

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /  
Couverture de couleur
- Covers damaged /  
Couverture endommagée
- Covers restored and/or laminated /  
Couverture restaurée et/ou pelliculée
- Cover title missing /  
Le titre de couverture manque
- Coloured maps /  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /  
Planches et/ou illustrations en couleur
- Bound with other material /  
Relié avec d'autres documents
- Only edition available /  
Seule édition disponible
- Tight binding may cause shadows or distortion  
along interior margin / La reliure serrée peut  
causer de l'ombre ou de la distorsion le long de la  
marge intérieure.
- Additional comments /  
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /  
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /  
Qualité inégale de l'impression
- Includes supplementary materials /  
Comprend du matériel supplémentaire
- Blank leaves added during restorations may  
appear within the text. Whenever possible, these  
have been omitted from scanning / Il se peut que  
certaines pages blanches ajoutées lors d'une  
restauration apparaissent dans le texte, mais,  
lorsque cela était possible, ces pages n'ont pas  
été numérisées.

THE  
CANADIAN PRACTITIONER

FORMERLY "THE CANADIAN JOURNAL OF MEDICAL SCIENCE."

EDITORS:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England. - J. E. GRAHAM., M.D. Tor., L.R.C.P. London.  
W. H. E. AIKINS, M.B. Tor., L.R.C.P. London.

Business Management, - - The J. E. BRYANT COMPANY (Limited), 64 Bay Street.

TORONTO, JULY 16, 1889.

Original Communications.

APPENDICITIS VERMIFORMIS, PERI-  
APPENDICITIS AND PERFORATIVE  
APPENDICITIS, WITH REPORT  
OF CASES AND REMARKS.\*

BY A. VANDERVEER, M.D.,

Professor of Didactic, Abdominal and Clinical Surgery, Albany  
Medical College, Albany, N.Y.

MR. PRESIDENT AND GENTLEMEN,—I desire in this short paper which I have the honor of presenting to you to-day, to offer an argument in favor of the more concise and simple classification of the pathological changes and conditions that are to be met with in and about the appendix vermiformis. I believe that Dr. Fitz, of Boston, led us in the right direction when in his very able paper he gave the more concise definition of appendicitis as the cause of many troubles in that neighborhood. I would do away with all past classification of typhlitis, perityphlitis, etc., etc. It has been pretty well demonstrated by many autopsies, held within the past few years, that inflammation of the cæcum with ulceration, or, an inflammation beginning in the connective tissues surrounding the lateral posterior portion of the cæcum, is exceedingly rare. That nearly all inflammatory conditions, with or without abscess, occurring on the right side of the abdomen, in a space bounded superiorly by a line drawn from the anterior superior spinous process across to the median line, and thence down to the symphysis,

and then along Poupart's ligament, can be traced to the appendix as having caused the trouble in some way. Of the nature of the foreign substances that may be found in the appendix, I would not take the valuable time of so intelligent an audience as this by giving the list, but I desire to emphasize, just here, my impression that by far, very far, the greatest number of cases originate from some form of fæcal concretion. Briefly I would call your attention to the great disparity that exists in the normal anatomy and position of the appendix. All of you will remember in your dissections to have found the appendix in every conceivable position; sometimes fastened to the connective tissue just behind Poupart's ligament, sometimes an inch or two in length, perhaps perfectly in the peritoneal cavity, then again of enormous length dipping down in to the cavity of the pelvis. The latter two conditions being exceedingly dangerous when ulceration takes place rapidly, as the contents must inevitably escape into the cavity of the peritoneum, causing either an immediate collapse or suppurative septic peritonitis. The cautious consideration of such cases leads me to make the assertion that we have cases of simple inflammation within the appendix which give us a fairly well-marked train of symptoms and which by reason of judicious treatment go on to recovery. From my note book I present two cases which I think fairly well represent this condition.

APPENDICITIS VERMIFORMIS.

Mr. W. S., aged twenty-two, energetic young

\* Prepared for the Ontario Medical Association.

man, bank clerk, was taken ill Oct. 8th, 1888, with distressing sharp pain in the right inguinal region, followed by two or three free movements of the bowels, with successive attacks of weakness and exhaustion and with some nausea. He was removed to his home, put in bed, and when seen by his family physician, Dr. Bigelow, was found to be in a condition of prostration, but not that of collapse. His right leg was drawn up, and he located the pain in the region that I have previously marked out, extending well up to the umbilicus. Anodynes were given with some stimulants, and absolute rest enjoined. His bowels were moved on the second day by injection, and some fecal matter passed, but most of the movement was quite loose. He complained of marked weariness, or partial weight on the right side of the bowels, but his symptoms did not grow worse. There was some irritation of the bladder, with more nausea and a tendency to distension of the bowels from gas. I saw him, in consultation with Dr. Bigelow, Oct. 12th, when I found very much the condition spoken of in the history, together with marked dullness low down in the right inguinal region, and with distension of the small intestines. The large bowel had been emptied in the morning by means of enema. His extremities were warm, his mind was bright and clear, his stomach was willing to take of milk and some beef tea, and he was in what you would call a comfortable condition aside from the local distress mentioned. I advised continuance of treatment together with the external application of a blister three by four inches, applied in shape so as to reach well down to Poupart's ligament, and which did its work well. He could only rest lying upon his back and with his right leg slightly flexed, the thigh upon the abdomen. The blister afforded him relief, he was kept quiet in bed for two weeks, when the pain had entirely subsided and he could straighten out his limb with comfort, but there was still some fulness which dissappeared at the end of another week. The bowels, after the eighth, were kept quiet for a period of eight days, and then a good movement followed the use of an injection of the emulsion of castor oil, a large quantity being given. He made a good recovery and has been well since.

This case is but a type of many that we see,

yet no doubt there was some irritation within the appendix, which produced the symptoms indicated, which, however, subsided without perforation or an abscess forming in the connective tissue. Belonging to this class of cases, and yet one that goes on to a greater degree of suffering, and which ultimately results in an abscess, is the following:

APPENDICITIS VERMIFORMIS — REPEATED ATTACKS RESULTING IN ABSCESS.

Mr. J. Mc—, aged twenty-two, drug clerk by occupation. I attended him during the fall of 1876 and the spring of 1877 in two attacks almost precisely similar to the case just described, and in the second attack I almost urged an exploration, fearing that an abscess was forming and that it might rupture into the peritoneal cavity, but he grew better and remained well for a year, then had his third attack in which an abscess formed, was opened, and in the discharge was found what were supposed to be berry seeds with fecal concretion. The cavity was drained and a good recovery followed. But these cases do not always terminate so favorably. These are the cases where, I believe, when a second attack presents we are justified in making an exploration and amputating the appendix, removing it completely. If not, our patient may go on into the developing of an abscess that may point in some of the odd, out-of-the-way positions, such as we have had described to us by able reporters, or may rupture still worse into the peritoneal cavity, and of which the following case is but an illustration:

APPENDICITIS AT LAST RESULTING IN ABSCESS.

Case of Dr. Beech, Gloversville, N.Y.

C. B. F., aged twenty-seven, good habits, fine physique, had an attack of supposed cholera morbus, attributed to eating of strawberries and cream. Continuing for two weeks it was pronounced inflammation of the bowels, afterwards suffered from indigestion and taken sick again a year after first attack. General symptoms were debility, fever, tenderness and tumefaction of bowels on right side. Fomentations and poultices were applied over tender place for six weeks, when an abscess discharged externally. The offensive discharge was pus for a month, then changed to serum. He went to Albany in December, 1869, consulted Drs. Armsby and

March, both of whom recommended exploratory incision. The incision was not made, however, the young man returned home, grew enormously large, was not well and had little endurance. In February, 1870, he entered a hospital in Boston, where Dr. Bigelow made an incision with the expectation of finding dead bone, but the result of the exploration was negative. Incision healed, sinus remained, and after a time iodine was injected. Later he began having pain in upper part of thoracic cavity, and opium was prescribed for it and nervousness. He formed the opium habit and continued it hypodermically until death. He was brought home in June, 1870, much worse with chest trouble. Family physician being absent, Dr. Beech was called and diagnosed hydrothorax, the heart being crowded over so that the apex beat was considerably to right of sternum. In August, 1870, Dr. Newton made an incision in the upper part of the left side, and pus discharged. A second opening low down near the bottom of the thoracic cavity came spontaneously later. Both continued to discharge offensive pus for about five years, when death occurred March 26th, 1874. At the autopsy made by Dr. E. R. Hun, marked evidences of old adhesive inflammation were found in the neighborhood of the appendix vermiformis. On account of great emaciation it was difficult to trace the sinus to this location. Seeds were found which must have been lodged there for a long time, and his constant attendant stated that he would not eat seeds during his entire illness, having formed the impression that his original sickness had been caused by them.

In the cases of peri-appendicitis we have very much the same train of symptoms as I have just described, but in which persistent rest and the use of familiar remedies does not succeed in relieving our patient. At the end of the sixth, eighth, tenth or twelfth day we find the swelling has increased, is more sensitive, the bowels positively inactive, injections have been tried, and only the lower bowel is emptied. In some cases cathartics have been ventured upon, but perhaps only to be returned by the stomach, and possibly a faecal vomiting threatens or presents. The following case in the practice of Dr. Buckbee, of Fonda, N.Y., illustrates very well the points I desire to reach:

PERI-APPENDICITIS WITH ABSCESS.

