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Vol. XIV.

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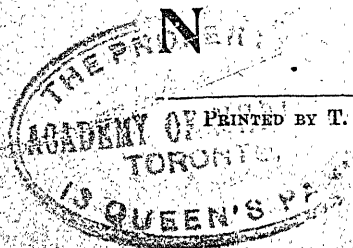
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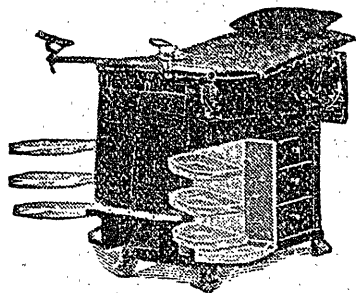
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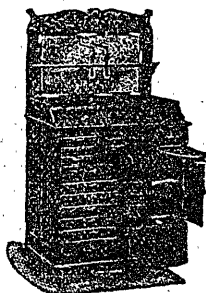
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3RD YEAR.—Surgery, Medicine, Obstetrics, Medical Jurisprudence, Clinical Surgery, Clinical Medicine, Pathology, Bacteriology, Hospital, Practical Obstetrics, Therapeutics.

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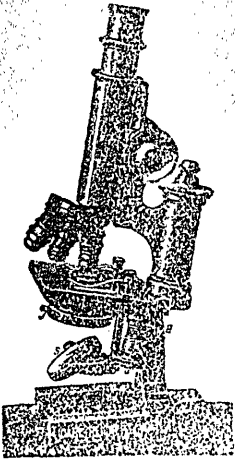
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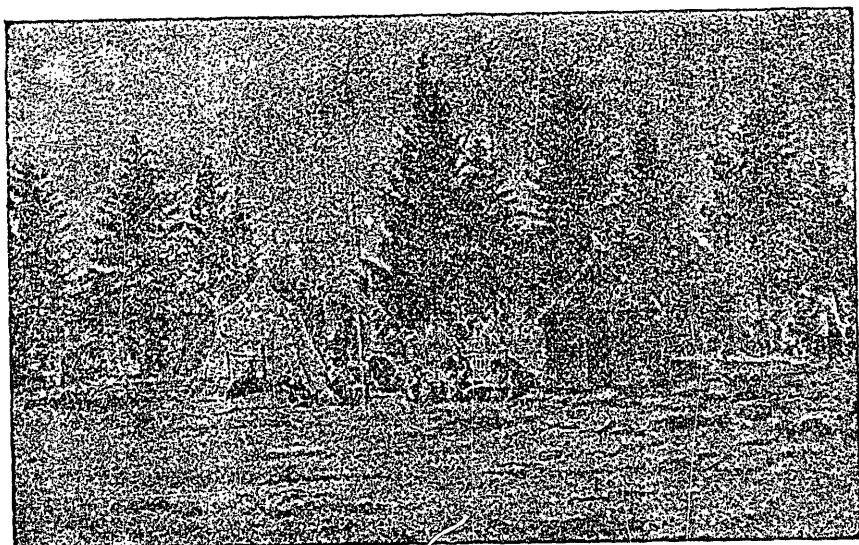
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VOL. XIV. HALIFAX, N. S., FEBRUARY, 1902. No. 2.

Original Communications.

SEROUS-MEMBRANE TUBERCULOSIS.*

By ARTHUR BIRT, M. D., (Edin.), Berwick N. S.

I find that the title of my paper is much too wide for the brief time allotted. I propose therefore to confine myself to relating to you the history of a case of tuberculous peritonitis treated by laparotomy; and supplement this by a few of the leading points regarding the operative treatment of this condition taken from such part of the literature of the subject as I have lately had access to.

Case of N. B.—The patient is a girl of 20—a twin. Farmer's daughter. Youngest one of a large healthy family singularly free from tuberculous diseases. Has never been robust but always healthy until present illness commenced seventeen months ago. About twenty-two months ago however she was thrown from a carriage and fell violently on her "stomach," to use her own words. She felt sore and bruised for some time over the abdomen and then seemingly recovered. Five months later then, she began to suffer shooting pains in the abdomen: they were regarded as neuralgic, and continued with intermissions until fifteen months ago, when an attack of so-called influenza with some fever and an exacerbation of the pains (which now involved the right upper chest as well) sent her to bed for three or four weeks. Again she pulled together and her general health seemed fair.

* Read before meeting of the Maritime Medical Association, Halifax, July, 1901.

Twelve months ago she *suddenly* noticed a general increase in size of abdomen. It was attributed apparently to flatulent distension probably hysterical. It resisted treatment—steadily increased, and her general health rapidly failed. Appetite was lost, emaciation set in and palpitation became annoying. Nine months ago I was requested to examine her.

Condition on first examination.—I found a delicate looking and small boned, anæmic girl, decidedly emaciated, with a malar flush and dyspnœa on slight exertion. Her pulse was 130 regular and compressible. Temperature 101.5°. Examination of the thorax shewed the lungs and pleuræ apparently sound, the heart's apex displaced considerably upward and inward. No murmurs were detected.

Abdomen.—Inspection of the abdomen revealed marked distension, the outline being somewhat square with some flattening at the sides. The abdominal wall was tense and shining and numerous large veins coursed over it.

Palpation gave negative results as the wall was too tense; but there was practically no tenderness complained of when the attempt was made.

Percussion.—Fluctuation was however easily elicited and change to lateral position gave a tympanitic note above and dulness in lower flank. The knee-elbow and upright positions shewed changes in the percussion note which confirmed the suspicion of free fluid in the peritoneal cavity.

No friction could anywhere be heard. Urine reduced in amount, normal specific gravity. No albumin or other abnormal constituents. Menstruation had always been normal.

Diagnosis.—The diagnosis of *subacute tuberculous peritonitis of the generalized ascitic type* (probably primary), being thus arrived at with a high degree of probability, consultation with Dr. Moore of Kentville followed, and as the girl was obviously losing ground fast and looked exceedingly ill, after a brief and futile trial of medical treatment I operated on Nov. 28th with the assistance of Dr. Moore. Dr. March of Berwick kindly acting as anæsthetist.

Operation.—Incision in middle line below umbilicus about three and one-half inches long. Peritoneum extremely hyperæmic and much thickened. A gush of straw coloured serous fluid followed its opening. This was slowly syphoned off. Examination of the peritoneal cavity now shewed the whole of that membrane to be more or less

thickly covered with miliary tubercles of varying size. The sensation imparted being, to use Watson-Cheyne's expression, like putting one's finger into a bag of rice. The tubercles seemed especially thick in the pelvis and kidney regions, but great numbers were also present on the reddened inflamed-looking intestines. No signs of intestinal ulceration, no enlarged mesenteric glands, no definite thickening of tubes or appendix could be made out on gentle palpation. There were a few flakes of lymph on the intestines but no adhesions. The peritoneal cavity was got fairly empty by tilting up slightly and swabbing the pelvis with gauze sponges on a long holder. The wound was then sutured with silk in one layer, and a continuous horsehair suture run through the skin. A strapping of adhesive plaster and a large dry dressing completed the procedure. In a similar case I should be inclined to suture the peritoneum, etc., separately, and then close the skin wound by strips of Johnson's Z. O. aseptic plaster as used for the last three years so successfully by Lilienthal of New York.

After history.—The immediate after history was uneventful, The pulse and temperature promptly fell. Her appetite quickly returned. The wound did not heal quite as well as I should have liked, a stitch abscess occurring and the scar seemingly somewhat weak and inclined to break down. She got up however on the twenty-eighth day, wearing an abdominal support and strapping. She did nicely for nearly two months and gained many pounds in weight. Then the fluid commenced to reaccumulate and the improvement halted. A second laparotomy was being considered when she developed a double tubercular pleurisy (probably through the lymphatics of the diaphragm) and was again desperately ill, losing weight rapidly. She was aspirated on the right side and about twenty ounces of fluid drawn off—that on the left side slowly disappeared. She was in bed three or four weeks in March, after which improvement began again and has slowly but steadily continued.

Present condition.—She is now looking as well as ever she did. The lungs still seem to be uninvolved, though the adherent and doubtlessly greatly thickened pleuræ with their (let us hope) obsolescent tubercles are of course a constant menace. The pulse rate has always continued rather high since the pleuritis, a fact which I ascribe to the probable presence of scattered tubercles on the pericardium, although I never got any very definite evidence that this membrane was involved.

The blood count shews about four million hæmocytes and sixty-five per cent hæmoglobin. The abdomen is of normal contour, and no evidence of fluid or friction can be detected and it is not tender. The scar is wider and weaker than it should be, apparently from the dragging of adhesions. This symptom has given a little trouble all along, but is improving. It may have been due to errors of technique. She is slowly gaining weight (102 pounds). Appetite is very fair—the bowels regular and menstruation normal. She is still highly nervous. Temperature normal.

