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CANADA

MEDICAL RECORD

JULY, 1897.

Original Communications.

THE OPERATIVE TREATMENT OF PUER-PERAL FEVER, WITH REPORT OF A CASE.

By A. LAPTHORN SMITH. B.A., M.D., M.R.C.S., ENG.

Clinical Professor of Gynacology in Bishop's University; Surgeon-in-Chief of the Samaritan Hospital; Gynacologist to the Western Hospita' and to the Montreal Dispensary.

Having now had considerable experience in the treatment of puerperal fever by measures medical and surgical, varying all the way from quinine and saline purgatives to washing out the uterus, curetting, packing, draining, opening abscesses of the cellular tissue and removal of purulent tubes and ovaries from the pelvic peritoneal cavity, and even to removal of the septic uterus, I feel more in favor than ever of resorting to measures sufficiently vigorous to suit the case, rather than to return to the almost helpless and hopeless methods formerly practised. Since my inaugural thesis prepared for the American Gynzecological Society, and appearing in its Transactions for 1892, on Puerperal Septicæmia, I have had a few cases in my own practice, and quite a large number which have been referred to me by the kindness of my colleagues. In the majority of these cases it must be said only the milder surgical measures had to be resorted to, for if nothing abnormal could be felt in the pelvis, and the temperature did not come down quickly under saline purgatives and quinine, the uterus was promptly washed out with permanganate or perchloride solution, and drained, not packed, with a wick of iodoform cotton, and generally with the result that within twentyfour or forty-eight hours the temperature and pulse had returned to the normal and a load of anxiety had been lifted from the attending physician's mind. As several such instances occurred among the wives of physicians who appeared to be in great danger, the latter became strong advocates of this method of treating high temperature after confinement.

In other cases, however, this simple treatment did not bring down the temperature and then curetting was generally resorted to, being always followed by the application of strong carbolic and Churchill's iodine to the interior of the uterus. In others, however, even this failed. In other cases the pelvic cellular tissue was found to be hardened and the uterus fixed, and in some of these cases a puncture was made into the mass and its purulent contents evacuated and drained by a rubber tube in the form of a cross, the transverse portion retaining the vertical portion in the cavity. It has been maintained by some that there is no such thing as pelvic cellulitis, but in this view I beg to differ from them, because in five cases at least I have opened the abdomen and found that while the tubes and ovaries were inflamed and adherent to the intestine or to the back of the broad ligament, yet they did not contain pus, while the broad ligament in these cases did contain pus. With Bernutz and Goupil I admit that the great majority of the cases which were formerly considered to be pelvic cellulitis were in reality cases of pelvic peritonitis due to diseased tubes and ovaries. From my own experience I should judge that, given 100 cases of a thick hard mass being felt in the pelvis surrounding the uterus, that 95 or 98 of them were due to diseased tubes and ovaries, while the remainder were genuine cases of pelvic cellulitis. I am not able to give any certain means of diagnosing the one from the other. If the ovaries and tubes remain perfectly healthy and the woman was thin, we might perhaps feel these organs floating free above the indurated mass; but in most of the cases of cellulitis the tubes and ovaries are bound down either by extension of infection through the wall of the broad ligament or by direct continuity to the uterus and tubes. case indeed both conditions were present, the sequence of events having been as follows: A lady whom I was engaged to confine with her first child, who was in excellent condition, of cleanly habits, and married to a virtuous husband, had such an easy and rapid confinement that the baby was born before I could be found. She was not examined either by myself or by the nurse, and she made an uneventful recovery with the exception of a temperature of 102° for 1 or 2 days, which disappeared under quinine and salines. She got up at the usual time and appeared perfectly well for three or four months,