Mr. B., aged thirty, farmer by occupation, good habits, and well developed muscular body, weight about 160 pounds; was taken sick Dec. 1st, 1887, with very many of the same symptoms described in my first case (Mr. S.) The swelling could be made out on the fifth day of his illness. On the morning of the eighth day he suffered rather more pain than usual, there was a rise in temperature to about 103° F., his pulse was increased, and marked tympanites threatened. I was telegraphed for and saw him about twelve hours after. He had grown gradually worse in his symptoms in this time, complained of great distention of the abdomen, which was quite apparent, had much nausea, yet did not vomit any great quantity, had an anxious expression of the face, temperature 103.5, pulse 120. There was marked dullness in the right inguinal region, but the prominence Dr. Buckbee stated, was not so marked as the day previous. I advised an immediate operation, which was assented to at once, and the usual incision was made above Poupart's ligament, and after dissecting down quite to the sub-peritoneal fascia I came upon an abscess containing about three ounces of dark, very offensive pus, in which we found two faecal concretions, and a sloughing appendix, the latter I did not disturb, simply placing in a large drainage tube, with a smaller one along side of it, washing out the cavity thoroughly with antiseptic solutions, and dressing with thymol gauze. The patient reacted well from the operation, began to improve within a few days, bowels moved the next day with the aid of an enema, and he went on to perfect recovery. Here is a case that demonstrates how early an abscess may form; also, I think, illustrates this point, that the appendix was so situated that nature was able to throw out a posterior wall or barrier, so as to protect the peritoneal cavity, and that when he grew worse, threatened perforation presented into the peritoneal cavity, but that this was relieved by a timely operation. Or in the next case of

PERI-APPENDICITIS, ABSCESS, OPERATION, RECOVERY WITH PERMANENT SINUS.

Wm. H., aged seventy, married, father of nine children, butcher by occupation. Called Feb. 17th, 1871, to see him, and found for past week

he had noticed soreness in right inguinal region; had taken cathartics, but gained no relief, and felt the lameness down right thigh. On Feb. 19th pain increased, bowels had not moved and had some hesitancy in urinating. Gave mild physics and anodynes to afford relief. During next week symptoms varied little, although pain was severe and deep-seated at times, and motion of thigh gave increased suffering. Tympanites well marked, bowels evacuated with some difficulty with enema. Feb. 20th, well-marked tumor was revealed in inguinal region. Diagnosis, peri-typhlitis, prognosis unfavorable. Poul-tices were applied locally over swelling, patient kept quiet as possible, taking quinine and opi-ates. No attempt made to move bowels. Same treatment until March 6th, when fluctuation became apparent. Sudden increase of temper-ature, pulse ranging from 110 to 120. Tumor presented above Poupart's ligament, size and thickness of hand. Family told, and realizing necessity of operation readily consented. At 10 a.m. he was put under influence of ether, and exploring needle passed into tumor three-quarters of an inch above Poupart's ligament, and nearer anterior superior spinous process. Careful dissection being made down through tissues three-quarters of an inch, large quantities of offensive pus escaped. No especial foreign substance was found. Very much more com-fortable next morning, and there had been a free discharge of disagreeable smelling pus during the night. Washed cavity out with carbolized water, he was easier in every respect and pulse nearly normal. Bowels moved third day after operation, the first complete movement in ten days. He was able to go out March 18th, there being then but a slight discharge. He improved in strength and was able to return to business the middle of May. Wound never entirely healed, though discharge never amount-ed to more than half a teaspoonful (two c.c.) in twenty hours. Continued in fair health until November 4th, when he suddenly died. Post-mortem examination revealed death caused from rupture of the heart; other organs in good con-dition. The sinus connected with appendix, and during life various kinds of seeds had escaped at different times.

Other cases that illustrate this division of my paper are the following:

Undoubtedly the saddest and most anxious cases that present in our practice, and which I would classify under the head of perforative appendicitis, are the following which I would present for illustration:

PERFORATIVE APPENDICITIS,

*Death on third day from shock and collapse resulting from perforation of the appendix, allow-ing contents to escape into peritoneal cavity.*

Miss B., aged nineteen, in all respects a healthy girl. Began menstruating at fifteen, perfectly normal each month. Was called to see her Sept. 13th, 1871, and gained the follow-ing history: She had felt pain and soreness for two or three days in right inguinal region; mother had given mild physic day before, which operated kindly, but had little sleep during night. Found slight soreness and some tym-panites on percussion, tongue coated, and very thirsty. Urinated freely with no pain. Just began to menstruate, being proper period. Had eaten very freely of blackberries for past two weeks. Gave three pills, each containing one-half gr. calomel, one-half gr. opium and one-sixth gr. ipecac, followed two hours after by two spoonfuls (ten c.c.) syrup rhubarb, and if feverish a solution of tr. aconite root, two drops to the teaspoonful (five c.c.), dose every two hours, patient remaining in bed. Supposed she suffered from torpidity of liver, and congestion of ovary incidental to menstrual period. Second day was better in every respect, father calling at the office to tell me at a.m., Sept. 14th. Ad-vised observing carefully any increase of pain and being kept quiet for a few days longer. Was called again Sept. 15th; no motion of bowels; slept some, but very restless since mid-night, and for past two hours complained of severe colicky pains and fulness in right inguinal region. She expressed fears of coming periton-itis as a condition or complication due to men-strual period. Ordered five gr. Tully powder every two hours, and applications of hot water cloths and oil silk to be made over abdomen. Three hours later she stated she felt perfectly easy, no pain, but there was, however, a serious change of appearance in her condition. Could scarcely detect radical pulse in either arm. Hands cold, no pulsation in posterior tibials, feet and legs very cold, in fact a profound col-lapse, yet perfectly rational. I stated to parents

she was undoubtedly suffering from perforation of bowels, and would probably not recover. Every effort was made to assist her, but no reaction, however, came on. She vomited some during the evening, but no motion of the bowels. Remained in this condition, perfectly rational, up to within an hour of her death, which occurred at three a.m., Sept. 16th.

Autopsy thirty-six hours after death. All organs were in a healthy condition. In the appendix, about an inch from the cæcum, was an ulceration and perforation allowing several blackberry seeds with some fluid to escape into the peritoneal cavity. Also a teaspoonful or more of seeds were found in the cæcum. There was scarcely any peritonitis present.

*Perforative Appendicitis—Death from perforation on third day.*

Miss G., aged eighteen, menstruation normal, and always healthy. Was requested by attending physician, Dr. J. M. Bigelow, to see her in consultation, he having given me the following history: Made his first visit on the 12th of Sept., 1874, and found that for two or three days preceding she had some pain in the right ileo-cæcal region; cathartic had been taken and acted, but no relief. Tenderness on deep pressure in right inguinal region and some tympanites; pulse above 100. He had ordered anodyne treatment, light diet, and warm fomentations over bowels, but with little effect. Pain increased, and acute peritonitis feared. Not near menstrual period. Amount of anodyne increased, but in night she became delirious, profound collapse occurred, and she died at ten a.m., Sept. 15th.

Post-mortem on the 16th revealed ulceration of appendix posteriorly, caused by small faecal masses. There was an escape of more than a pint of faecal matter into the peritoneal cavity, and the folds of the ilium were glued together somewhat by recently thrown out lymph. The peritonitis was not general, however, being confined to the right ileo-cæcal region.

*Perforative Appendicitis—Perforation—Death from Septic Suppurative Peritonitis.*

Master S. M., aged seven, first called to see him Thursday, April 22nd, 1875. His parents said, on Sunday previous he had had pain in bowels; his mother gave him castor oil on Monday, which acted freely, and he felt better;

but on Tuesday pain returned more severe than previously. His abdomen was greatly distended, and marked tenderness in right inguinal region. Bowels did not move for two days, and vomited at times. Ordered one-half grain opium every two hours, and warm poultices over surface of bowels. The vomiting continued, he was only partially comfortable, gradually sank, and died a.m. of April 25th.

Post-mortem thirty-six hours after. Present, Drs. Morrill, Blatner, W. H. Bailey, F. C. Curtiss, J. M. Bigelow, and medical students. Examination showed body well nourished, slight effusion in pleural cavities, heart normal, and large ecchymotic spots upon external surface of large intestines. Folds of large intestines slightly agglutinated, abdominal parities covered with lymph, and right inferior surface of spleen covered with lymph and pus. On right side small intestines were agglutinated and slightly adherent to parities. The appendix vermiformis was ulcerated, perforated, and contained a date-seed-like concretion. There was a small supernumerary spleen.