Some points on the operative treatment.—An examination of all my available literature on the subject is the basis of the following statements, for many of which I am indebted to Watson-Cheyne's lectures on tuberculous disease, Dec., 1899. (B. M. J.) Taking the recovery rate of tuberculous peritonitis generally under medical treatment as about eight per cent. (Pick's statistics), we may state that of published cases of tuberculous peritonitis so treated 75 per cent. are improved or cured by laparotomy; but, if all cases of the disease were subjected to the operation fifty per cent. of improvement or cures would represent the outside limit.

Suitable cases for operation—The cases may be classed roughly as suitable for operation in the following order:—

- (a). Localised ascitic cases.
- (b). Generalised ascitic cases.
- (c). The dry fibro-adhesive forms.

Whilst those with large caseating masses (often associated with intestinal ulceration) and those secondary to disease of the Fallopian tubes are regarded as unsuitable.

The tables worked out by Aldibert and Roersch shew however that success may occur in any variety.

The outlook is best in the group with localised ascites, and next in cases like the one I have described; but the outcome is often better than the most sanguine operator would expect from the condition of the particular peritoneum before him. It is justifiable to be fairly sanguine. Slight pulmonary tubercle often improves for a time at least after the operation, and pleuritic effusion is not considered a contra indication. Opinions differ as to the best course in tuberculous salpingitis; but obviously if the tubal disease be detected before the peritoneum is involved, the right course would be prompt removal of the infected tubes to save the peritoneum.

Time for Operation.—Cheyne says as regards *time* for operation—that in practically all cases where improvement does not follow under medical treatment after a reasonable time, say in from four to six weeks in acute cases, to four to six months in chronic cases, the abdomen should be opened. It is a mistake to wait too long, until the patient gets so run down and poisoned by toxins that the chance is gone, and it may be done *too* soon when reaccumulation of the fluid seems predisposed to. It should be done if there is pain and disability from bands and kinking of the gut in the adhesive forms.

The Operation.—In operating it is important not to attempt too much. Excision of tuberculous ulcers, removal of tubes or of the appendix, which are sometimes the primary foci, should not be undertaken unless one finds only quite a commencing peritonitis at that part—lastly, in case of doubt it is better to operate than not. It is unnecessary to flush the abdomen with antiseptic solutions, to get it absolutely dry by sponging, etc., or to drain the cavity. Care must be taken in opening the abdomen lest adhesion be present and the intestine injured. Rents, if made, either in intestine or peritoneal coat must of course be carefully sutured up.

Even where pus is present it is better not to drain, but to flush out with normal saline solution, inject a little iodoform emulsion and close up. Improvement may begin at once or be delayed some little time. The operation has been repeated three times on more than one patient with ultimate success, and has many times been repeated at short intervals.

Rationale.—No satisfactory explanation of the results obtained by this treatment has been given. Watson-Cheyne suggests the following theory, viz.: That where a large quantity of fluid is rapidly removed, serum is poured out to a considerable extent, this serum containing antitoxins manufactured in the blood in the course of the disease and thus being anti-bacteric. It bathes the peritoneum and so weakens the bacilli on it that phagocytosis goes on effectively, while the increased fibroid formation and fibroid changes in and around the tubercles complete their destruction.

This to my mind seems hardly to explain the improvements obtained in the dry forms of the disease. Whatever be the explanation, the fact remains that abdominal section *does* cure these cases. This has been proved both in the post-mortem room, and in laboratory experiments on animals. The peritoneum has been found quite

healthy and smooth a year or two after the operation for tuberculous peritonitis in persons again subjected to laparotomy for some other condition. In conclusion I need hardly remind you that neither the diagnosis nor the operative procedures are always of this straightforward type—all degrees of complexity being met with—and I would urge that we should exercise a keener look-out for the early forms of this well-known disease, so that the patient may be given a fair surgical chance, either at our own hands or those of our more expert surgical brothers.

In conclusion I would like to express my thanks to Dr Moore who so ably assisted me, and to Dr. John Stewart for the kindly interest he has all along taken in this case.



EARLY DIAGNOSIS AND TREATMENT OF TUBERCULOSIS, WITH REPORT OF CASES CURED.*

By J. H. RYAN, M. D., Sussex, N. B.

The therapeutical results obtained in treating tuberculosis in the past are far from encouraging. The unfavorable prognosis, I fear, has created too great laxity in the profession and out of it.

Are medical men not often at fault?

Is there not a supineness or inertia affecting the rank and file of the great medical army the world over in regard to the treatment of tuberculosis? Various causes may be assigned for this: the chief reason, to be sure, is the unsuccessful treatment and unfavorable prognosis.

Again: the patient and his friends do not second the physician's efforts in making a cure. It is generally admitted that if the disease is treated carefully from the beginning, very much better results are to be obtained and some cures effected. I am also of the opinion that if there were more of that much abused commercialism existing, it would not only be better for the physician but still better for the patient and for suffering humanity at large.

Has not the time now come when some of the old dogmas, taught by our medical fathers, should be relegated to obscurity? There is not a member of our self-sacrificing profession prouder than I of our high-calling and the far-reaching blessings and untold alleviation of suffering wrought through the instrumentality of the medical profession; but as it is hard for a starving man to be a good Christian, so it is likewise difficult for a poorly paid physician to be a good philanthropist.

In these days of large combines and vast monopolies, the struggling masses look to the medical profession for gratuitous treatment: and they do not look in vain; but I surmise that the treatment they obtain is not of the very best or highest order, for how is it possible for physicians to supply the best for which they get nothing?

My sojourn on the Pacific Coast for a few years in Southern California introduced me to the western profession. There are two

* Read before meeting of New Brunswick Medical Society, Moncton, July, 1901.

broad classes of medical men there: both regular graduates and both, I assume, well qualified to practice medicine; one, the regular physician who scorns to advertise: the other, the irregular, or advertising physician. Besides these they have the uneducated quack and Chinese doctors. The advertising yet qualified medical men of the Pacific Coast shun and scorn the illiterate quack, and hold their annual meeting, read papers, &c. The daily papers give as much publicity to their papers, meetings and social functions as they do to the meetings of the regular State Association. It was painful to note the apparent financial success which often attended this class of advertising physicians. The unthinking public would flock to them in large numbers. Though we cannot but deprecate and deplore such high-handed charlatanism, yet we should not shut our eyes to the fact that they are there and still doing business at the old stand. We may try to ignore them; but the patients they treat and the people at large will thrust the intelligence before you that they do cure consumption, and ask you to explain the why and the wherefore of certain miraculous cures.

I was acquainted with an intelligent English trained nurse who assured me that she was very much benefited by a modified tuberculin.

Grant that they do cure some cases of incipient phthisis, the regular profession can and do cure the same disease, and possibly just as often as their irregular brothers; but, does the regular physician get as much credit and remuneration for his equally good success and skilful treatment? It will be conceded that he does not.

The advertising practitioner will have a larger clientele and a greater advantage over his more modest brother.

Now what is to be done to establish the just rights of the regular profession? This is a mooted point.

I cannot help thinking that we have been heretofore altogether too modest with the general public. Why not admit them into our confidence to a greater extent than in the past? Possibly the uncertainty in our diagnosis is often answerable for our hesitation and morbid fears. Withholding information on the diagnosis of incipient phthisis from a patient not only wrongs the physician but the patient as well. If a patient were plainly told that he had quite recently become infected with tuberculosis, and received the assurance that his disease was now curable at that very time, and that the present was the golden opportunity to make a strenuous effort to abort and cure the

disease, would he not second the physician's efforts and turn his entire attention to an immediate cure? Undoubtedly he would. A cure was in sight and he would work to get it. How much better such a course would be than the vacillating, equivocating, diagnosis and prognosis, where the patient is in a quandary very like the doctor who was unable to give a positive opinion.

In every case where a practitioner suspects tubercular infection, I hold that he is not doing his whole duty where he fails to make diligent search by microscopical analysis for the pathognomonic sign of tuberculosis, viz: the tubercle bacillus. Only the bacillus of leprosy can possibly be confounded with it; and leprosy is so rare that we may safely, for practical purposes, call the bacillus of tuberculosis the only and best pathognomonic sign. The objection will be raised, perhaps, that the expense of a microscopical outfit precludes the possibility of all physicians procuring this very essential instrument. Then a fear may be entertained by some that the technique is laborious and complicated. Nothing is farther from the truth. It is indeed very simple. Those physicians who have already microscopes but who have not yet procured a one-twelfth homogeneous oil immersion objective have only to add this lens with an Abbe condenser to their microscopes and their instrument is complete. These lenses, stains, etc., can be obtained very cheaply from Bauch & Lomb, Rochester, N. Y., and from other optical manufacturers.