when she was laid up with pain, fever and swelling in the right inguinal region. Her pulse was very rapid and he knees were drawn up, and I felt satisfied that she had a pyosalpinx. I made arrangements to operate on her as soon as I returned from a consultation to which I had been called in the country. But during my absence she became so ill that the physician who was in charge of her became alarmed and called in another gynæcologist, who opened the swelling in the vagina and evacuated a pint or more of fetid pus. This gave her great relief, but although she carried a drainage tube for several months there was no appearance of the foul-smelling discharge from it ceasing. She became a burthen to herself and to her husband, who could not remain in the house owing to the odor, so that she begged me to perform the original operation which I had intended to do. This was done, and the large hard mass felt in the pelvis was found after opening the abdomen to be an enormous pus tube which had ulcerated into the broad ligament and set up a genuine but secondary pelvic cellulitis. After one of the most difficult operations I have ever performed this pus tube and ovary or tubo-ovarian abscess was extracted, and the patient made a perfect recovery.

Last autumn, at the Samaritan Hospital, a patient was sent in six weeks after her confinement, from which she had never gotten up, and a similar hard mass was found filling the right side of the pelvis. Her pulse was exceedingly rapid, her temperature high; there was profuse discharge; she was very emaciated, and was altogether in a very precarious condition, the pain being so great that she had to be constantly kept under the influence of morphine. The abdomen was opened and a diseased tube and ovary were taken out; but in doing so a large abscess in the broad ligament was opened into. This was thoroughly cleaned out and scraped with the fingers, and disinfected with bichloride solution. I intended in this case to have put a gauze drain through into the vagina, but the anæsthetist warned me that she could not hold out another minute, so I hastily closed the incision and got her back to bed. She made a slow and anxious recovery, but finally became quite well, and is now well on in another pregnancy.

I call to mind two other cases of genuine pelvic cellulitis, one of which, a phy sician's wife, the healthy ovaries could be

made out, and which was treated by the vaginal drainage tube with satisfactory results. The other was a young and healthy woman who, while in her seventh month, fell off a street car on to her abdomen, and as I was absent at the time sent for one of my assistants, who was so alarmed at her condition that he felt called upon to perform an accouchement forcé, with the result that she had a pretty severe lacerated cervix up into the cellular tissue between the folds of the broad ligament, resulting in the infection of the latter and a genuine pelvic cellulitis. This was opened and a large quantity of exceedingly fetid pus evacuated, and a cruciform drainage tube was introduced and kept in for several weeks, at the end of which time everything had returned to the normal and it was removed.

This I believe is the most frequent manner in which genuine pelvic cellulitis takes place, namely, from laceration of the cervix and direct infection of the exposed cellular tissue between the vagina and the peritoneum. Exceptionally this cellular tissue is infected by other accidents, such for instance as a case I had under my care in the Western Hospital this April of a lady from New York State, who, while endeavoring to bring an abortion on herself, perforated the posterior wall of the cervix between the peritoneum and the vagina with a male catheter containing a stiff steel wire, which was probably dirty, and which probably slipped through the eve of the catheter. In this case the mass surrounding the uterus disappeared after two months' treatment with tampons, iodine and iodide of potash internally; the right ovary, however, could be felt adherent and somewhat large at the back of the uterus, having possibly become slightly infected by contact with the broad ligament.

I have at present in the Samaritan Hospital a little woman from Old France who never left her bed since the birth of her first child six months ago. She was rapidly becoming exhausted under morphine injections when she came under my care. She was brought to the hospital in the ambulance, and had such a high temperature and rapid pulse that I was compelled to wait another two weeks before I ventured to operate. The pelvis was full of exudation, and although the large mass could be seen and felt through her thin abdominal wall, the ovaries or tubes could not be outlined; I presumed