In 1880 I read a paper before our State Medical Society urging in these cases an early and prompt operation. This had been done by some operators before, and has been done by some since, and yet the literature upon the subject and the report of successful cases is very meagre, but few, very few, have been reported, and still I am convinced that we should persevere and endeavor to make our diagnosis as early as possible, and then, when symptoms of perforation present, to operate at once. I believe the time is coming when amputation of the appendix will become a justifiable operation. These cases die if left to nature and to our feeble medication, and it is possible that we may save many by an early operation. When shall we operate in cases of peri-appendicitis, or of perforative appendicitis? is a subject that will bear close investigation, careful study, and thorough discussion, all agreeing in the former cases, whenever we feel that through the rise in temperature, and when other anxious symptoms present, an immediate operation becomes necessary, the abscess must be drained and treated in an antiseptic manner. As regards the latter cases, where perforation takes place rapidly, we are not yet united as to the best time for oper-

ating. Surely not when the patient is in a condition of collapse, with cold hands and feet, with a clammy perspiration, and quite pulseless. We have now a condition of surgical shock that our art is unable to relieve. But beyond a doubt we should operate in these cases the very moment any of the serious symptoms present. When the patient gives the shriek of sharp concentrated pain, when the anxious countenance threatens, when the pulse goes up to 120 or 140 from 80, possibly with or without much increase of temperature, but localized tenderness in the right inguinal region, and with distressing and acute tympanites, then by all means we are justified in making an exploration, and if the appendix is now but slightly perforated, or in a sloughing condition, we can go on and amputate it; and perhaps save our patient. If septic peritonitis is present, I believe by washing out the peritoneal cavity, thoroughly flooding and floating the intestines in hot sterilized water we may possibly abort a peritonitis, draining if necessary, our patient may react and be saved from his condition of collapse and finally go on to recovery. Regarding the nature of the incision, I am impressed with the belief that in making a deep incision in search of the abscess connected with appendicitis, that the Hancock-Parker incision is still the best, that is on a line above Poupart's ligament. Regarding the incision for removal of the appendix, in the cases of acute perforative peritonitis, I am of the impression that the median incision will perhaps answer best in the majority of cases, and leave our patient with a better condition of the abdominal walls, less likely to result in weakening and a tendency to hernia than the incision that is made from the anterior superior spinous process across to the median line, or in the *linea semilunaris*. As to the method of the removal of the appendix, I am not strongly impressed with the necessity of invaginating the peritoneal surface with suture. I believe a simple ligature thrown around the base of the appendix, careful not to include any portion of the cæcum, as I have done in two cases, is a safe operation, and one that results in satisfactory healing of the stump. While much has been written upon this subject, much is yet to be learned. I have not felt like discussing the difference of opinion between the late Dr. Sands and Dr. Weir, of

New York, as to whether in a case of peri-appendicitis the abscess originally arises extra or intra-peritoneal. I believe that the formation of an abscess rests largely with the position of the appendix itself. That if that portion which has become inflamed or threatens perforation has time to attach itself to deep portions of the anterior wall of the abdomen or pelvis, that the patient then stands a far better chance to have an abscess develop extra-peritoneal. One thing we have to comfort us in all these cases is, that the profession at large are understanding them much better and clearer, that the diagnosis is made earlier, that the use of cathartics are employed with a greater degree of good judgment, and that the element of rest and the use of anodynes assist very materially in the treatment of cases. That we have much more, all things being considered, to hope for in the future than has occurred in the past. We must watch carefully the early symptoms, and anticipate, if possible, a collapse, and *operate early*.

I desire to present the following case as one worthy of record, from the fact of its being a typical one of the class to which it belongs, also that a differential diagnosis was only made so late in its history as to preclude making a successful abdominal section.

*Appendicitis—Concretion composed of berry seeds and fecal matter in appendix vermiformis, with consequent ulceration, perforation, peritonitis and death—Autopsy—Remarks—Practice Dr. W. W. Craig.*

J. C. C., aged forty-two, weight 205 lbs., height five feet eight inches, complained of diarrhœa July 29th, 1887, about six p.m., and received treatment at a drug store. Later, further movements from bowels were checked, patient felt nauseated and restless but no pain or vomiting. Development farther on showed that he had eaten heartily of red raspberries at each meal for several days previous to attack, and in first discharges, as well as in watery alvine dejections coming as a result of the enemata, large numbers of seeds were found. Saturday a.m., July 30th, patient had a feeling of distress, became uneasy, but worked until four p.m., when colic pains set in in the lower abdominal regions, not localized, and immediately followed by emesis and great thirst. Stomach contents with bilious matter were

thrown up. First saw him Saturday evening, when symptoms continuing, anodynes were given, and he slept comfortably for six or seven hours. At nine a.m., 31st, temperature 101.8° F., pulse 102, vomited bilious matter with all food taken, and complained of illy-defined abdominal pains. Examination showed tenderness on pressure over abdomen, tympanites on percussion, but no localized pain or hardened mass. Diagnosis, intestinal obstruction; location and character, sub judice. Hot water enema brought away large numbers of berry seeds with little faecal matter. Symptoms continued, temperature rising, belly more prominent, patient restless, but no acute pain. Another hot water enema brought a few more seeds. Anodynes and stimulants ordered for second night. Monday a.m., August 1st, temperature same as previous evening, surface of body still warm, tenderness had disappeared with increased distension of abdominal wall. Patient restless, vomiting, and occasional attacks of singultus. Same symptoms and treatment at nine p.m. Tuesday, Aug. 2nd, ten a.m., patient weaker, breathing thoracic, about forty per minute. Consultation was held in evening with Dr. Vanderveer. Tympanites over whole of abdominal region, abdomen prominent, tenderness in right iliac fossa, mind clear, pulse rapid and feeble, temperature 103, expression anxious, extremities now cold and body covered with cold perspiration. Still vomited bilious and stercoraceous matter, ingultus. Diagnosis as before, with probable location about appendix vermiformis and beginning of caecum. Ordered tincture of digitalis and whisky every two hours, alternating with champagne and "matzoon," with sufficient morphine, hypodermically, to keep patient quiet. Saw patient again Wednesday, eight a.m., with Dr. Vanderveer; all symptoms exaggerated. Consultation with Drs. Vandereer and Ward at nine p.m., condition becoming rapidly worse. Abdominal section was advised as a last resort, but patient died at eleven p.m., before preparations for operation were completed.

Post-mortem examination Thursday, August 4th, twenty-four hours after death, Drs. Vanderveer, Ward, Craig, Marselius, J. D. Craig, and student Smith being present. Abdomen greatly distended, skin being drawn nearly as tight as a

drum head, somewhat prominent about umbilicus and flattened in region of ascending and descending colon. Heart, lungs, liver, spleen and kidneys normal. Small intestines very much distended with gas. In the right iliac fossa several layers of small intestines, somewhat distended with gas, together with adjacent portions of caecum and ascending colon were matted together and covered with a large layer of recently effused fibrinous exudation to the depth of about one-sixteenth of an inch, with other evidences of acute localized peritonitis. Effused serum was also found in the abdominal cavity. A recently formed ulcer, through which some of the contents of the bowel had escaped into the peritoneal cavity, was found in the appendix vermiformis, one-half inch from its point of junction with caecum, also, a slough of the caecum at the point of the attachment of the appendix. A concretion found to be composed of berry seeds closely packed together and held in place by mucous, and faecal material, and stained brown by bile pigment, was removed. This concretion fully explained case, and justified treatment.

(Had an operation been done in this case, it would have necessitated the making of a section of the caecum, a procedure that would have been quite impracticable, and the best result we could have hoped for would have been an artificial anus. With our present knowledge of intestinal anastomosis as has been practiced by Drs. Senn and Abbe, I would in a similar case make use of their method, attaching the ilium to the caecum higher up, then invaginating and closing the latter at its lower end. In all our cases of abdominal section, I cannot conceive of a case that presents a greater number of points of embarrassment than this one; thick fat abdominal walls, great distension of small intestines, and a weak heart. Yet these cases die if left only to medical treatment. These are the cases where the physician and surgeon should join their united skilful efforts early in diagnosis and treatment.)

ALREADY arrangements are being made by Profs. Virchow, Bergmann, and Waldeyer, for the International Medical Congress which is to be held in Berlin next year. Probably it will open on the 6th of August.



## AN IMPROVED FORM OF RELAXATION SUTURE.

BY DR. N. A. POWELL, OF TORONTO.

Lecturer on Surgical Appliances and Assistant Demonstrator of Anatomy, Trinity Medical College.

Sir Joseph Lister, in a paper published in 1875 upon "Recent Improvements in the details of Antiseptic Surgery," called attention to the utility of what he termed button sutures. His original device took the form of oval plates of sheet lead 1-20 of an inch in thickness, and each having a central perforation for the passage of a silver wire. Introducing the wire through the deeper parts of a wound and at a distance of from one to two inches from its margins, a button was strung upon each of its ends, pushed down upon the skin and secured from slipping by winding the wire around the shorter diameter of the button. Plates like this very fairly take the place of the tips of a finger and thumb by which the sides of a wound have been supported, and they take all strain from the stitches

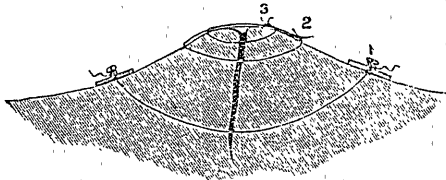


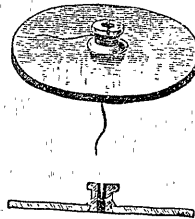
Diagram showing course through a wound of (1) a relaxation suture, (2) an approximation suture, (3) a coaptation suture.

which accurately close it. Although improvements have been from time to time suggested by many surgeons as regards the material out of which such plates may be constructed, their adaptation for sutures other than silver wire and the devices by which these sutures are to be secured, the principle upon which their use is based remains essentially unchanged. They perfectly replace the obsolete quilled suture, which if drawn tightly enough to be of service was apt to act as a dam to the circulation, even endangering the vitality of flaps. A great many surgeons have yet, I fear, to learn how much better they are than long strips of adhesive plaster, which do little more than slide together the skin margins, allowing cavities to form within the wound for the collection of serum and the products of inflammation. Probably the best known form of suture plate is

that subsequently devised by Sir Joseph Lister. These are illustrated in most works on antiseptic surgery, are oval in shape, cut from sheet lead and have lateral portions turned up at an angle, so that the wire can be belayed in a figure of 8 around them.