The physical signs revealed in a given case by palpation, percussion, auscultation and mensuration, are all important and should not be ignored; but we all know how unsatisfactory and deceptive they often are; and how true; and often we are obliged to give what has been called a guarded diagnosis and prognosis.

On the other hand—when you have stained a film of a patient's sputum or other suspected substance on a cover glass or slide, taking the few necessary precautions against error, and you can see the little red rods scattered over the microscopical field, you have had an ocular demonstration that the patient expelling this substance has surely got consumption: and if the patient doubts the accuracy of your diagnosis, he may be instructed to look into the microscope and see the bacilli for himself. Now, both patient and physician are convinced that they are brought face to face with the startling intelligence that a serious disease threatens the life of the one and challenges the skill of the other.

When a child expels intestinal parasites from time to time, the physician administers his anthelmintics with no greater confidence in his diagnosis than the practitioner who is called upon to treat phthisis after seeing the bacilli in his patient's sputum.

The small aspirating needle or hypodermic syringe when used for diagnostic purposes, exploring for fluid in the various cavities, are not more convincing in their usefulness than the strong lenses that lay bare the offending microbe.

It is well known how helpless the profession is to relieve in the presence of advanced, or in severely infected, cases of tuberculosis. When we are interrogated about such a case, and asked to state what we would propose to do in the premises, the expansive sigh of the physician foretells both his hopelessness and incapacity. On the other hand, if the infection is recent, but none the less positive, I claim it is the physician's duty to give a favourable prognosis. So much is gained at once by such a course; the patient is inspired to be hopeful and to take fresh courage, while he and his friends will place still greater confidence in their physician.

It is here where the unprincipled quack usually gains several points over his more truthful brother; but if it can be shown that a good prospect for cure exists, then I believe we should be emphatic and obtain all the good we can by the moral support of the patient and his friends: and it will be necessary that they should know all about it—the whole truth, in order that they will be the more ready and able to cooperate with the physician and nurse, in the necessary treatment which should follow. Not only is it the physician's duty to acquaint the patient and his friends of the existence of infection in a given case, for the patient's personal benefit, but for the safety of his friends and the public at large.

I may be permitted to refer briefly to a case of phthisis in a young lady who consulted me at my office one year ago. She was from a neighboring city, and she informed me that their family physician assured her and her mother that her lungs were not affected, but that, nevertheless, she should go to the country. She explained that a sister, who slept with her when at home, also had a cough. I found numerous tubercle bacilli in her sputum and learned that she was severely infected. The lady with whom she was stopping refused to have her live and sleep with members of her family any longer as she had been in the habit of doing, so the patient returned home. I

learned a few weeks since from the same lady with whom she had previously been stopping in the country, that the girl's mother and other members of her family were very indignant at first when they heard that the patient had consumption, but that later they saw their mistake when this patient, and a sister, and a brother all died of phthisis within the year just past. From the information I obtained in the above case it might be supposed that her previous medical attendant did not exercise sufficient precaution or care in the management of this case. It would be very unjust, however, to asperse the treatment or care given before I saw her, for the simple reason that the doctor has not been heard from on the other side: moreover, it is generally known to the profession that without better legislation than we now possess, medical men are helpless to control infected tubercular cases or their attendants. It would undoubtedly be a good expedient for the Provincial Board of Health to declare phthisis, at least, an infectious disease, and so far as it is possible to isolate phthisical patients and force the annihilation of their sputum.

On my return from California in the summer of '96, four patients consulted me at different times whose sputum I found contained more or less tubercle bacilli.

CASE 1.—J. S., a young man, informed me that a brother had just died of consumption. This man was but slightly affected. The bacilli in his sputum were comparatively few. There was an absence of the dotted or beaded appearance in the bacilli, supposed to be spores, or fragmentation, in his case. I prescribed out door life, long drives in the open air, generous and varied diet, one fresh egg beaten with sugar and porter twice a day, sponge baths with moist and dry rubbing, general tonics, creosote, hypodermic medication of nuclein, 5% solution, and anti-tubercle serum. With the nuclein solution and serum I began with a few minims and increased gradually the dose, which, in this case, was not administered more often than twice a week, owing to the distance the patient lived from Sussex. He recovered fully and is living to-day and engaged in severe manual labor.

CASE 2.—Mrs. J. O., aged 46. Was first seen February, 1897. Had cough for several months with purulent sputa containing numerous bacilli. Same treatment as above, including the nuclein solution and anti-tubercle serum of Parke, Davis & Co., administered hypodermically in increasing doses. Treatment commenced February, 1897,

and stopped about December 15, 1897. Duration of treatment, ten months. During treatment this patient had an attack of hematuria, other urinary symptoms negative. Made a complete and satisfactory recovery, gaining 24 pounds in weight, and weighs at present 150 pounds.

CASE 3.—Miss M. G., aged 15, consulted me June, 1897. Had la grippe followed by purulent expectoration, rapid pulse, pyrexia and morning sweats, and rales in both lungs. After careful search over the microscopical field of a stained and mounted specimen of her sputum, only at one part of the field were found a few clusters of tubercle bacilli and apparently within large cells. This patient did not come under any special treatment; but my instructions regarding hygiene, &c., were fully carried out and my prescription of Fellows' syrup hypophosphites compound, given in regular doses, for many months. A little later they moved to St. John. July 9th of the present month her father writes me: "Last summer she was in splendid health and looked well; but this last spring she caught cold and has had a cough for the last three months, though not very bad. She was examined by a doctor in St. John two weeks ago and her lungs were sound. She is taking hypophosphites again." It is perhaps interesting to note in this connection that this young lady's brother, L. G., (as her father explained) was taken ill last summer; had his sputum examined at St. John hospital, when bacilli were found in it; also, a lesion at apex of right lung was discovered. His father, in his letter to me, goes on to explain how he sent his son to a consumptive hospital in Portland, Me., for a short time only. He seemed to improve until January. Since then he has been losing ground. He was sent to the Adirandocks in New York a month ago. A letter just received from the resident physician says there is no improvement and he is expected home within a few days. It is just possible this case, L. G., was infected by his sister, M. G.,—case 3 of this report.

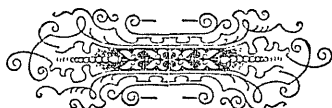
CASE 4.—The fourth case I wish to report I have reserved for the last as she is a striking example of a well marked case of phthisis cured. November, 1896, M. S. A. S., aged 38, weight 104 pounds, summoned me for hæmoptysis. For several weeks past had been nursing a case of phthisis. Physical signs and the microscope revealed infection with tubercle bacilli. The patient was informed of the nature of the infection and encouraged to expect a cure within a reasonable time. This patient seconded all my efforts to free her from the infection in

a noble manner. She was put on general tonics, quinine, iron, arsenic and strychnine, followed immediately by anti-tubercle serum and nuclein solution. The treatment also included from time to time beechwood-creosote, carbonate of creosote, the hypophosphites compound and emulsion of oil, etc. After four doses hypodermically of anti-tubercle serum and nuclein solution each, the dose was made thirty minims of each: one administered beneath the skin of the right arm.

The dose of the serum and nuclein solution was later brought up to a drachm each, three times each week. Still later the dose was increased one-half, or ninety minims injected into each arm. Even larger doses were given, but one and one-half drachms were found to be more satisfactory. In order to obtain this medication the patient was obliged to drive ten miles in the autumn and winter as well as at milder seasons of the year. She usually drove alone particularly as she grew stronger. Many microscopical analyses were made of this lady's sputum and for many months the sputum always contained bacilli. There was no part within the microscopical field wherein they could not be seen. The dotted or beaded appearance indicating spores (Koch) or fragmentation, (Stengel) were often marked. Forced alimentation with a very generous and mixed diet was faithfully adhered to, moist and dry rubbing with towels and the hands, were practiced on the patient by herself and her husband. Hyperventilation, by keeping a few windows always open and regulating the temperature of the room or bed was maintained by fire or extra clothing. The patient lived out of doors most of the time. All the errands or business trips she undertook for her husband, and withal she improved twenty pounds in weight within six months. Still later she added five pounds more. At about this time she was anxious to try a proprietary remedy advertised in New York State. It was recommended for coughs, &c. The patient thinks it relieved her cough, but states that she had gained twenty-five pounds in weight before using this medicine (which I never saw nor investigated, for obvious reasons). A few days since I saw Mrs. A. S. and asked her for the name of the medicine, but she had forgotten it. I also asked for some of the sputum to make another search for bacilli; but she assured me that she had no expectoration. The last time I examined her sputum very few bacilli were found, and none with the beaded appearance. She had three

hemorrhages from the lungs while she was under my treatment, viz: November 15th, 1896, January 6th, and January 22nd, 1897. This patient was under treatment from November 15th, 1896, to November, 1897, about eleven months. Her weight is between 140 and 150 pounds. She is the picture of health and looks little like the woman she was four and a half year ago.

