four hours, and on the third day every six hours. In this case the Glyco-heroin seemed to continue the effect of the morphia.

A new point in favor of Glyco-heroin is that it enhances the effect of morphia when given hypodermically. Although in seven other cases of asthma, with attacks similar to the above, Glyco-heroin was administered, in two-hourly doses, with the remarkable effect that the cough and dyspnea ceased within four hours.

Antiphlogistine in San Francisco.—The enterprise and courage of the members of the San Francisco drug trade were clearly exemplified during the recent disaster. Before the fire was extinguished they placed large orders with the manufacturing chemists. One house ordered 30,000 pounds of antiphlogistine, and altogether over 100,000 pounds were shipped to the coast upon order within a week. On a

steamer from New York, running up the California coast at the time of the earthquake, were 35,000 pounds of antiphlogistine, and upon orders from the home office, the emergency hospitals were liberally supplied free of charge.

Sanmetto in Acute Gonorrhoea and Gleet.—Dr. T. L. McDermott, of Louisville, Ky., writing, says the best results from Sanmetto in his hands were obtained in sub-acute gonorrhoea and gleet, in which the results in many cases were very marked, and for this exasperating ailment sufficiently rapid to encourage the patient to continue the treatment. He says that this in itself is no small measure of praise, for all physicians are aware of the fugitive nature of these patients, their lengthened chronicity, and the pains-taking attention necessary to effect a cure. He says that he has seen excellent results from sanmetto in many cases of nocturnal enuresis, cystic catarrh, and other functional diseases of the bladder; however, its general use by the profession speaks loudest of its efficiency in these cases.

The Rationale of the use of Iron in the Treatment of Phthisis.—Although the benefits derivable by phthisical individuals from an atmosphere that is conducive to a full measure of systemic oxidation are immeasurably great, the fact remains that it is not always

within the power of the physician to induce the patient to move to a region affording such an atmosphere. The patient may, through inability to pursue his vocation, be financially unable to make a change of residence, or he may be influenced by the optimism peculiar to phthisical subjects, to postpone the change until the disease has progressed too far.

When, for any reason whatever, it is not possible to change the abode of these subjects, it is within the power of the physician to check the progress of the disease by the augmentation of systemic oxidation.

While all forms of iron increase systemic oxidation by converting

the oxygen in the economy into ozone, the mucous surface of the alimentary tract of phthisical subjects is usually too enfeebled to absorb iron unless it is presented in the organo-plastic form. For this reason, Pepto-Mangan (Gude) affords results which cannot possibly be secured from any other preparation of iron.

In addition to promoting oxidation to a surprising degree, Pepto-Mangan (Gude) invigorates the digestive functions and increases the nutritive processes most markedly. The appetite of the patient is improved, the wasting is arrested, and the vital resources are greatly enlarged by the continued employment of the preparation.

Glyco Thymoline



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NASAL, THROAT
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210 Fulton St., New York

THE TREATMENT OF NASAL CATARRH

BY

JOHN A. HALE, M.D.

Alto Pass, Ill.

FOR years I used various remedies and met with varying success. until tiring of one remedy after another I relied solely on Potassium Permanganate in weak solutions as a nasal douche, but a review of some points in this paper will show why I always sought for something else. Glyco-Thymoline has usurped the place of the permanganate solution in my armamentarium, and after sufficient trial, established faith, implicit faith, in its specific therapeutic action for this condition. A knowledge of its essential constituents and their therapeutic action only tends to strengthen a belief in its specificity. Caution is necessary in the selection and use of remedies, but a fair trial has proven no untoward inconvenience emanating from the use of this remedy: meanwhile the therapeutic results are gratifying and the good effect of Glyco-Thymoline can be easily verified by a trial, when conclusions will be the result of practical truths only.



3 AGES OF WOMEN

For young girls arriving at womanhood, many times laboring under abnormal mental strain from over-study, and from the additional nervous tension due to the physical changes incidental to the first menstruation

Hayden's Viburnum Compound

IS PARTICULARLY SERVICEABLE.

It is a uterine sedative and calmative and assists in the normalization of the pelvic circulation.