Next to these come the MacEwen buttons, oval plates perforated with two holes close to the centre. In using them a doubled suture is passed, its ends threaded through buttons and then tied together, using a reef knot at one side of the wound and running reef at the other, so that slack can be taken up or undue pressure relaxed at any time without disturbing the healing process. Dr. Ogilvie Will has described a plate made of silver, with two projecting posts around which the wire is to be wound, but so far as I can learn they have not been much used on this side of the Atlantic.

To Drs. Getchel, of Philadelphia, and Geolet, of New York, we are indebted for plates which have nipple-like projections, intended to be compressed just as perforated shot are. For certain special uses they are admirable, but in general surgery there are two strong objections to the clamped-shot fastening. Firstly, it is liable to slip, and secondly, when once adjusted it cannot subsequently be tightened or relaxed. Sheet lead in the making of any of these appliances is objectionable, since it blackens the skin and needs to be under-padded with gauze. A far better material is the "air chamber" or "suction" lead, which can be obtained from any dentist. Being roll-plated with pure tin on each side, it will not discolor, and the 18 gauge thickness is easily cut to any shape desired.



The plates which I have the honor of presenting here are made of pure block tin. The base should be from 18 to 20 Stubbs wire-gauge thick, of oval form, and in size about  $\frac{5}{8} \times \frac{7}{8}$  in. A central post arises from the base to a height of 3-16 in. It has a shoulder where it joins the plate, is perforated with a round hole from the

\* Read before the Ontario Medical Association.

under surface of the plate to its own apex, and is cross-cut down to the shoulder in the short axis of the plate.

In using these appliances, the wire or thread is passed through from below, bent into the slot, wound two or more times around the post, and then carried across the post through the slot again. This can be done more rapidly than it can be described, and does not need the guidance of the eye.

They are equally well-adapted for use with silk-worm or catgut, silk or wire. They can be sterilized by boiling, and used indefinitely. They can be bent to fit irregular surfaces. They can be instantly fastened, unfastened, tightened or relaxed, and cannot slip or break. Finally, they are inexpensive, costing here \$1.25 per dozen. Mr. J. J. Hall, a jeweler with P. W. Ellis & Co., of Toronto, made my models and can supply the buttons. J. Stevens & Son, of Toronto, and J. Reynder & Co., of New York, will also keep them in stock.

After I had been using this device for some time, I met with a description in a western journal of a hard rubber button with fastening essentially like the one above described. The article appeared in 1882, and was signed H. H. Clark. After considerable correspondence, I have failed to find either the man or the button but here cheerfully accord to Mr. Clark whatever credit is due for having suggested the fastening which I innocently supposed I had been the first to use.

## Selections.

### THE TREATMENT OF ABDOMINAL ANEURISM.

—A novel procedure has just been attempted by Mr. Keetley in a case of large abdominal aneurism which is under his care at the West London Hospital. The tumor, which mainly occupies the epigastric region, and projects prominently forwards, has thrust the liver into the right lumbar region, and Mr. Keetley, in order to control if possible the pulsation in the aneurism, devised and carried out the following procedure. An incision was made below the ribs on the right side, and the peritoneal cavity opened; a specially constructed instrument with a handle, a curved stem, and a thickened extremity was

then passed into the wound and through the foramen of Winslow, between the liver and the tumor, and made to compress the aorta above the origin of the cœliac axis. Upon the first occasion the stem was of copper, and unfortunately bent under the pressure to which it was subjected. The operation was repeated with an instrument constructed of steel. It was found that the object aimed at could be obtained, but not entirely. Although the aorta was by this means partially compressed, it was not possible to control the circulation sufficiently justifiable to continue the attempt. However, Mr. Keetley is satisfied with the feasibility and the ultimate utility of the procedure, and its non-success in the present instance is doubtless largely due to the immense size of the tumor preventing even the fingers from reaching the aorta above the disease, and disturbing the normal relations of the parts.—*Medical Press and Circular.*

MIXED ANÆSTHESIA.—The method of producing insensibility by the conjoint administration of narcotics and anæsthetics has been before the profession for a quarter of a century, but has never come into general use. It was originally recommended by Bernard, who found by experiments on animals, and his conclusions were subsequently confirmed on man, that when the administration of the narcotic preceded by some little time that of the anæsthetic, the amount of the anæsthetic required is less, that there is far less excitement attending the inhalation, and that there is less vomiting afterward. The narcotic, moreover, antagonizes the paralyzing action of the anæsthetic on the cardiac and respiratory centres and prevents subsequent shock.

In this country the mixed method was advocated by Dr. J. C. Reeve as early as 1876 (*American Journal of the Medical Sciences*), but it has never, neither here nor abroad, received the appreciation or attracted the attention it deserves. Mr. Ernest Hart, in some recent notes on "Medical Paris" (*British Med. Jour.*, May 11, 1889), states that for the last ten years the method has been used at the Sorbonne in anæsthetizing animals for experimentation, and without a single accident, whereas with the ordinary method the mortality from chloroform

was one animal in three, and sometimes even greater.

The mixed method, as generally used in the human being, consists in injecting hypodermically from  $\frac{1}{6}$  to 2.5 gr. of morphia and 1-192 to 1-80 gr. of atropia from fifteen to twenty-five minutes before the inhalation of the anæsthetic, just long enough for the effect of the narcotic to be fully felt by the nervous centres. In the production of artificial anæsthesia, and especially in cases of prolonged and severe operations, mixed anæsthesia appears to be most important for the comfort and safety of the patient, and is deserving of more general use.—*Med. News.*

POULET ON THE TREATMENT OF PURPURA HÆMORRHAGICA BY NITRATE OF SILVER.—The author relates two characteristic and severe cases of purpura hæmorrhagica which promptly recovered when nitrate of silver was given internally. The first was that of a boy, twelve years of age, with a family history of tuberculosis and albuminuria, who, eight days previously, had been attacked by a petechial eruption, culminating in profuse epistaxis, which rapidly reduced him to an exsanguineous condition. He ordered perchloride of iron and the acid infusion of roses, and as this did not check the hæmorrhagic tendency he followed it up on the following day by plugging the nostrils and giving subcutaneous injections of ergotine. The bleeding, however, continued as before, and the condition of the patient became critical. He then resorted to nitrate of silver, in doses of one-fifth of a grain, twice a day, incorporated with bread-crumbs and given after food. The next day a manifest improvement had taken place, and in the course of three or four days the drug could be discontinued. The lad gradually recovered, but the loss of blood had been so abundant that it was years before he ceased to be delicate and anæmic. The second case was that of a young woman of twenty. Eight days after her last menstrual period purpuric spots made their appearance, with frequent attacks of bleeding from the nose, stomach, and bowels. She was fairly well nourished, and lived in the open country. Her previous health had been good, but for some weeks past she had experienced a feeling of lassitude with loss of appetite. The eruption was most marked at

first on the lower extremities, but soon became general. Various anti-hæmorrhagic remedies were tried, but without any marked effect on the bleeding. Slight albuminuria. Legs a little puffy. Under these circumstances he ordered one-eighth of a grain of nitrate of silver in a pill three times a day. The effect was so marked that within four days sight and hearing were restored, and the purpural patches began to fade. The hæmorrhages ceased after the first day of the exhibition of the nitrate. Twelve pills in all were taken, and they sufficed to effect a cure.—*London Medical Recorder.*

VERHOOGEN ON SULPHONAL.—The author insists on the excellent results obtained with sulphonal in the treatment of certain cases of insomnia in which opiates were formerly contra-indicated. In doses of fifteen grains, administered *per rectum*, sleep invariably supervened within twenty minutes, and lasted six hours or thereabouts. The patients complained of no disagreeable after-effects, and improved in condition. Occasionally it was found necessary to repeat the dose during the night. He mentions the case of a patient who was given the drug in this way for six weeks consecutively. The injection was usually given at 9.30 p.m. On several occasions she fell asleep before the time arrived for the injection, and this was consequently dispensed with, but it was always easy to see from her fatigued and comfortless face in the morning that the same amount of repose had not been experienced as with the drug. He asserts that no contra-indication exists to the use of sulphonal. Cardiac and arthritic cases, renal and dyspeptic cases, are all amenable to its influence under all circumstances, and neither intolerance or tolerance are to be apprehended. The usual dose is a gramme ( $15\frac{1}{2}$  grains), and this always proved sufficient to induce sleep. It is not easily taken by the mouth on account of its relative insolubility, and it is best given suspended in tepid water *per rectum*, though it is rarely possible to secure that all the drug shall find its way into the gut. Some difference has been noted in the effects obtained from the drug, which, it is suggested, may be due to variations in the quality.—*London Medical Recorder.*

THE  
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS  
OF THE MEDICAL SCIENCES.

*Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.*

*When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY (Limited), 58 Bay Street.*

TORONTO, JULY 16, 1889.

SUTURES AND LIGATURES WITHIN  
THE ABDOMEN.

The choice of material for sutures and ligatures for the abdominal walls and intra-peritoneal structures is a matter of considerable importance, and one upon which the opinions of leading surgeons in the world are divided. Numerous experiments have been made from time to time, and their results have shown that four or five kinds of material can be used with safety, if certain precautions are used. Practical surgeons have for years used these different varieties with various degrees of success. Some recent experiments reported by Dr. Thompson in the *Centralblatt für Gynaekologi*, and quoted in the *British Medical Journal*, are interesting in this connection. He rejected silver as an unabsorbable material, and used carbolized catgut, chromic gut, silkworm gut, and silk. All were sterilized, and made as nearly as possible of equal thickness. With a view to the use of sutures in cæsarian section, rabbits, cats, and bitches, that had recently given birth to young, were chosen. A short incision was made in each uterine crown and united again by a suture, different kinds being used on opposite sides in each case. The omentum and abdominal wound were also sutured. At different intervals the animals were killed and the sutures inspected. We are told that carbolized gut was completely absorbed in seventeen days, little but the knots remaining in ten days. Chromic gut was unabsorbed in sixty-four days. Silk threads were loosened but intact in fourteen days, and almost entirely absorbed in sixty-four

days. From these results Dr. Thompson concludes that in abdominal surgery silk is the best and safest material for suture, since it can be thoroughly sterilized, and is slowly but surely absorbed. Chromic gut and silkworm gut are bad because unabsorbable. Carbolized catgut is unsafe because it is too speedily absorbed.

A NEW ELIXIR OF LIFE.

The celebrated scientist, M. Brown-Séguard, has recently been making some marvellous, if not startling, discoveries. He has been making experiments (as reported in *Progrès Médical*) with a view to ascertain the effects produced on the system by the action of the testicles on the blood circulating through them. We find that he has been studying this subject for twenty years, and during that time has done a fair amount of experimenting. In 1875 he found in one instance that grafts containing testicular matter had a wonderful effect on an old and broken-down dog, inasmuch as it endowed him anew with the friskiness of youth. Latterly, M. Brown-Séguard has been experimenting on himself by using subcutaneous injections of blood from the spermatic veins of a young animal mixed with the juice obtained by crushing its testicles with a little water. He is said to be verging on fourscore, and therefore the results of such experiments will prove of great interest.

He reports the following effects: His muscular strength has returned in great measure; that torment of the aged, intestinal atony, has disappeared, so that defecation has become normal again; the bladder has regained its contractility, as shown by increase of force in the stream of urine; mental exertion has become easy again; and finally there are many other manifestations of return to youthful vigor. When these remarkable *facts* were reported to the Paris Société de Biologie, some of the members were unkind enough to throw doubts on the conclusions and attribute the results to imagination. What the majority thought, we know not; but it has been suggested that, if the great scientist, once old and enfeebled, but now rejuvenated and frisky as a kitten, is correct, vast possibilities may be huddled together in the testicles, and possibly also in the ovaries. If it happen that testicle juice or ovary cutlets

will restore youthful vigor and friskiness, what a shaking up there will be of the dry bones of the aged and feeble! M. Brown-Séguard will not have lived in vain, his elixir will be the most popular of modern nostrums. Great is science, and truly wonderful are her discoveries. In the meantime there is likely to be a large and immediate demand for young testicles, and small boys and dog pups had better not wander far from their protectors.

#### NOTES.

NEW YORK POLYCLINIC.—D. H. C. Coe has been elected to the professorship made vacant by the death of Prof. James B. Hunter.

A RUSSIAN physician has employed five drops of creolin to the quart of water for syringing the ear, and has found that in this strength it does not irritate or prove in any way undesirable.

*The Polyclinic* has joined the *Philadelphia Medical Times*, *The Medical Register*, and *The Dietetic Gazette*. This quartet will be known for the future under the title of *The Times and Register*.

HUCHARD says that calomel given to produce diuresis (in doses of 4 grains four times a day for two days) is useless in cardiac disease complicated with cirrhosis of the liver, and it is positively hurtful in renal disease or heart disease associated with albuminuria.

VIBRATION IN CYCLING.—Dr. B. W. Richardson regards the bicycle, as at present constructed, with disfavor, because it subjects the rider to a continuous succession of spinal shocks, the effect of which is to produce a weariness of body and a nerve prostration which may induce serious results.

AFTER PAINS. — A very obstinate case of after pains is reported by Loviot which resisted opium but yielded to chloroform inhalation continued for nine hours. A rather risky practice in view of the recent experiments which have clearly demonstrated the fatty tissue change which takes place after even four hours of chloroform administration.

MEDICAL COUNCIL ELECTIONS.—The names of five Toronto physicians are mentioned as candidates for the Midland and York Division, namely, Drs. J. H. Burns, A. J. Johnson, W. Britton, H. T. Machell, and W. H. B. Aikins. Two of the candidates are already in active canvass, although the election does not take place until the month of March.

In a letter which has been received from Dr. Willard of the Vermont "Nervous Establishment and Rest Cure," he says: "I have been meeting with marked success, and at the present time nearly all my rooms are either occupied or engaged. How much of this is due to my advertisement in your excellent journal of course I do not know, but I do know that I receive frequent letters of application and enquiry from the vicinity of Toronto."

A CLAUSE in one of the advertisements of the Davis & Lawrence Company, found in this issue, will be of interest to our readers. It will be noticed that the Company will give quotations for compressing *special formulæ* of lozenges, triturates, hypodermics, and pills in quantities, and also for sugar-coating and for special formulæ for elixirs, syrups, fluid extracts, etc. They will send price lists and free samples to the address of any physician on application. But if liquid preparations are required, they must be sent by express at the expense of the applicant.

ON CHURCH-GOING.—A Dakota doctor, in a speech to young graduates, gives them some excellent and practical advice (*N. W. Lancet*), but places the duty of church attendance upon a singular basis, which savors more of the main chance than of the religion of self-respect. This is what he has to say about it: "I went to church and Sunday School, and if any of you young M.D.s do not attend S. S. you begin, as it will help you to a good class of patients, besides its grave duty as a gentleman and a man of education. I have a class of young misses, and am sure they help me to as many patients as any of my friends, besides you had better be at church than hanging around the streets or saloons."

THE Vermont Microscopical Association has just announced that a prize of \$250, given by the Wells & Richardson Co., the well-known chemists, will be paid to the first discoverer of a new disease germ. The wonderful discovery by Prof. Koch of the cholera germ, as the cause of cholera, stimulated great research throughout the world, and it is believed that this liberal prize, offered by a house of such standing, will greatly assist in the detection of micro-organisms. All who are interested in the subject and the conditions of this prize, should write to C. Smith Boynton, M.D., Secretary of the Association, Burlington, Vt.

AMERICAN MEDICAL ASSOCIATION.—Officers for ensuing year :

President—E. M. Moore, of Rochester, N.Y.

Vice-Presidents—J. W. Jackson, of Missouri ; W. W. Kemble, of Minnesota ; J. H. Warren, of Massachusetts ; and T. B. Evans, of Maryland.

Permanent Secretary—W. B. Atkinson, of Philadelphia.

Treasurer—R. J. Dungleison, of Philadelphia.

Librarian—C. H. A. Kleinschmidt, of Washington, D.C.

Judicial Council—N. S. Kennedy, of Chicago ; J. H. Brown, of Kentucky ; W. Brodie, of Detroit ; R. C. Moore, of Nebraska ; Gillespie, of Tennessee ; T. A. Forster, of Maine ; J. B. S. Holmes, of Georgia.

Place of next meeting, Nashville, May, 1890.

Sir James Grant, of Ottawa, was present at the Newport meeting, and in his usual eloquent manner addressed the Association.

UNPLEASANT EFFECTS OF SULPHONAL.—Dr. J. P. C. Griffith clearly states (*Therapeutic Gazette*) the chief disadvantages to the use of this popularized drug as follows : 1. Its hypnotic action usually develops very slowly. 2. This action is very liable to be prolonged throughout a greater or less part of the following day. 3. It is difficult to determine the dose which may be given with effect and with comfort in each individual case, and this dose may vary at different times in the same case. 4. The drug is liable to produce unpleasant secondary effects, which may even replace the primary hypnotic action. Chief

among these are mental excitement, nausea, vomiting, dizziness, headache, languor, exhaustion, depression, and a staggering gait. These symptoms may appear either after large or after quite small doses. 5. It very often fails to exert any hypnotic action, either in any dose whatever, or in any amount which can be given with comfort to the patient.

## Meeting of Medical Societies.

### ANNUAL MEETING OF BATHURST AND RIDEAU MEDICAL ASSOCIATION.

The fifteenth annual meeting of the Bathurst and Rideau Medical Association was held in the Masonic Hall, Arnprior, on Wednesday, July 3rd, the following gentlemen being present : Dr. J. G. Cranston, President ; Dr. R. W. Powell, of Ottawa, Vice-president ; Dr. H. B. Small, of Ottawa, Secretary ; Drs. Burns, Lynch, and Allan, of Almonte ; Dr. Dickson, of Pembroke ; Dr. Graham, of Front Westmeath ; Dr. McIntosh, of Pakenham ; Dr. Rogers, of Ottawa ; McFarlane, of Ashton ; Drs. Mann, McCormick, and McDonald, of Renfrew ; and Drs. Armstrong and Ward, of Arnprior.