In conclusion I may add that the serum treatment, I believe, in advanced cases of phthisis is useless. My experience with the streptococcic serum in mixed infection in a few advanced cases has been unfavorable to that serum.



REPORT OF TWO CASES EXTRA-UTERINE FŒTATION— RUPTURE OF THE SAC AND OPERATION.

By N. S. FRASER, M. B., (Edin.), M. R. C. S. Eng., St. John's, Nfld.

Although our actual working knowledge of extra-uterine foetation only dates back some twenty-five years, yet the symptoms and diagnosis have been so frequently written up in the various medical journals, and cases so frequently reported, that now every practicing physician should be able to diagnose a case at once. For this purpose we want to be alive to the possibility of its occurrence, as well as to be able to make a diagnosis when brought face to face with a case. Every experience of the general practitioner that is related, will help others. For this reason I report the following two cases—the first I have met after thirteen years of a large general practice.

CASE 1. *History*.—Mrs. W. C., had given birth to two children—the youngest fourteen months previously—when she became pregnant for the third time. She thought that she aborted (at third month) in July 1900. Continued to have some red discharge for a week or two which then ceased and she saw nothing until middle of October. It came on again then, and continued more or less until November 3rd. That morning (November 3rd) on getting up to breakfast she felt weak and languid, ate some beans and soon afterwards became sick. As she vomited the beans she blamed them for making her sick. I saw her at 2 p.m. when her appearance alarmed me. She was ghastly white, puffy under the eyes and pasty looking. I ordered her to bed, and believing from the history that it must be a case of incomplete abortion with excessive hæmorrhage, made immediate preparation to do a curetting. The latter operation was done with Dr. Rendell's help under somewhat incomplete anæsthesia, no thorough examination being made; but I was struck on introducing the speculum with the small amount of blood coming from the uterus. This aroused my suspicions, and calling again later in the evening I found her complaining of great weakness and pain in the region of the liver and at the top of the left shoulder. Her breathing was very rapid and shallow,—altogether thoracic. Temperature normal and pulse 118, bounding, but soft. Examination of the abdomen revealed the presence of free

fluid in the much distended peritoneal cavity, and this, together with the previous history, caused me to diagnose the case as one of ruptured extra-uterine foetation with active hæmorrhage.

Operation.—The operation was performed at midnight, in her own house, assisted by Dr. Rendell, while Dr. Stabb administered the anæsthetic. On opening the abdomen there was a gush of blood and intestines. The latter were returned with difficulty, so great was the tension. Then, exploring the pelvis with my fingers, I found the ruptured tube on the left side from which bright arterial blood was welling up very rapidly. Having clamped it off, hæmorrhage was arrested and we were able to clear away the clots and dry out the pelvis. Before closing the wound, the abdominal cavity was filled with normal saline solution, and when the operation was finished a quart of the same was thrown into the colon with the long rectal tube. The pulse came down after operation to 96 and the breathing was much easier.

The further progress of the case contained nothing of note, save the tendency to paralysis of the bowels; that one might expect. To overcome this, purgatives were administered early in the case, and high injections containing turpentine and glycerine used repeatedly until the bowels were freely moved—just twenty-four hours after the operation.

CASE 2. *History.* — Mrs. P., multipara. Youngest child aged two years and four months. Menstruated in December but not in January and considered herself pregnant. At eleven o'clock on the night of February 11th, 1901, she was seized with pain in the left side. This continued all night; and, the next morning on rising from bed she got weak. She vomited occasionally during the day and had the weak feelings off and on. There was also a slight red vaginal discharge. I was called at 6 p. m. February 12th and found her complaining of pain all over the abdomen—particularly severe up in the left shoulder—and of weakness. The history given was that above stated. On examination there was not great distension of the abdomen but there was free fluid in the abdominal cavity. The uterus was small in size, freely moveable and the os uteri had the soft feel of pregnancy. The diagnosis made was a *ruptured extra-uterine foetation* and immediate preparation was made for an operation.

Operation.—The operation was performed at midnight in the patient's bedroom, with very little room to move about. Doctors Rendell and Stabb kindly assisted me. The abdomen was fairly full of dark blood and clots, but there was no trouble with intestines in this case as the tension was not great. The rupture was found to be on the left side. After securing the bleeding points, the peritoneum was brought together over the broad ligament, leaving no raw surface, and the abdominal wound sutured layer upon layer.

The after progress of this case was most satisfactory. Twenty-four hours after operation she seemed as well as ever and continued so all through.

It will be evident from the report of these two cases that case No. 2 benefitted from the experience I gained in case No. 1. Had it not been for the misgivings I felt when so little blood escaped from the uterus, during the curettement of case No. 1, I should not have visited her again until next day, and would then have been too late to save her life. A severe experience of this kind taught me a lesson which I shall never forget and which I relate now for the benefit of others. I shall in future not be so ready to jump at a diagnosis of simple abortion merely because the patient is passing blood and clots and has pain. Let us keep in mind the possibility of a tubal abortion with internal hæmorrhage in these cases; and let us examine carefully all doubtful cases, and now and again we will have the satisfaction of saving a life which we would otherwise sacrifice.



Selected Articles.

HYGIENE OF THE MOUTH.

By S. L. GOLDSMITH, A. M., D. D. S., New York

Good digestion is one of the first and most fundamental factors upon which good health is based. To be properly digested the food must be introduced into the stomach in a thoroughly comminuted state, and without good teeth this is impossible.

Do the people of to-day understand how to take care of their own teeth or the teeth of their children? In the opinion of the writer the majority do not, and it will be his endeavor in this article to explain what the teeth are, the diseases which attack them and the best means at our disposal to preserve them.

THE TEETH.

Every individual is endowed by nature with two sets of teeth, the first or temporary and the second or permanent.

The first teeth called by various writers "deciduous," "milk" and "temporary," make their appearance from about the twenty-second week to the thirtieth month and are twenty in number, five on each side of each jaw, viz., one central incisor, one lateral incisor, one cuspid and two molars.

The permanent teeth, with the exception of the third molars, make their appearance from about the sixth to the twelfth year. The third molars erupt from the fifteenth to the thirty-fifth year and are known as the *dentes sapientie*, or wisdom teeth, because of their eruption at an age when education is supposed to have been completed. This set consists of thirty-two teeth, eight on each side of each jaw, viz., one central incisor, one lateral incisor, one cuspid or canine, two bicuspids and three molars. The first of the permanent teeth to appear are the "sixth year molars," and as their name indicates, they erupt about the sixth year. These teeth, coming in as they do back of all the temporary teeth and without the child having lost any of its first teeth, are frequently unnoticed and are often lost through neglect, because parents labor under the impression that they are

part of the temporary set. The upper cuspids are often called "eye-teeth" from their position in the arch.

The teeth themselves, both temporary and permanent, are made up of consecutive layers, as is shown in cross-sections of a cuspid tooth and also by cross-sections of the teeth of one side of the permanent set.

That part of the tooth projecting into the mouth cavity is called the crown and the part held in the jaw bone, the root or fang. This, of course, has illusion only to healthy teeth, as in some diseased conditions the roots are more or less denuded of bone and project into the oral cavity.

The outer layer of the crown is the enamel and is the hardest tissue in the body. It extends only a little beyond the edge of the gum and is replaced on the root by the cementum or *crusta petrosa*. The next layer is the dentine, and it makes up the bulk of the tooth, containing within itself a cavity which is filled by the pulp, often called nerve of the tooth. There is still another layer which, while not a part of the tooth itself, adheres to it when the tooth is extracted. This is a very vascular, fibrous membrane which envelops the root and is called the pericementum.

Ramifying from the pulp through the dentine are numerous microscopic tubules which, while they have never been demonstrated to contain nerve tissue, nevertheless convey sensation. It is the cutting of these tubules that is accountable for most of the pain of the dental chair.

It will be seen that the anatomy of the temporary teeth, with very slight differences, is the same as that of the corresponding teeth of the permanent set. This may seem strange to many, as they only see the baby teeth after they have been shed. While the second set is being formed the roots of the deciduous teeth are being absorbed, so that when a tooth is about to erupt its predecessor is ready to drop out. Sometimes through one cause or another the root of a temporary tooth is not absorbed at the proper time, and in consequence the tooth which is to replace it appears in an improper position.

DISEASES OF THE TEETH AND SURROUNDING TISSUE.