that this was also a case of pus tubes, and opened the abdomen to remove them. I found the omentum adherent to the brim of the pelvis and to the abdominal wall, the coils of intestine adhered everywhere to the broad ligament and to each other, the vermiform appendix was adherent to the right tube, the right tube and ovary were situated in Douglas's cul-de-sac with many layers of fibrinous lymph surrounding them and binding them to the back of the broad ligament. dug out with great difficulty, and were found not to contain any pus, although diseased pus welled up from a hole in the back of the broad ligament as in the case previously mentioned, and was dealt with in the same manner and for the same reason, namely, that the patient's life was hanging by a thread. The utmost haste was made, although time was taken to carefully tie off the vermiform appendix and cover the stump with peritoneum. This patient has not made a good recovery, she is still in the hospital with the same hard mass that she had before the operation, and is still suffering a great deal of pain, although the prospects are that she will eventually recover. Of course, all these cases mentioned are exceptional ones, for on the other hand much more than one hundred times I have found the pelvis filled with material of plaster of Paris-like consistency completely fixing the uterus, and I diagnosed the case pus tubes, and opened the abdomen and found pus tubes only, and after the operation the uterus was perfectly movable and the pelvic roof soft and free from exudation. Two weeks ago, I operated on a patient at the Western Hospital in presence of the gentlemen attending the post-graduate course, who was sent to me by my friend Dr. Caisse. She was confined about two months ago with her first child and had a normal confinement. A few days after delivery her temperature went up, when her physician very promptly and very properly gave her vaginal douches, and they failing to bring down the temperature, he followed them with intra-uterine douches of permanganate. This also being ineffectual he sent for me to curette, which I did after dilating and washing out the uterus, and following it by the application of Churchill's solution to the whole of the inside of the uterus and the introduction of a gauze drain. I discovered a small tear in the perineum which I sewed up. Even this proved ineffectual, and as some eight weeks had elapsed with

a temperature of 102° or 103° nearly always present, I was called in again, when on examination I found two masses the size of lemons on either side of the uterus. I diagnosed tuboovarian abscesses, and had her removed with the doctor's consent to the Western Hospital, when, on opening the abdomen. every one present could see the flakes of fresh lymph binding the intestines, appendix and omentum to the tubes and The patient was in fine condition, and I, therefore. had time to carefully remove the appendix, free the adhesions of the bowel, lift out the large ovaries from their bed of fresh lymph, a much easier task than it was in the case of six months' duration, and fortunately got the ovarian abscesses out through the opening without bursting them, as their contents are considered to be very virulent. I had forestalled the possibility of their rupturing and infecting the peritoneum by covering the bowels with a sterilized towel on which the pus would have fallen. The second ovary, however, ruptured just as I had succeeded in extracting it through the incision, and its contents spurted over many of the bystanders. The oozing from the back of the uterus was stopped by a fine purse string ligature run around the margin of the raw surface. The abdomen was washed out very thoroughly with salt solution, and a fresh lot of the latter was poured in and left there. This patient has made a rapid recovery, and has expressed herself completely free from pain 3 days after the operation; her temperature and pulse are normal, she is eating well, and would be out of bed on the twenty-first day.

I could mention many other cases of pus tubes following confinement, but perhaps one of the most interesting was that of a young married lady with her first child who had a normal labor, but whose husband went astray at the end of a week's enforced abstinence, and who, as I afterwards discovered, had infected his wife with gonorrhæa on the ninth day. In this case I felt the tube filling up day by day, but when it had reached the size of a large orange it suddenly emptied itself through the uterus into the vagina and the mass quickly disappeared. This patient made a good recovery without any other treatment but antiseptic douches.

I thought that these cases must be numerous in the practice of others, and it would, therefore, be useful to have their attention called to the value of active interference rather than allow the patient to become exhausted by long continued suffering and recurring attacks of pelvic peritonitis due to puerperal infection of the tubes and ovaries.

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Selected Article.

APPENDICITIS; WHEN TO OPERATE AND HOW TO OPERATE.

By PARKER SYMS, M.D.

Appendicitis may be defined as a disease more or less widespread, which has its origin in an inflammation of the appendix vermiformis.

It may be limited strictly to the appendix, or it may in-

volve the neighboring peritonæum.

It may result in a general peritonitis, or in general peritoneal sepsis, or in general septic poisoning by infection through the neighboring veins.

It is not within the scope of this paper to go fully into the pathology of appendicitis. I shall merely outline the various conditions which obtain in the different forms of the disease, and then set forth what my experience has taught me as to the best plan of treatment in a given case,

All cases of appendicitis I classify under two heads: First, benign; second, malignant. These may be subdivided

thus:

BENIGN.