The President, Dr. J. G. Cranston, took the chair, and after extending a cordial welcome to the visiting physicians on behalf of himself and medical *confrères* of Arnprior, delivered an able address.

A number of valuable papers were read, and cases in practice cited, by Drs. Armstrong, Powell, Horsey, Dickson, and others.

A resolution was adopted authorizing the affiliation of the Association with the Ontario Medical Association.

A vote of thanks was tendered to Dr. Hill, of Ottawa, the esteemed treasurer of the Association, who was unable to attend this meeting.

The election of officers resulted as follows: President, Dr. J. G. Cranston, Arnprior ; Vice-presidents, Dr. R. W. Powell, of Ottawa, and Dr. Burns, of Almonte ; Secretary, Dr. H. B. Small, of Ottawa ; Treasurer, Dr. Hill, of Ottawa ; Executive Committee, Drs. Horsey, Rogers and Sir James Grant, for the City of Ottawa, and Drs. Dickson, Lynch, Armstrong, Mann, Allan, and Grant, for the rural districts.

It was decided to hold the next meeting of the Association in the City of Ottawa, in the month of January, 1890.

### Therapeutic Notes.

**IRON FOR CHILDREN.**—Although the value of iron tonics for children is well recognized, yet the usual formulæ in which they are prescribed are most unpleasant and difficult to administer. The following are quoted from the *Revue Gén. de Clin. et de Thér.*, May 9, 1889, and will be found both pleasant to take and effective :

1. Effervescent ferruginated lemonade. The two mixtures are added to each other at the moment of drinking :

#### Mixture A.

R—Citrate of Iron, gr. ix.  
Citric acid, gr. xij.  
Water, f̄ij. M.

#### Mixture B.

Bicarbonate of potash, gr. xij.  
Syrup of Lemon, ʒijss.  
Water, f̄ʒjss. M.

The above is sufficient for two doses.

2. Pills of pepsin and iron. Tanner prescribes two of the following pills for children three years of age :

R—Reduced iron, 19 grains.  
Phosphate of zinc, 9 “  
Pepsin, 19 “  
Glycerine, q.s.

Make into twenty pills.

3. The following is also always easily administered and greatly liked by the little ones :

R—Hydrated peroxide of iron, ʒj.  
Confection of orange, } aa ʒv. M.  
Confection of opium, }

Dose, from one-half to one coffeespoonful, according to age. The above is highly recommended by Dr. Ellis.—*Med. News.*

*Injection for Cystitis.* Albert.

R Aluminis,  
Zinci Sulphatis,  
Ac. Carbolicæ, aa. gr. xx,  
Aquæ distill, ʒj. M.

Sig. : Add this solution to 8 or 9 ounces of warm water, and inject the bladder daily in a case of chronic cystitis, using a double-current catheter.—*L'Union Medicale.*

*For Acne of the Face.* E. Besnier.

R Saponis viridis,  
Sulphuris precip.,  
Adipis aa. ʒss.,  
M. Ft. Unguentum.

Sig. : This ointment is to be well rubbed into the face in the evening, and allowed to remain on all night. Next morning wash it off with warm water. In the evening rub it on again, and so on for four or five days. If the irritation of the skin is too great, apply soothing poultices for forty-eight hours, then return to the use of the ointment. To complete the treatment apply to the skin with a camel's hair-brush the following lotion :

R Sulphuris precip.,  
Glycerini,  
Sp. Camphoræ,  
Aquæ Rosæ ; partes æquales. M.

Sig. : To be used at night. In the morning wash off with warm water.—*L'Union Medicale.*

*For Whooping Cough.* Vetlesen.

R Ext. Cannabis Indicæ, gr. xv.,  
Ext. Belladonnæ, gr. viiiss.  
Alcoholis absol.  
Glycerini, aa. gr. lxxv. M.

Sig. : To a child of 8 mos. to 1 yr. give 4 to 5 drops ; 1 to 2 yrs., 5 to 8 drops ; 2 to 4 yrs., 8 to 10 drops ; 4 to 8 yrs., 10 to 13 drops ; 8 to 12 yrs., 12 to 15 drops ; over 12 yrs. and to adults, 15 to 20 drops. The mixture is to be given only at night, or night and morning.—*L'Union Medicale.*

*Vinum Creosoti Compositum.* Frankel.

R Creosoti, ʒij,  
Tr. Gentianæ, ʒv.,  
Alcoholis, ʒiv.,  
Vini. Xerici, ad. Oj. M.

Sig. : Give two or three tablespoonfuls daily to a phthisical patient when the temperature does not exceed 100° F., and when the bacilli are not yet very numerous.—*L'Union Medicale.*

### Books and Pamphlets Received.

*The Wrong of Craniotomy upon the living fœtus.*  
By Samuel C. Busey, M.D., Washington.  
Reprinted from *American Journal of Obstetrics.*

*Detroit College of Medicine. Announcement for Session 1889-90.*

*Clark University, Worcester, Mass. First official announcement, May 23rd, 1889.*

*Fees in Hospitals.* By Henry J. Bigelow. From the Boston *Medical and Surgical Jour.*

*Sixty-fifth Annual Announcement of the Jefferson Medical College of Philadelphia, Session of 1889-90.*

*Annual Announcement of the Medical Department of the Western University, Session 1889-90.* London, Ont.

*Papers read before the Medico-Legal Society of New York from its organization, first series.* New York: *The Medico-Legal Journal Association*, publishers, 57 Broadway.

*Secondary Mixed Infection in some of the Acute Infectious Diseases of Children.* By Bayard Holmes, M.D., Chicago. Reprinted from the *North American Practitioner.*

*A Manual of Instruction for giving Swedish Movement and Massage Treatment.* By Prof. Hartrig Nissen. Philadelphia and London: F. A. Davis, publisher, 1889.

*Wood's Medical and Surgical Monographs.* Volume 2, No. 3. June, 1880. Contents: General Orthopedics, including Surgical Operations; by Dr. August Schreiber.

*A Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment.* By Robert W. Taylor, A.M., M.D. Pats. v. and vi. Philadelphia: Lea Brothers & Co. 1889.

*Æquanimitas: Valedictory Remarks to the Graduates in Medicine of the University of Pennsylvania.* By Wm. Osler, M.D., Professor of Medicine, Johns Hopkins University, Baltimore.

*American Public Health Association. Preliminary Announcement of the Sixteenth Annual Meeting to be held at Brooklyn, N.Y., Tuesday, Wednesday, Thursday and Friday, October 22, 23, 24, 25, 1889.*

*The Relation of the Abdominal Surgeon to the Obstetrician and Gynecologist.* By A. Vander-veer, M.D., of Albany, N.Y. Reprinted from "Transactions of American Association of Obstetricians and Gynecologists."

*Synopsis of Human Anatomy.* By James K. Young, M.D. Philadelphia and London: F. A. Davis, publisher, 1889.

*Double Ovariectomy During Pregnancy; Subsequent Delivery at Term.* By Wm. Warren Polter, M.D., Buffalo. Reprinted from "Transactions of American Association of Obstetricians and Gynecologists."

*The Physiology of the Domestic Animals.* A text book for veterinary and medical students and practitioners. By Robert Meade Smith, A.M., M.D. Over 400 illustrations. Philadelphia and London: F. A. Davis, publisher, 1889.

*The Rational Method of Preventing Yellow Fever on the South Atlantic Coast.* By J. C. Lettardy, M.D., Savannah, Ga. Read before the Medical Association of Georgia at Macon, Ga., April 18th, 1889.

*The Influence of the Nervous System on Cell Life (Metabolism).* By J. Wesley Mills, M.A., M.D., Professor of Physiology, McGill University, Montreal. Reprinted from *N. Y. Medical Journal.* Also by Dr. Mills: Valedictory Address to the Graduates in Medicine of McGill University. Reprinted from *Montreal Medical Journal.*

*The Therapeutic Value of Systematic Passive Respiratory Movements.*

*A Case of Potts' Disease with an unusual deformity.*

*The Mechanical Treatment of Senile Coxitis.*

*The Prevention and Treatment of Crural Adduction.* All by Henry Ling Taylor, M.D., of New York City. (Reprints.)

*Wood's Medical and Surgical Monographs.* Volume 3, No. 1. July, 1889. Contents: Cancer and Cancerous Diseases; by Sir Spencer Wells. Cardiac Dyspnoea and Cardiac Asthma; by Dr. S. Von Basch. Influence of Menstruation and of the Pathological Conditions of the Uterus on Cutaneous Diseases; by Dr. L. Grellety. Tension as met with in Surgical Practice, Inflammation of Bone, Cranial and Intra-cranial Injuries; by T. Bryant, F.R.C.S. Antisepsis, and its Relation to Bacteriology; by Dr. J. Neudorfer.

## Book Notices.

*Electro-Therapeutics or Electricity in its Relation to Medicine and Surgery.* By W. H. King, M.D. New York: A. L. Chatterton & Co., 98 Maiden Lane.



A very fair review of the subject in a well-bound and clearly-printed volume of one hundred and fifty pages.