Diseases of the teeth may be divided into two classes: Firstly, those which attack the teeth themselves, causing cavities and attendant troubles. Secondly, those which attack the alveoli or sockets of the teeth, thus producing "loose teeth."

What is the cause of caries or decay of the teeth? Many theories have been advanced upon this subject, but since the investigation of Miller, Williams and Black, names well known in the dental profession, the present accepted theory is practically beyond question. The theory which we accept today is that decay depends upon bacteriological influences subject to individual environment. To elucidate: The mouth continually contains innumerable bacteria which are ever ready to obtain lodgement upon some vulnerable point of the enamel or in some piece of fermenting food. As soon as the first inroad into the enamel is made the bacteria of themselves produce an acid which eats further into the tooth. Thus we see how important it is to thoroughly brush the teeth after eating. When the process of decay has reached the dentine it is much more rapid as the bacteria soon find their way into the microscopic tubules before mentioned. The decay now continues until the pulp (nerve) of the tooth is exposed, the irritation then sets up an inflammation of the pulp and a "jumping toothache" is the result. After an indefinite time the pulp finally succumbs, dies, and then commences to decompose. The gases of decomposition, together with the bacteria ever present, pass through the end of the root and an inflammation of the pericementum is the result. Unless the dead nerve is removed, and the root canals sterilized and proper treatment applied to the gums an abscess supervenes, causing the face to swell until the abscess discharges, either spontaneously or through surgical interference. In the absence of proper treatment a chronic abscess develops which may result in necrosis of the jaw. It is indeed fortunate that necrosis is a relatively rare result of abscess, although there is absolutely no assurance that it may not develop in any particular case. Another trouble which resembles decay in some of its characteristics is what is known as erosion. This disease is manifested by shallow cup-shaped cavities more frequently on the buccal surfaces, usually presenting a highly polished surface. They are found in mouths whose reaction is nearly always acid.

DISEASES OF THE SOCKETS.

A disease through whose ravages many teeth are lost is one which attacks the sockets or alveoli and by removing their support causes exfoliation of the teeth. Among the various terms applied to this disease by different writers are pyorrhea alveolaris, Riggs' disease, alveolitis, phagedenic pericementitis, etc. The term most generally

used, however, is pyorrhea. Pyorrhea may be purely local, having its origin among other causes in accumulation of salivary calculus, commonly called tartar; or it may have its origin in some systemic condition. Cases of pyorrhea require the attention of a competent dentist; all the patient can do is to maintain a condition of absolute asepsis or cleanliness of the mouth. Those cases depending on some diseased condition of another part of the economy require the treatment of the original trouble before the dentist can hope for successful results. Rheumatism, gout, diabetes and Bright's disease are among the most frequent disorders found associated with pyorrhea avicularis.

PROPHYLAXIS.

Prophylactic or preventive treatment cannot be commenced too soon. From the time of conception the prospective mother should take such food as will tend to nourish all the tissues of the child. For the nourishment of the teeth food rich in lime salts is to be recommended and among these may be mentioned whole wheat bread, cracked wheat, oatmeal, etc. The whiter the bread the less wholesome it is, since the outer part of the wheat, that part containing the lime salts, has been removed. The old idea that lime administered in the form of lime water will be assimilated is a fallacy.

After the birth of the child every effort should be made to nourish it at the breast. While the total abstinence from artificially prepared foods is not insisted upon it must not be forgotten that the exclusive use of proprietary foods predisposes to a scorbutic condition. If it is not possible to feed the child upon human milk the best substitute is cow's milk. As soon as the child begins the use of solid foods those referred to as rich in lime salts should be selected. These, briefly stated, are the important rules of diet to aid the development of the tooth tissue.

The mouths of infants should be cleansed by the nurse by carefully introducing the index finger, around which a piece of clean linen has been wrapped and immersed in a solution made by dissolving half a teaspoonful of boric acid in a half pint of boiled water. The cloth should be dispensed with as early as possible and a proper brush substituted and used in a manner to be explained later, since the cloth forces particles of food between the teeth. As soon as the child is able to handle the brush it should be instructed in its use and carefully watched to see that the habit is acquired.

Having shown what causes caries, or decay of the teeth, it will be

understood how important it is to brush the teeth after eating, and as the secretions of the mouth are more acid at night it will also be seen that the teeth should be brushed before retiring. The majority of toothbrushes upon the market are totally unfit for the use intended. A toothbrush should be made of irregular tufts of bristles, slightly curved to conform to the contour of the dental arch and converging to a point, and the brush itself be small enough to reach every part of the mouth. In brushing lay the side of the brush against the teeth, the bristles pointing toward the apices of the roots, and turn the brush toward the cutting surfaces of the teeth. This will cause the bristles to spread out and penetrate the crevices between the teeth, brush the more exposed surfaces, and give the gums a healthy massage. Keep the mouth open, think of what you are doing and be careful to brush the inside as well as the outside of the teeth. Never close the mouth and attempt to save time by brushing the upper and lower together, for neither will receive proper attention. It is a good idea to make it a point to devote three minutes (by the clock) to the operation and see that the back of the wisdom tooth receives a proper cleansing.

Brushing in the manner just described will prevent recession of the gums, whereas brushing transversely will destroy the delicate attachment of the gums and cause a recession which can seldom be restored. The adoption of this method of cleansing in cases where, from improper brushing, the gums have receded, will be found to stop the trouble, although the tissues once lost cannot be replaced. Brushing transversely also has a tendency to wear away the enamel and help to form erosion.

Brushing the teeth alone with water is not sufficient. A tooth powder should be used every time the teeth are brushed. This may seem a bold assertion, but in the opinion of the writer a tooth powder which may be used at all may be used at all times; any powder containing the smallest trace of grit should be discarded.

A good antiseptic antacid mouth wash is also a very good adjunct to the dental toilet, for after properly brushing the teeth some bacteria may still remain in inaccessible places and these the mouth wash will destroy or render innocuous.

In some mouths it is wise to pass waxed dental floss silk between the teeth before brushing them, in fact it can do no harm in any mouth, although some people become so adept in brushing the teeth

that they can reach all crevices, and the use except occasionally, of dental floss is almost superfluous. Even though these instructions be carefully carried out salivary calculus (tartar) *will* form to a greater or less degree, and cavities *will* arise in spite of all that one can do.

The services of a dentist should therefore be sought regularly every six months for the purpose of examination. It does not follow that the dentist will find anything to do but he is the best judge as to whether his services are required.

The cavities in children's teeth should be filled as soon as they appear, for the following reasons: To prevent pain; to preserve a proper masticatory surface; to secure retention of the temporary teeth until the proper time for their exfoliation and bring about a proper development of jaw-bone, so that when the permanent teeth appear they will have sufficient room to erupt in their proper positions. Thus the child will have a regular arch which, it is hoped, by following directions presented in this article, it will be able to retain through life.—*Pediatrics*.



Correspondence.

Editor Maritime Medical News.

DEAR SIR: Were we to answer your editorial in last month's issue in a general way we could do no better than quote the first two paragraphs of Dr. Crawford's excellent paper in the same number entitled "Smallpox and Compulsory Vaccination."

Misery likes company and it is quite consoling to find that the Board of Health of our sister city is being set upon and abused as per your editorial. "The Solons and Wiscacres, the patronizers of Osteopaths, Christian Scientists and Holy Ghosters" do the snarling in St. John. Judge of our surprise at finding the editor of the *Maritime Medical News* consorting with the vulgar throng in throwing mud at his fellow practitioners. But your editorial demands more than a general answer inasmuch as its particular assertions are not based upon facts but are concoctions of the writer's imagination.

Take the assertion that the offer of twenty-five cents for each successful vaccination received no takers among the profession in Halifax. Here is the offer and the names of the parties to whom it was addressed.

OFFICE OF CITY HEALTH BOARD.

Halifax, N. S., April 6th, 1901.

To Dr. _____

Dear Dr.,—At a meeting of the City Health Board held this day you were appointed one of the public vaccinators for Ward _____ to carry out the scheme of Compulsory Vaccination as ordered by the Board. The remuneration is placed at twenty-five cents for each successful case, the Board to supply the vaccine.

If you accept the appointment, kindly notify the City Medical Officer, *in writing*, at once, and meet at the City Hall on Monday at 3.30 p.m., for instructions.

Yours respectfully,

(Signed) JOHN A. WATTERS,

Secretary

A copy of the above was sent to the following :

- | | |
|---------|-------------------------------------|
| Ward 1. | Drs Murray, Gow and W. F. Smith. |
| “ 2. | “ Goodwin, Silver and Foster. |
| “ 3. | “ Murphy, Buckley and W. B. Almon. |
| “ 4. | “ Wallace, Purcell and Forrest. |
| “ 5. | “ Doyle, Walsh and Venables. |
| “ 6. | “ Jacques, Hogan and O'Shaughnessy. |

Letters of acceptance were received from all these gentlemen, Dr. Walsh alone stipulating for more pay. All of these letters are in the hands of the Secretary of the Health Board.