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has stood the test of time and for twenty-five years has been accepted and recognized as the standard remedy in the treatment of **Dysmenorrhea**, **Amenorrhea**, **Menorrhagia** and other diseases of the uterus and its appendages.

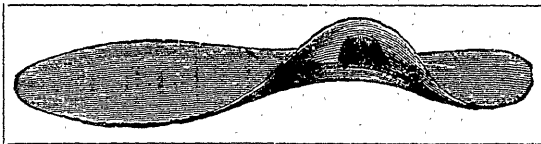
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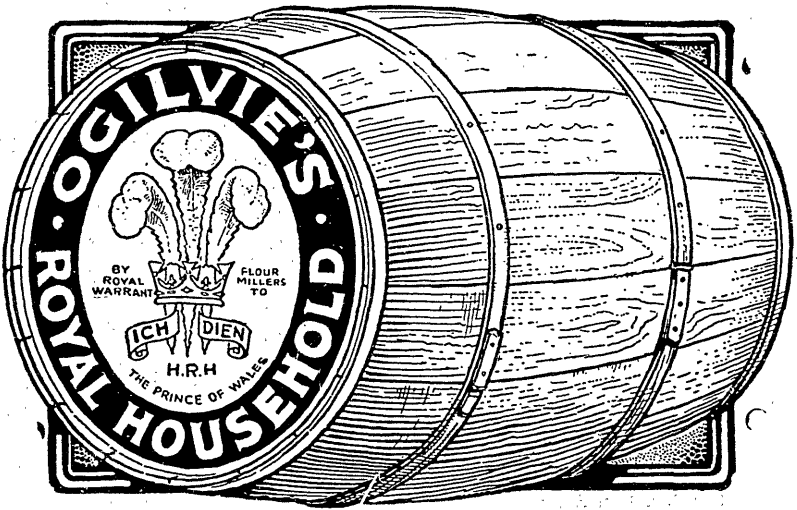
The principal orthopedic surgeons and hospitals of England and the United States are using and endorsing these Supporters as superior to all others, owing to the vast improvement of this scientifically constructed appliance over the *heavy, rigid metallic plates* formerly used.


These Supporters are highly recommended by physicians for children who often suffer from *Flat-Foot*, and are treated for weak ankles, when such is not the case, but in reality they are suffering from *Flat-foot*.

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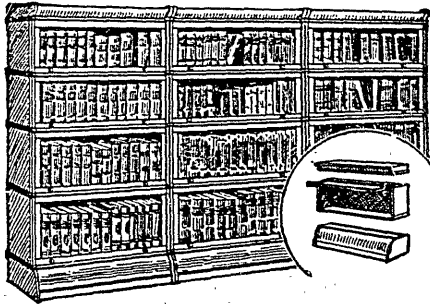


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on carriages and it doesn't pay him to buy anything but the best. He simply cannot afford to take the chances of a breakdown at a critical moment. He needs a carriage that is first class in every respect, from the smallest bolt to the hickory in the spokes and the more important fastenings. In other words he needs a **Nova Scotia Carriage**, for he cannot get a better one and if he wants to know all about **Nova Scotia Carriages** all he has to do is to write us; for we will be pleased to send him our handsome illustrated catalogue and furnish whatever other particulars he may care to have. :: :: :: :: ::

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J. G. MCCARTHY, M. D., Assistant Prof. in Anatomy.
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W. S. MORROW, M. D., Assistant Prof. of Physiology.

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THIRTY-SEVENTH SESSION, 1905-1906

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GEORGE L. SINCLAIR, M. D., Coll. Phys. and Surg., N. Y.; M. D., Univ. Hal.; Emeritus Professor of Medicine.

JOHN STEWART, M. B., C. M., Edin.; Emeritus Professor of Surgery.

DONALD A. CAMPBELL, M. D., C. M.; Dal.; Professor of Medicine and Clinical Medicine.

A. W. H. LINDSAY, M. D., C. M.; Dal.; M. B., C. M.; Edin.; Professor of Anatomy.

F. W. GOODWIN, M. D., C. M.; Hal. Med. Col.; L. R. C. P.; Lond.; M. R. C. S.; Eng.; Professor of Pharmacology and Therapeutics.