*Diabetes, its Cause and Permanent Cure, from the standpoint of experience and scientific investigation.* By Emil Schnée, M.D., Consulting Physician at Carlsbad. Translated from the German by R. L. Tafel, M.A., Ph.D. Publisher: H. K. Lewis, Gower St., London.

In this work Dr. Schnée *hopes* it is demonstrated to the satisfaction of everyone that diabetes is curable. In 1881 Dr. Schnée *discovered the real cause* of diabetes; it is never found in anyone who is not hereditarily predisposed to it. "Herein lies the great mystery, never before discovered by anyone, of the cause of diabetes; and here, according to my conviction, hereditary lues on the part of one of the parents, grandparents, or great-grandparents of the patient, has to be taken into consideration."

*Strathspeffer Spa, its Climate and Waters, with Observations historical, medical, and general descriptive of the vicinity.* By F. Fox, M.D., London. London: H. K. Lewis, 136 Gower street, W.C., 1889.

This little volume is addressed by the author to medical men and visitors at the Spa, which is situated in the Highlands of Scotland, nearly twenty miles from Inverness.

*Sixteenth Annual Report of the Secretary of the State Board of Health of the State of Michigan, for the year ending June 30, 1888.* Lansing: 1889.

The first part of the report consists of a compilation of meteorological conditions, and a contribution to the study of the causes of sickness, based on weekly reports of sickness by physicians in the State.

Probably the most important article in the report is a paper by Dr. Baker, in which reports of sickness and meteorological conditions are so grouped as to show the relation of certain meteorological conditions to diseases of the lungs and air passages.

*Elements of Histology.* By E. Klein, M.D., F.R.S. New and enlarged edition. Lea Brothers & Co., Publishers, Philadelphia.

In this edition a number of changes are found, these being necessitated by the constant progress that is being made in histology. The

paragraph on the division of the nucleus is now in accord with recent exact observations; as are also those treating of the termination of nerves in the epithelium and epidermis; and the termination of the nerve fibres in striped muscular tissue. In the chapter on the structure of striped muscular tissue, Rollett's recently published views have been adopted. A few new illustrations have been added. This work deservedly occupies a first place as a text book in histology.

*A Treatise on Surgery, its Principles and Practice.* By T. Holmes, M.A., Cantab., Consulting Surgeon to St. George's Hospital, etc. Fifth edition, edited by T. Pickering Pick, Surgeon to and Lecturer on Surgery at St. George's Hospital, etc. Philadelphia: Lea Brothers & Co.

This work is highly prized in various parts of the world, but especially in England. After the first edition appeared there was some feeling of disappointment expressed in certain quarters because of alleged incompleteness in the descriptions of a few subjects. There was probably some reasons for such allegations at that time, but we believe in succeeding editions all such causes of complaint have been removed, and we have in this last one of the most excellent text-books on surgery that can be found. We believe that much credit is due the editor, Mr. Pickering Pick, for the merits of the book as it is now presented to us. He has omitted entirely the chapter on the Eye in this edition, and such omission will probably meet with general approval, in consideration of the fact that space is limited and it is difficult to find chapters which could be removed to give place to one on diseases of the Eye without seriously impairing the usefulness of the book. As compared with former editions, the subjects most considered and altered are: Inflammation, Wounds, Tumors, Diseases of Bones and Joints, Abdominal Surgery, and Diseases of the Breast.

*Extra-Uterine Pregnancy.* 1. Its Pathology, by Franklin Townsend, M.D. 2. Its Diagnosis, by Joseph Price, M.D. 3. Its Treatment, by E. E. Montgomery, M.D. 4. Its Observations—Clinical, Pathological and Surgical, by W. H. Wathen, M.D. 5. A Critique of its Management, by J. M. Baldy, M.D. 6. The Technique of the Operation. By John B

Deaver, M.D. 7. Its Management when the Fœtus Survives Tubal Rupture, and goes on to the Period of Viability, by L. S. McMurry, M.D. 8. Its Treatment (concluded), by A. Vander Veer, M.D.

A Discussion. From the Transactions of the American Association of Obstetricians and Gynecologists, 1888. Together with an Editorial Review of Tait's "Ectopic Pregnancy and Pelvic Hematocele," from the *Buffalo Medical and Surgical Journal*. Philadelphia: Wm. J. Dornan, 1889. Price 75 cents.

*A Guide to Therapeutics and Materia Medica.* By Robert Farquharson, M.D., F.R.C.P., London. Fourth American from the fourth English edition, enlarged so as to include all preparations official in the U.S. Pharmacopœia. By Frank Woodbury, M.D. Philadelphia: Lea Brothers & Co., 1889.

The American editor has found it necessary to make very many additions to its former edition owing to the rapid advances made in therapeutics. A number of non-official but important new drugs are carefully considered, and the formulæ of the American Pharmaceutical Association has been added. All the special features which have characterized this valuable work in its former editions have been retained. There is also a chapter on the treatment of poisoning, and a brief notice of the action of ptomaines.

*Transactions of the College of Physicians of Philadelphia.* Third series, volume X. Philadelphia: Printed for the College, 1888.

This volume contains biographical sketches of Drs. Caspar Morris and N. A. Randolph. The annual address by the president, Dr. S. Weir Mitchell, together with many important monographs, among which may be mentioned "Medical Matters in China," by Dr. H. W. Boone; "Membranous Enteritis," by Dr. W. A. Edwards; "Treatment of Whooping-cough with Antipyrin" and "Friedrich's Ataxia," by Dr. J. P. C. Griffith; "Pneumonia," by Dr. H. Hartshorne; "Friedrich's Ataxia," by Dr. W. Osler; "The Walk and some of its phases in Disease," by Dr. F. X. Dercum; "Treatment of Syphilis," by Dr. J. C. Wilson; "Tubercular Peritonitis," by Dr. John H. Musser.

*Woods' Medical and Surgical Monographs*, consisting of original treatises and of complete

reproductions in English of Books and Monographs selected from the latest literature of foreign countries. Published monthly. Price, \$10 a year; single copies \$1. Volume II., No. 2. Contents.—On the Preventative Treatment of Calculous Disease and the use of Solvent Remedies, by Sir Henry Thompson, F.R.C.S., M.B. Lond. Sprains, their Consequences and Treatment, C. W. Mansell Moullin, M.A., M.D. Edin.

There can be no question as to the great importance of both calculous disease and sprains, and there can be no doubt as to the ability of the distinguished authors to treat their respective subjects. No words of commendation from us are necessary. If they were we would gladly give them, as both monographs are very interesting and instructive.

Volume I., No. 3. Contents: Neurasthenia and its Treatment, by Dr. H. Von Ziemssen, Director of the Medical Clinic, Munich. Antipyresis and Antipyretic Methods of Treatment, also by Dr. H. Von Ziemssen. The Tongue as an Indication of Disease, by Dr. W. H. Dickinson, Senior Physician and Lecturer in Medicine at St. George's Hospital, London. On the Treatment of Cystic Goitre, by T. M. Hovell, F.R.C.S., Senior Surgeon to the Hospital for Diseases of the Throat, and Lecturer on Diseases of the Throat at the London Hospital Medical College. New Remedies from 1878 to 1888, by Dr. C. Cauquil, late Interne of the hospitals at Paris.

This list comprises a most valuable series of contributions from well known authors.

*Cyclopedia of the Diseases of Children, Medical and Surgical.* The articles will be written especially for the work by American, British and Canadian authors. Edited by John M. Keating, M.D. Volume I. Philadelphia: J. B. Lippincott Company.

The preparation of this work has been placed under the management of Mr. John M. Keating, of Philadelphia, who, as editor, states that his object has been to include not only the medicine and surgery of pædiatrics, but all the specialties tributary to it, as well as all collateral subjects of interest and importance. He also says that the work is a collection of monographs—not mere dictionary articles. Dr. Jacobi, in his introductory remarks, says that when he commenced professional life such a collection of monographs could not have been written, and thinks the whole work will contain all that is known at present on the anatomy, physiology,

pathology, and therapeutics of infancy and childhood. The first volume is divided into two parts: Part I. including general subjects such as anatomy, physiology, bacteriology, maternal impressions, nursery hygiene, infant feeding, etc.; Part II. including fevers, miasmatic diseases, embryology, and general therapeutics of children's diseases.

In looking over the list of contributors our first thought was that the work was too much split up, as is generally the case in our modern medical cyclopedia, but a perusal of the book presents to us a series of articles singularly able and interesting. They dovetail into each other in so skilful a manner as to make a thoroughly extensive treatise, and not a simple bundle of essays. Such a happy accomplishment could not have been a simple accident or coincidence. A master mind must have been at the helm. If this volume is a fair sample of the whole work, we have no hesitation in saying that the editor is giving us one of the most valuable contributions to modern medical literature. We say this with special pleasure because we are not in love with the modern encyclopediac fashion. Pediatrics has made wondrous advances in recent years, and has reached a position well worthy of its vast importance. This work clearly treats the subject in its broadest aspects, and ought to be in the hands of every general practitioner who takes an intelligent interest in the dear, helpless little ones placed under his care.

*Diseases and Injuries of the Ear: their Prevention and Cure.* By C. H. Burnett, A.M., M.D., Philadelphia. Lippincott Co., 1889.