In offering twenty-five cents the Board followed the precedent set by former Boards and accepted without demur by physicians of their day. In corroboration of this we quote an extract from the minutes of the Board of Health, November 24th, 1885: “The Executive Committee of the Board of Health beg to submit the following record of work for the approval of your Board.

2. Your committee to meet the want of the greatly increasing number of poor persons seeking to be vaccinated have made an arrangement with the medical staff of the Halifax City dispensary to vaccinate all the poor who may apply; the city to remunerate the physicians in the sum of 25 cts. for each successful operation.” It is a matter of fact that there was a house to house vaccination at that figure. This figure appears small it is true, but it must be remembered that it is a work of charity on the part of the city, and that for similar work done for years by the Dispensary staff the remuneration given has only been thirty-one cents per hour.

As to bullying the City Medical Officer into acquiescing in the employment of two young medical men and two students, the editor should know that the City Charter imposes upon that officer the duty of vaccinating the poor, and that the Board was in reality helping instead of bulldozing him.

As to getting vaccination done at a cheap rate, the editor should know that we hold office for the public good and not for professional aggrandisement. But the statement that the remuneration was only seven cents per vaccination is simply false.

The statement that the City Board of Health has alienated every public body with which it has had relations is more of a reflection upon these bodies than upon the Board of Health. Should the state-

ment be true we are but one of many, for even in London the orders of the Board of Health were antagonized by the School Board in the matter of compulsory vaccination. We are not concerned with pleasing opponents of plumbing rules, anti-vaccinationists, osteopaths and Holy Ghosts.

Fourth year students were employed to simply cleanse arms and take names, for which we require no defence and deserve no blame.

The statement that the quarantine of the Victoria General Hospital was raised by the chairman of the Health Board is untrue. The ward in which the patient was and all the nurses in attendance with the house physician were kept in strict quarantine for the authorized period.

If there has been any negligence in fumigating houses the Board is not aware of it.

The other statements reflecting on the Board generally and on us in particular are of a like unfounded nature.

In conclusion we would recommend to the Editor of the "Maritime News" some better occupation than that of manufacturing mud pellets to fling at his brethern.

Truly yours,

MURDOCH CHISHOLM.

N. E. MACKAY.

To the Editor, Maritime Medical News.

DEAR SIR,—The following letters are taken from the *Morning Chronicle* of January 8th and 14th respectively, and will explain themselves :

A GRATEFUL PATIENT.

SIR,—Would you kindly allow me space in your valuable journal in which to express my appreciation of the kind attention I received while a patient at the Victoria General Hospital.

I entered the hospital in September last to be treated for Hernia and Hydrocele and remained eight weeks, undergoing a delicate operation which left me in a very weak state, requiring special skill and attention. All this, and more, was cheerfully given by the attending physicians and nurses.

I must speak in terms of highest praise of Mr. Kenney, the kind

and efficient superintendent; of Dr. Murphy, whose surgical skill is equalled only by his geniality and sympathy, and of Drs. Robbins and Wardrobe, both so willing and ready to respond to any call; nor would I forget the kind hearted nurses, both male and female, who never seemed so happy as when administering to the wants of some unfortunate sufferer.

Neatness, cleanliness and comfort characterize the whole institution.

I am now at my home, improving every day, and shall always feel that I owe a debt of gratitude to the Victoria General Hospital.

Yours respectively,

Clyde River, Jan. 1st, 1902.

A. E. MACK.

STATEMENT OF FACT.

SIR,—In the issue of the 8th inst. there appears in your paper a letter headed, "A Grateful Patient," over the signature of A. E. Mack, of Clyde River. That gentleman seems to have a very faulty memory, or could not have read over very carefully the letter to which his signature is attached. I saw Mr. Mack operated upon in the last week of September, and, being interested in the case, watched its developments closely. On the first day of October Mr. Mack's condition was so bad that he had to be handed over to the care of the senior surgeon (whose name, if I remember rightly, is not Dr. Murphy), who found on examination that Mr. Mack's temperature was between 102 and 103, and that pus extended from the groin to the shoulder blade, with the skin red and inflamed. That surgeon, with the assistance of his house surgeon, had great difficulty in saving the patient's life, and to their careful attention Mr. Mack really owes his present good health. I do not think that Mr. Mack will care to deny that this is the correct version of the treatment.

MEDICAL STUDENT.

Jan. 9, 1902.

Here follow two letters, one of which is from Dr. MacKay to the patient, which Mr. Mack enclosed in his letter to me:

233 PLEASANT STREET,
HALIFAX, N. S., Jan. 10th 1902.

DEAR SIR,—I was surprised to see the enclosed letter in the local papers.

In view of the condition in which you were when I took charge of your case on the 1st day of October, you must have a very faulty memory, or could not have read over very carefully the letter before

signing your name to it. Did you forget the trouble Dr. Robbins and myself had in saving your life when you put your name to such a letter?

Yours truly,

N. E. MACKAY.

Mr. A. E. Mack, Clyde River.

CLYDE RIVER, January 20, 1902.

Dear Dr. Murphy:—I enclose you a letter received from Dr. MacKay, who seems to be jealous of your skill. I also enclose a clipping I have taken from the *Chronicle* of the 14th inst signed "Medical Student." I think by comparing the two you will be of my opinion, which is that the same *Student* wrote both of them. I am sorry to have affronted Dr. MacKay, but cannot help it; I gave the credit where I thought it belonged.

I have got quite well and strong now. I could not say wound was entirely healed, till last week.

I am Dear Sir,

Yours very truly,

ALBERT E. MACK.

Comment is unnecessary.

Yours truly,

T. J. F. MURPHY.

THE
MARITIME MEDICAL NEWS.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

Vol. XIV. HALIFAX, N. S., FEBRUARY, 1902. No. 2

Editorial.

VACCINATION AND THE CITY HEALTH BOARD.

On another page of this issue will be found a letter from Drs. N. E. McKay and M. Chisholm, defending themselves against the stricture passed upon the Halifax Health Board in our January number. After carefully reading their defence we fail to see that they have bettered their position by anything stated in that letter, nor have they—save one petty inaccuracy—taken conclusive issue with any one of our charges.

They publish a couple of letters, a list of names, and a part of a resolution passed by the City Health Board in 1885; and beyond these—which contradict no statements made by us, they content themselves with a bald, general denial of our accuracy.

As medical journalists we have two duties to perform. The first, our duty to the general public and the community in which we live; the other to the profession to which we belong and the best elements of which we try to represent, and support in their struggle with those who would attack their dignity and imperil their interests.

We would therefore, despite the letter of Drs. MacKay and Chisholm, reiterate *seriatim* the statements made by us and say that we are prepared to prove them.

1. No inspection has been or is being made of passengers arriving by trains from infected districts.
2. No general vaccination, even of children, has yet taken place—hundreds of school children remain still unvaccinated. This in spite

of the fact that when Dr. Jones was chairman of the Board he secured passage through the Legislature of an Act giving the Board most ample powers.

3. Twenty-five cents per successful vaccination was the rate offered for a *house to house* vaccination of the children of those earning *less than \$6.00 a week*—no lists being supplied the vaccinators, no concentration in schools or other stations, and the earnings of the parents to be investigated and determined by the vaccinator.

4. Although a number of medical men replied in the affirmative to the letter of appointment as public vaccinators, and attended at the City Hall *to learn particulars*, no qualified medical man could be found in Halifax willing to accept the terms and conditions of the Board's offer when made fully known, and *not one* vaccination was done as a result of it.

5. The vaccination done by the Health Board last fall—about 300 in all—cost nearly 75 cents each and there is *no record* of how many, if any, of them were successful.

6. Last month two medical men did 75 vaccinations in one hour at the City Hall, being paid \$2.50 each for the hour's work, being assisted by two students paid 50 cents each per hour. This is 75 vaccinations for \$6.00, a rate of *8 cents* per vaccination. We had not included the cost of student labour when we made the rate *7 cents* and we find we owe Dr. McKay and Dr. Chisholm an apology for having underated their benevolence.

7. We have it from an eye witness that *students did vaccinate children* at the City Hall and we have it on first class authority that they were engaged in the first instance for that purpose. We consequently cannot accept the denial of Drs. MacKay and Chisholm whose accuracy is impeached by the six preceding paragraphs.