Acute, primary.

1. Simple catarrhal, with or without concretion.

2. Parietal, involving all the coats.

3. Parietal, with local adhesive peritonitis.

Chronic.

1. Recurrent.

2. Relapsing, with concretion, stenosis, or foreign body.

MALIGNANT.

I. Acute suppurative, with local fibrino-purulent peritonitis, by extension or perforation.

2. Acute suppurative, with progressive fibrino-purulent

peritonitis by extension or perforation.

- 3. Subacute gangrenous, with localized fibrino purulent peritonitis.
 - 4. Suppurative, with retro-cæcal cellulitis.
 - 5. Gangrenous, with retro excal cellulitis.

Fulminating: 1. Acute purulent, with perforation and general peritonitis or peritoneal sepsis. 2. Acute gangrenous, with perforation, general peritonitis, or peritoneal sepsis.

Any benign appendicitis may become a case of any of

the forms of malignant appendicitis.

This is more frequently demonstrated in the current and relapsing forms. The question is really one of degree of severity rather than one of variety of diseased condition.

It is my rule to *insist* upon operation in any one of the varieties which I have classed as malignant, and to advise operation in the recurrent and relapsing cases, unless there is some special condition of the patient which would contraindicate an operation on general principles.

In these cases I always operate between the attacks, and long enough after an attack to avoid operating through

an infected and inflamed area.

Every acute case of mild severity may be treated expectantly with the hope of checking the disease before it becomes one of malignant type,

Any case in which there is not rupture or perforation of the appendix, and in which there is not purulent peritonitis,

may completely recover.

This is true of cases with adhesive peritonitis, when there is a perceptible tumor; but it is not true of cases in which

there is a periappendicular abscess.

Now comes the important part of this subject—namely, how is one to determine from the clinical evidences of a case of appendicitis just what the local pathological conditions are? This is a most difficult problem to solve, for the symptoms are not always in keeping with the severity of the disease.

Many cases of mild appendicitis are attended by very severe symptoms; while many of the most grave cases give rise to very slight symptoms. This latter is particularly true of the most malignant type—namely, the fulminating variety.

In the beginning of such an attack, symptoms may be even less significant and severe than in a case of catarrhal or simple parietal appendicitis. There is no local peritonitis, no tumor, and perhaps the only symptoms will be pain and tenderness in the right iliac fossa, slight rise of temperature, and slight acceleration of pulse rate; in fact, the symptoms may clearly point to a mild attack until perforation or rupture takes place, and, when severe symptoms first appear, it will be to announce a condition that is already beyond hope of cure.

In considering this question the physician will naturally be guided by his own experience; but he should always give careful heed to the lessons others have learned. It is very desirable that this subject should be regarded too seriously rather than too trivially. If a physician has been fortunate enough to have been limited in his experience to a number of cases of the benign type, he is apt to have formed the idea that all cases of appendicitis may recover without operation, and a patient with a malignant form of the disease is very unfortunate if he comes under the care of that man. Fortunately, there are to-day few practitioners so narrow-minded and ignorant.

The real danger in cases of appendicitis is that the operation shall not be done when necessary; and that an operation may be done in a case which would have recovered if treated expectantly is not a matter of much importance, for, if the operation be properly done, the risk to the patient is almost *nil*. In appendicitis the danger lies in the disease, and not in the operation.

It is of the utmost importance in acute cases calling for surgical interference that operation be done as early as possible. In a case of acute suppurative or gangrenous appendicitis the patient's chance of recovery is much greater if operation can be done before perforation or rupture has taken place, even if protecting adhesions are formed, and, of course, if these are not present when the breakdown comes, the chance of recovery is very small.

I know of no question more difficult to decide than the one which presents itself in the early hours of an acute appendicitis—namely, is it the beginning of a benign case, or is it the beginning of a malignant one?

This is a question that can not be answered in many instances, for in the two forms the onset is the same.