This work has been written with the object of giving practical lessons in nursing and in the general management of cases of defective hearing. It is written throughout in plain language, free from technical terms, and therefore, while it would be useful to the general practitioner who has not given much attention to this subject, it may be read with the greatest benefit by the intelligent (non-medical) class of the community, and especially by those who have charge of the training or nursing of children. The plan of the work is in three parts, of which the first gives a simple general account of the structure and function of the ear; the second

describes the common diseases and injuries of the ear, with their prevention, hygienic management and cure, the aim here evidently being to teach the inexperienced what to avoid doing rather than what to do; and the last part is devoted to the aural hygiene of the deaf. The book comprises about 160 pages, and is nicely printed and bound.

*An Elementary Treatise on Human Anatomy.*  
By Joseph Leidy, M.D. Second edition.  
Philadelphia: J. B. Lippincott & Co. 1889.

Twenty-eight years ago the first edition of this work was issued. It has long been out of print and copies of it have been hard to obtain. The re-written second edition is a work that reflects infinite credit upon its author, who in many lines of research and in many lands has won an enduring fame. In human anatomy now-a-days it is hard to be original, but this book on every page bears the impress of its author's originality. In many respects it is like no other. While anatomical teachers will read it with interest, it may well be doubted if for the purpose of students in Canada it is well adapted. The arrangement of the work is not such as to make it convenient for use in the dissecting room. For example, the long and the short supinator are described together in the text, although reached at quite different stages of a dissection. In like manner the "terete pronator" and the "quadrate pronator," as they are called here in the attempt to render into English all Latin names of parts, follow each other in the text. While all sections of the book are thoroughly up to date, that upon cerebral anatomy is particularly to be commended. From some personal knowledge of the way in which anatomy is taught in the better class of schools across the line, we venture to predict that this work will be largely used in the United States. That our own students, with four winter and one summer sessions' attendance absolutely required of them, and with the Council's dreaded ordeals to pass, will need something more exactly in line with the instruction they receive here, and will not for this work give up Grey, Ellis, Heath, Holden, Quain and the rest, we are equally certain. The illustrations in the book are admirably clear, while the type, presswork, and binding are all that could be desired.

## Personal.

DR. A. D. HOLMES (McGill, '89) has opened an office in Detroit.

DR. BILLINGS, of Washington, is to receive the D.C.L. degree from Oxford University.

THE Pathological Society of Toronto elected Dr. R. A. Reeve to the presidency for the ensuing year.

DR. HENRY M. HURD, of Pontiac, Mich., has accepted the office of Superintendent of the Johns Hopkins Hospital.

## Miscellaneous.

IF you feel mad when some rude person runs into you in the street, how must you feel when a locomotor ataxia?—*N. Y. Commercial Advertiser*.

DR. MATTHEWS DUNCAN says that fertility is surest in its occurrence, and safest and most happy in its results, when the woman is between twenty and twenty-five and the man five years older. During these ages the dangers to the mother are at a minimum, and the production of healthy, long-lived, vigorous offspring most certain.—*American Lancet*.

It has frequently been noted that the New Englander is very cautious in his language, and that he rarely gives a direct answer to a question. A gentleman said to a friend whose family were not noted for active habits, "Was not your father's death very sudden?" Slowly drawing one hand from his pocket and pulling down his beard, the interrogated cautiously replied: "Wa-al, rather sudden for him."

NOTED CASE OF DROWNING.—It is reported that a man well under the influence of alcoholic liquor recently went into a saloon in Trenton, N.J., and called for a glass of beer, which was given him on a table at which he was seated. He was soon observed to be leaning forward upon the table as if in a sleep or stupor. "When the barkeeper tried to arouse him half an hour

later it was found that he was dead, his nose being immersed in the liquor in such a way that respiration was completely stopped." Many cases have been reported of persons having been drowned in but little depth of water, but this is the first case reported of a man drowning himself in a glass of beer.—*Journal of A. M. A.*

JOY AMONG THE CONVICTS.—The prisoners at Sing Sing are said to have sent up a shout of joy when they heard the bill permitting them to go to work had become law. For a year they have been idle, in consequence of the Yates' Bill, and sickness and lunacy have been more frequent than ever in the history of the prison. Largely through the efforts of the State Charities Aid Association the Fassit Bill has been passed, permitting the prisoners to go back to the shops. Work in the factories will be resumed in a short time, and the prisoners are themselves hard at work putting the machinery and shops in order. The testimony of the physicians and keepers shows that the prisoners have suffered to a surprising degree, both in body and in mind, from their enforced idleness.—*N. Y. Med. Jour.*

THE UTILIZATION OF GARBAGE.—According to the "Bulletin of the Rhode Island State Board of Health" for May, the city of Milwaukee will soon abandon the cremation of garbage, which it was among the first of the western cities to adopt and advocate. It is proposed to substitute a drying process in the place of combustion. A company is at work with a new method which converts cities' refuse into articles more or less saleable. The garbage is made to pass through a series of mechanical driers, and in the course of ten hours becomes a brown powder. The oil is pressed out or drawn off, and the residue can be sold as a fertilizer.—*N. Y. Med. Jour.*

WHEN MARRIAGE IS A FAILURE.—According to a bachelor editor, the following is why so many marriages prove a failure: He says that nine-tenths of the unhappy marriages are the result of green human calves being allowed to run at large in the society pastures without any yokes on them. They marry and have children before they do mustaches; they are fathers of twins before they have two pairs of pants, and

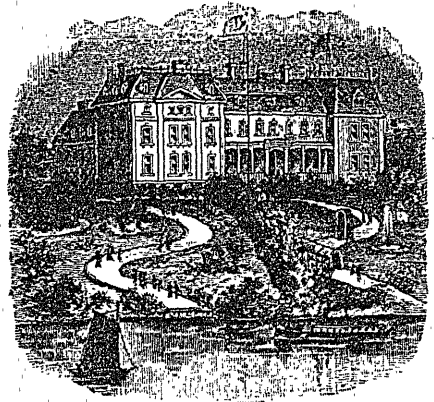
the little girls they marry are as old as their grandmothers in schemings. Occasionally one of these gosling marriages turns out all right, but it is a clear case of luck. If there was a law against young galoots sparking or worrying before they have cut all their teeth, we suppose the little cusses would evade it in some way, but there ought to be a sentiment against it. It is time enough for these bantams to think of finding a pullet when they have raised money enough to buy a bundle of laths to build a hen-house. But they see a girl who looks cunning, and they think there are not going to be girls enough to go around, and they begin to get their work in real spry; and before they are aware of the sanctity of the marriage relation they are hitched for life, and before they own a cookstove or a bedstead, they have to get up in the night and go for a doctor, so frightened that they run themselves out of breath and abuse the doctor because he does not run too, and when the doctor gets there there is not enough linen in the house to wrap up a doll baby.—*Cincinnati Medical Journal.*

## Births, Marriages and Deaths.

### DEATH.

EMERY.—At Minneapolis, July 1st, Leonard Grant, infant son of Dr. Geo. W. and Louise J. Emery, aged five months and fifteen days.

TREATMENT FOR CATARRHAL AFFECTION OF THE THROAT.—Dr. G. B. Hope, 34 W. 51st Street, New York, Attending Surgeon Metropolitan Throat Hospital, and Professor Diseases of the Throat, University of Vermont, says: "For a long time I have been employing Horsford's Acid Phosphate as a constitutional treatment for catarrhal affections of the throat. I consider it to be among the very best tonic excitants of the vocal organs, and particularly applicable in relieving the fatigue and huskiness of voice incident to those who pursue a professional career of actor or vocalist, and far preferable to the various forms of wines now so generally recommended for this purpose. I have seen no other allusion to its employment in this direction, which I believe you are perfectly safe in recommending both from a theoretical and practical point of view."



## BISHOP RIDLEY COLLEGE

OF ONTARIO, (LIMITED).

ST. CATHARINES.

A Protestant Church School for Boys, in connection with the Church of England, will be opened in the property well-known as "Springbank," St. Catharines, Ont., in September next, 1889.

Boys prepared for matriculation, with honors in all departments, in any University; for entrance into the Royal Military College; for entrance into the Learned Professions. There will be a special Commercial Department. Special attention paid to Physical Culture. Terms moderate. For particulars apply to the Secretary, 26 King St. E., Toronto.

FRED. J. STEWART, *Sec.-Treas.*

### COLLEGE OF

## Physicians and Surgeons

OF ONTARIO.

### MEDICAL COUNCIL EXAMINATIONS

SEPTEMBER, 1889,

IN TORONTO AND KINGSTON.

The written Primary and Final Examinations commence on Tuesday the 17th September, 1889.

By Order

R. A. PYNE,

*Registrar College of Physicians and Surgeons, Toronto.*

N.B.—Candidates' application forms may be had on application to the Registrar. The application is to be properly filled out, and declaration executed and delivered into the hands of the Registrar, accompanied by the tickets and certificates and the Treasurer's receipt, not later than the 10th of September, 1889. All candidates for Final Examination are required to present their Primary tickets and Certificates at the same time. Candidates for Primary who have attended a prior examination will require to pay a fee of \$10. Candidates for Final who have attended a prior examination will require to pay a fee of \$10. The Treasurer's address is Dr. W. T. Aikins, 282 Jarvis Street, Toronto.