8. For seven days after the discovery of smallpox at the Victoria General Hospital *no person* was allowed to leave that institution. On the eighth day, two private paying patients, one Dr. MacKay's and one Dr. Chisholm's, were permitted by the authority of Dr. Chisholm, chairman of the Health Board, to leave the hospital, and a number of other patients left at the same time and scattered to various parts of Nova Scotia.

9. That the Health Board is not aware that smallpox was conveyed to the Riley family from the Pickles house where Mrs. Riley

had been working is incredible, and no amount of quibbling can relieve the Board of its responsibility.

Thus by referring to our January number it will be seen that we stand by every statement we have made, save that by *one cent* we underestimated the generosity of the Board to its employees.

We do not however think we have been mistaken in our view of their benevolent designs and their fraternal treatment of the City Medical Officer. True, in the plentitude of their generosity, they had a large number of poor people vaccinated for him. They allowed him to place a substitute in the smallpox hospital that he might be at their beck and call to perform his other duties, *insisting however upon him paying the bill*. They would cut down his princely (?) salary by several hundreds of dollars, and in other ways prove their kindly feeling toward a professional brother over whom they are placed in a little brief authority. Their persistent prosecution of him is evidenced every week in the public press and were further proof needed their own minute books and the records of the City Council bear ample witness.

TETANUS COMPLICATING VACCINATION.

From various sources there have recently been reported cases in which tetanus has followed upon vaccination. A case of this nature occurred not long since in Saint John, and has already been referred to in our columns. Another case has been recorded by the newspapers from Sydney, and from various quarters in the neighboring republic instances of this unfortunate complication have been reported.

Dr. Robert N. Willson, in a paper read before the Philadelphia County Medical Society, reports a case of this nature which occurred in his practice. In this case the vaccination had been performed by another physician four weeks previous to the day on which he was called. At the end of the fourteenth day, after a moderately severe course, healing had begun, and when last seen by the vaccinating physician the ulcer was clean and quite free from any sign of secondary infection, although still discharging serum. A shield had been in

use, and the sore had not been properly cared for after the physician last saw the patient, and the child's home was in the second story of a building of which the first story was a stable. The child had often been in bed with the parents.

"Communication with the physician who had performed the vaccination elicited the statement that among the many other cases vaccinated with virus obtained from the same source, another case of tetanus appeared, also in a child." The father of this child also was a stableman.

In each case the technique of the vaccination was faultless, but the after care was insufficient, and that opportunity existed for the conveyance of the tetanus bacillus from stable to child was very evident.

Commenting upon these cases, and comparing them with those occurring in the epidemic in Camden, it was noted that the shield was used in nearly all the cases in which tetanus developed. It was pointed out that in every instance the tetanus appeared at a very late date—from the twentieth to the twenty-eighth day after the vaccination, and, moreover, every case was fatal. Now tetanus may be long in making itself manifest after the infection, but it is the rule that the longer its appearance is delayed, the milder is the attack. Usually symptoms developed within from a few hours to two weeks after the introduction of the virus. It would therefore seem altogether unlikely that the tetanus germ could have been introduced at the time of vaccination, in the cases referred to, and consequently the vaccine is not to be held responsible for the symptoms of tetanus.

Dr. Willson remarks :

"In conclusion, I would say that after diligent search I can find no case on record that presents even probable evidence of the introduction of the tetanus infection with the bovine, or, in fact, any other virus of modern times. No amount of such assurance can undo the harm that has already been done to a vitally valuable prophylactic measure by the carelessness of the watch that has been kept over the vaccine sore. But we can slowly eradicate the evil influence of the recent weeks by an entirely new scrupulousness that will in time overthrow the opposition that is rampant to-day. If by calling attention to this most dreaded of all the complications of traumatic and operative medicine, both the physician and patient are awakened to the fact that a danger of the entrance of tetanus organisms is ever present, and as long as there is on the surface of the body the most

LACOTOPEPTINE TABLETS.

Same formula as Lactopeptine Powder. Issued in this form for convenience of patient—who can carry his medicine in his pocket, and so be enabled to take it at regularly prescribed periods without trouble.

"Everything that the science of pharmacy can do for improvement of the manufacture of Pepsin, Pancreatine, and Diastase, has been quietly applied to these ferments as compounded in Lactopeptine."

—*The Medical Times and Hospital Gazette.*

CAN BE ORDERED THROUGH ANY DRUGGIST. SAMPLES FREE TO MEDICAL MEN.

NEW YORK PHARMACAL ASSOCIATION,

88 WELLINGTON STREET WEST, TORONTO.

Liquid Peptonoids with Creosote

Beef, Milk and Wine Peptonised with Creosote,

Liquid Peptonoids with Creosote is a preparation whereby the therapeutic effects of creosote can be obtained, together with the nutritive and reconstituent virtues of Liquid Peptonoids. Creosote is extensively used as a remedy to check obstinate vomiting. What better vehicle could there be than Liquid Peptonoids, which is both peptonized and peptogenic? It is also indicated in Typhoid Fever, as it furnishes both antiseptic and highly nutritive food, and an efficient antiseptic medicament in an easily digestible and assimilable form.

In the gastro-intestinal diseases of children, it also supplies both the food and the remedy, thereby fulfilling the same indications which exist in Typhoid Fever.

Each tablespoonful contains two minims of pure Beechwood Creosote and one minim of Guaiacol.

Dose.—One to two tablespoonfuls from three to six times a day.

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"BOROLYPTOL"

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AS A NASAL DOUCHE AS A MOUTH WASH
AS A FRAGRANT DENTIFRICE.

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Samples sent
on application.

88 WELLINGTON STREET West, TORONTO.

To bring up a Baby

On sterilized or pasteurized or other modified milk, is a complicated problem that will baffle the majority of scientists. A laboratory would be needed to prepare the milk in, a complex apparatus to cook it in, and then a supply of ice to act as a preservative after it is prepared. These methods are simple to the physician and nurse, but other people have most of the babies.

Wampole's Milk Food

Can be prepared in a moment and at any time—anywhere—in the kitchen, in the bedroom, on the cars, by the roadside or anywhere water can be obtained.

Foods that need cooking are not safe. The difficulty, indeed the practical impossibility of getting even a mother to give care to the preparation of a food in which a long, complicated process is involved (especially at night) is well known.

Foods that require the addition of milk ought really not to be called foods. In large cities especially, pure and fresh milk is almost unobtainable.

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trivial aperture or abraded area, then the price that has already been paid is not too dear and the lives that have been sacrificed have not been lost in vain. Spread at one time over a city of the size of Philadelphia many thousands of simple open wounds, and provide for them the far superior care and attention that are usually devoted to minor surgical conditions, yet the list of fatalities from tetanus would probably equal or exceed in number the cases noted in the course of vaccinia. This is the actual experience of the day. And for the same reason: in both instances there is an open absorbing lymph surface that welcomes the tetanus germ. Following one Fourth of July I knew of and saw more cases of tetanus than I have seen or read of as connected with the vaccine sores of several years. The lesson is none too plain."

In the discussion which followed the reading of Dr. Willson's paper there was general unanimity of opinion that the shield is not to be recommended in the after care of vaccination.

An interesting point was brought out by Dr. Joseph McFarland who has been studying the literature of tetanus in association with vaccinia, and who has been able to find record of but a single instance of this complication in the years preceding 1882. From 1852 until 1901 only four cases are recorded, while in 1901 about twenty-four cases occurred within a few months. In all of this last series of cases the virus of one manufacturer had been used.

Dr. McFarland's remarks were to the effect that it is quite possible for the tetanus germ to be present in vaccine, and to remain latent for several days after vaccination before beginning to develop. Spread over an abraded surface and left freely exposed to the air, the germ would find itself under conditions very unfavorable for its growth, until, after the lapse of six or ten days, the vaccination lesion becomes covered with a crust. Then, protected from the outside air, it is able to develop in the necrotic and diseased tissues beneath.

Such variation in opinion does not help us to a conclusion other than that absolute cleanliness is to be insisted upon throughout the whole course of vaccinia, and that a vaccine should be selected to which no suspicion attaches.

EDITORIAL NOTES.

SMALLPOX IN ST. JOHN.—The total number of cases of smallpox in St. John has been one hundred and one, of which twenty-three died. There were treated :

At the Epidemic Hospital, - - - - -	29
“ Isolation Hospital, - - - - -	29
At Home, - - - - -	43

Happily there have been no new cases for several weeks, excepting two which came to port on a steamer and are now insulated at the Quarantine Hospital, under the care of the port physician, Dr. J. E. March.

CHIPMAN MEMORIAL HOSPITAL.—We take the following from the *Montreal Star* of February 5th, in reference to the splendid new hospital recently opened at St. Stephen, N. B. :

“The Chipman Memorial Hospital was opened yesterday afternoon by Hon. L. J. Tweedie, Premier of New Brunswick.