M. A. CURRY, M. D., Univ. N. Y.; L. M., Dub.; Professor of Obstetrics and Gynecology and of Clinical Medicine.

MURDOCK CHISHOLM, M. D., C. M.; McGill; L. R. C. P., Lond.; Professor of Surgery and of Clinical Surgery.

NORMAN F. CUNNINGHAM, M. D., Bell. Hosp. Med. Coll.; Professor of Medicine.

G. CARLETON JONES, M. D., C. M., Vind.; M. R. C. S., Eng.; Prof. of Public Health.

LOUIS M. SILVER, M. B., C. M., Edin.; Professor of Physiology, Medicine and of Clinical Medicine.

C. ICKIE MURRAY, M. B., C. M., Edin.; Professor of Clinical Medicine.

GEO. M. CAMPBELL, M. D., C. M., Bell. Hosp. Med. Coll.; Prof. of Pathology and Diseases of Children.

W. H. HATTIE, M. D., C. M., McGill; Professor of Medicine.

N. E. MCKAY, M. D., C. M., Hal. Med. Col.; M. B., Hal.; M. R. C. S., Eng.; Professor of Surgery, Clinical Surgery and Operative Surgery.

M. A. B. SMITH, M. D., Univ. N. Y.; M. D., C. M., Vind., Professor of Clinical Medicine, Applied Therapeutics, Class Instructor in Practical Medicine.

C. E. PUTTNER, PH. M., D. PH., Hal. Med. Coll.; Lecturer on Practical Materia Medica.

THOS. W. WALSH, M. D., Bell. Hosp. Med. Coll.; Adjunct Professor of Obstetrics.

A. I. MAHER, M. D., C. M., Professor of Clinical Surgery and Class Instructor in Practical Surgery.

E. A. KIRKPATRICK, M. D., C. M., McGill, Lecturer on Ophthalmology, Otolaryngology, Etc.

E. H. LOWERISON, M. D., Lecturer on Ophthalmology, Otolaryngology, Etc.

JOHN MCKINNON, LL. B., Legal Lecturer on Medical Jurisprudence.

THOMAS TRENAMAN, M. D., Col. P. & S., N. Y., Lecturer on Practical Obstetrics.

E. V. HOGAN, M. D., C. M., McGill; L. R. C. P. & M. R. C. S., Eng.; Professor of Clinical Surgery and Associate Professor of Surgery.

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T. J. F. MURPHY, M. D., Bellevue Hospital Medical School, Professor of Clinical Surgery and Lecturer on Applied Anatomy.

L. M. MURRAY, M. D., C. M., McGill; Professor of Pathology and Bacteriology.

W. B. ALMON, M. D., C. M., Dal.; Lecturer on Medical Jurisprudence and Senior Demonstrator of Anatomy.

D. J. G. CAMPBELL, M. D., C. M., Dal.; Demonstrator of Histology.

J. J. DOYLE, M. D., C. M., McGill; Junior Demonstrator of Anatomy.

J. R. CORSTON, M. D., C. M., Dal.; Junior Demonstrator of Histology.

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_____, Lecturer on Botany at Dalhousie College.

_____, Lecturer on Zoology at Dalhousie College.

JAMES ROSS, M. D., C. M., McGill, Lecturer on Skin and Genito-Urinary Diseases.

A. S. MACKENZIE, PH. D.; Prof. of Physics at Dalhousie College.

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3RD YEAR.—Surgery, Medicine, Obstetrics, Medical Jurisprudence, Clinical Surgery, Clinical Medicine, Pathology, Bacteriology, Hospital, Practical Obstetrics, Therapeutics. (Pass in Medical Jurisprudence, Pathology, Therapeutics.)

4TH YEAR.—Surgery, Medicine, Gynecology and Diseases of Children, Ophthalmology, Clinical Medicine, Clinical Surgery, Practical Obstetrics, Hospital, Vaccination, Applied Anatomy. (Pass Final M. D., C. M. Exam.)

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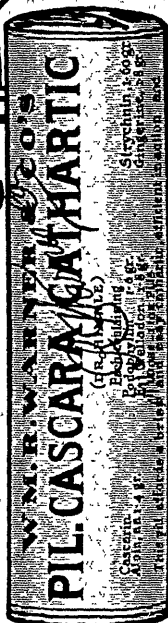
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