There were present the officials of the towns of St. Stephen and Milltown, and other representative men from different parts of the county, a few invited guests and several friends of the Chipman family from St. John and elsewhere.

After devotional exercises by Rev. Canon Newham and Rev. Dr. Read, Lady Tilley delivered a touching address, at the conclusion of which she unveiled a memorial tablet bearing the inscription, ‘The Chipman Memorial Hospital is given by the children in memory of their father and mother and other dear ones entered into rest.’

Premier Tweedie gave an address, in which he spoke of the good work done by Lady Tilley in connection with the Victoria Hospital Fredericton, and said he hoped to add the St. Stephen Hospital to the worthy objects which received a grant from the provincial treasury. He then announced the names of the trustees: J. D. Chipman and Lady Tilley, representing the estate; Hon. Geo. F. Hill, Judge Stevens, G. W. Ganong, M. P., and Irving R. Todd.

J. D. Chipman, on behalf of the heirs, presented the deed of gift, which was accepted by Hon. G. F. Hill, chairman of the Board of Directors. The gift was also acknowledged by Mayor F. M. Murchie, of St. Stephen, and Mayor Frank Murchie, of Milltown, and by G. W. Ganong, M. P., on behalf of the county.

Hon. Judge Stevens closed the proceedings with an eloquent address. The hospital is beautifully situated on the bank of the St. Croix, just below the business part of the town. It was formerly the Chipman homestead, which has been remodelled and thoroughly equipped as a hospital under the personal supervision of Lady Tilley, who, with the other heirs, her brother, J. D. Chipman, and sister, Mrs. Col. Toller, of Ottawa, and Mrs. Howland of Toronto, have handed over the building and beautiful grounds fully equipped and ready for immediate use. It is supplied with twenty beds in all, one of which is endowed by the St. Croix Cotton Mills, and one by J. T. Whitlock, of St. Stephen; one by the city of Calais, Maine; one by the people of St. Andrews. N. B., and one in a private room, by E. G. Russell, manager of the Intercolonial Railway, in memory of his mother. The operating room is furnished with the best modern equipments, as the special contribution of the ladies of several churches of St. Stephen and Milltown. The nurse matron is Miss Ogilvie, a graduate of St. John Hospital; and the secretary-treasurer is Mrs. James Vroom, of this town.

Mayor Murchie, of St. Stephen, at the opening, presented a cheque for one thousand dollars as a contribution to the maintenance fund from the men of St. Stephen and Milltown."

DR. MUIR ABROAD.—The following item has been taken from the October issue of the *Southern California Practitioner*. It readily proves how easily Dr. "Will" makes friends:

"Dr. W. S. Muir of Truro, Nova Scotia, president of the Maritime Medical Association, has been visiting for some weeks his brother, Hon. J. A. Muir of Los Angeles. Dr. Muir besides being an able surgeon, has a most genial personality, which shone forth most delightfully at a banquet that was given in his honor at the California Club. At the recent meeting of the Maritime Medical Association the members of that society presented Dr. Muir, in recognition of his valuable services as secretary of the medical society of Nova Scotia for the past fourteen years, a handsome oak and silver spirit stand, and presented to Mrs. Muir a set of handsome vases. Away out here in California we forget about Nova Scotia, but there are in that province 476 medical men, while in Prince Edward Island there are 90, and in New Brunswick 243. Dr. Muir carries with him to his far away home the friendship of all the members of the profession of Los Angeles with whom he came in contact."

Matters Personal and Impersonal.

Dr. J. E. Robertson, of Montague, P. E. I., has been appointed Senator in place of the late Senator Prowse.

Dr. J. B. Black, of Windsor, was recently re-elected Mayor of that town.

Dr. A. Robinson has again been re-elected Mayor of Annapolis by acclamation.

Dr. H. V. Kent has recently been appointed councillor for one of the wards of Truro.

Dr. James Warburton has been re-elected Mayor of Charlottetown, over his opponent, Dr. F. F. Kelly.

Dr. J. F. Black, of this city has just started on an extended trip to different parts of Europe and Egypt, and expects to be away one or two years.

Dr. Wm. H. Macdonald of Antigonish has recently been seriously ill with acute rheumatism. Late reports bring the good news that he has recovered.

Dr. Wardrope, formerly house surgeon of the Victoria General Hospital is doing a flourishing practice at New Campbellton, C. B., and surrounding country.

Jonathan Hutchinson, F.R.S., General Secretary of the New Sydenham Society, has requested Messrs. P. Blakiston's Son & Co., of Philadelphia, the American agents of the Society, to announce the publication of "An Atlas of Clinical Medicine, Surgery and Pathology," selected and arranged with the design to afford, in as complete a manner as possible, aids to diagnosis in all departments of practice. It is proposed to complete the work in five years, in fasciculi form, eight to ten plates issued every three months in connection with the regular publications of the Society. The New Sydenham Society was established in 1856, with the object of publishing essays, monographs and translations of works which could not be otherwise issued.

The list of publications numbers upwards of 170 volumes of the greatest scientific value. An effort is now being made to increase the membership, in order to extend its work.

Therapeutic Suggestions.

Tubercular Meningitis.—

R	Strontii bromidi.....	gr. xv.
	Chloral hydratis.....	gr. viijss.
	Syr. valerianæ.....	fl. ʒvj.
	Syr. menth. piper.....	fl. ʒij.
M. S. ʒj. q. ½ h. if necessary,		

MALBA.

Tonsillitis:—

R	Formalin.....	℥xv.-xx.
	Potassii chlor.....	
	Liq. ferri chl.....	ʒj.
	Aq. menth. pip..... q. s.	ʒiv.

and

R	Quininæ hydrobrom.....	
	Sodii benzoat.....	gr. ij.
	Salol.....	gr. v.

M. ft. caps. No. j. Sig. One q. 3 h.

Medical Times and Hospital Gazette, September 21, 1901.

Notes.

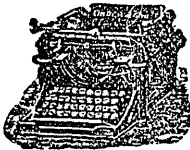
SANMETTO IN GENITO-URINARY DISEASES.—Dr. B. G. Inman, of Bradford, Ohio, writing says: "I have used Sanmetto and find that it is all that one could desire in the treatment of urinary diseases. With an experience of thirty-eight years of practice I know of no medicine that is more direct in its action in all cases of senile prostatitis and other genito-urinary diseases. I regard Sanmetto as one of our best vitalizing tonics to the reproductive organs, which gives it a wide range of usefulness in the treatment of many nervous troubles."

HELEN KELLER'S FIRST EARNINGS. SHE WANTED MONEY TO BUY AN ISLAND HOME.—There is a pretty story in connection with the series of articles which Helen Keller the wonderful blind girl, has written for *The Ladies' Home Journal* telling about her own life from infancy to the present day. She always has shrunk from the publicity which follows successful literary work, and it was with great difficulty that she was persuaded to take up the task of preparing her autobiography. She had, however, set her heart on owning an Island in Halifax harbor for a summer home, and in a spirit of

fun the editor of *The Journal* offered to buy it for her, or to provide the means to buy it. When the work of writing appeared especially irksome Miss Keller was reminded of her desire to become a land-owner, and it spurred her on. Just before Christmas she completed the first chapter of her marvelous story; and on Christmas morning she received from her publishers a cheque for a good round sum. Her delight may be imagined, for this was the first money of any account which she had ever earned. "It is a fairy tale come true," she said. Whether she will really carry out her plan to buy the island remains to be seen. (See the *Ladies' Home Journal*.)

GRIPPAL COUGH, LARYNGITIS, BRONCHITIS.—In these affections, antikamnia is indicated for two reasons: First, because of its absolute power over pain; at once removing this element of distress and placing the whole system in the best possible condition for a speedy recovery. And second, because of its power to control inflammatory processes, lowering the fever by its peculiar action of the nervous system. Codeine is strongly indicated because of its power as a nervous quietant, often quickly and completely controlling the cough. In nervous coughs, irritation of the throat, laryngitis, bronchitis and phthisis, where the cough is altogether out of proportion to the amount of expectoration, Antikamnia-Codeine Tablets will give prompt satisfaction. In fact, in cases of nervous coughs, irritable throat, so commonly attendant upon influenza and la grippe, as well as in sub-acute laryngitis, and slight bronchitis, the tablet alone will often so control the cough that the disease rapidly subsides. This is not strange when we remember that nothing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis, the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain and bringing the temperature down to the normal standard.

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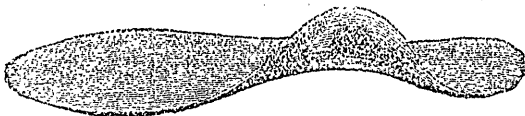
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