In some cases the local and general symptoms are so severe or significant from the beginning that there can be no doubt that the case is one of a severe and dangerous type. But the converse of this is not true, since one can never predict in a case that has a mild beginning that it will not have a serious ending.

In such cases one can only decide on the proper plan of treatment by making repeated examinations, and noting the progress or regress of the disease.

As a general rule it may be stated that a patient that is not decidedly better at the forty-eighth hour than at the twenty-fourth is not going on to spontaneous recovery.

General practitioners frequently put surgeons to a great disadvantage by not calling them in consultation early enough to allow them the benefit of making an early and then a later examination, and thus comparing the conditions. Too often the surgeon is called upon to decide a one-sided question. He can work to better advantage for many reasons if he sees

the case early. His judgment can be soundly formed, his knowledge of the case from its early stages is of importance, and, when operation does become necessary, it can be the better accomplished if it has been anticipated and prepared for than if it be undertaken on the spur of the moment, perhaps at night, and without time for the best arrangement of details.

A typical attack of acute appendicitis will have about the following symptoms: A sudden onset, usually beginning with abdominal pain, starting around the umbilicus, and becoming more or less general, and finally becoming most intense in the region of the right iliac fossa. This may or may not be attended by vomiting. Soon there will be slight elevation of temperature, about 100° F., and acceleration of the pulse rate to about 90.

The most characteristic symptom is tenderness, with its seat of maximum intensity at the appendix. There is always a change in facial expression, varying from a slightly anxious look to a well-marked Hippocratic face.

Muscular rigidity will soon be present, especially in the

right rectus abdominis.

Ail these symptoms may be present to a greater or less degree in the mildest case of catarrhal appendicitis. In the most severe of all cases — namely, the acute gangrenous without peritonitis—there may be no symptom present before rupture save point tenderness, muscular rigidity and accelerated pulse.

After an acute case has progressed a few hours, if local peritonitis is produced, either the simple plastic or the fibrino-purulent, a distinct tumor will be present in the neighborhood of the appendix. This may be obscured by the rigid

muscles.

No fixed rule can be laid down for deciding in the early

stages between the mild and the severe cases.

No man is capable of deciding this question positively and correctly in all cases. Ample and widespread experience with the various types of the disease will give one a faculty of determining the nature of the condition which may almost be called intuitive.

An exact and true word picture of a given case of simple catarrhal in the first thirty-six hours might fully and accurately describe a given case of the fulminating type; but, to one properly experienced, an indescribable character of some one symptom, as the pulse or facial expression, may indicate a malignant process. Usually a catarrhal or simple parietal appendicitis will present a mild train of symptoms from the start, and under the proper expectant treatment will show marked improvement in some or all of the symptoms by the forty-eighth hour.

At this time, in the majority of cases of suppurative or gangrenous cases with local peritonitis, "tumor," pain, and vomiting will have ceased, and the evidences present will be as follows: Temperature about 100°; pulse about 100; muscular rigidity, tumor well marked, hard, defined, and increasing; local tenderness now over site of tumor. Facial expression more or less anxious.

A gradual abatement of these symptoms will point to a regression of the disease. A sharp rise of temperature and acceleration of pulse rate, followed by a sudden fall of temperature and a sudden decrease in the pulse rate, usually marks the rupture or perforation of an appendix into firm

adhesions.

During an attack of appendicitis a sudden cessation of symptoms is always a bad sign.

A fulminating attack of gangrenous or suppurative appendicitis may have about the following symptoms marking

three stages:

First. The stage before perforation. Temperature, 103°; pulse, 120, high tension, small volume; pain localized, severe, lancinating; tenderness exquisite; facial expression anxious, haggard; respiration, 30 a minute, costal variety; vomiting reflex in character. General feeling of severe illness.

Second. The stage of rupture, short in duration, sudden in advent. Temperature normal or subnormal; pulse, 80; pain gone; tenderness slight; facial expression much improved; respiration normal; vomiting none. General feel-

ing of relief and recovery.

Third. The stage of general septic peritonitis or sepsis. Temperature about 101° to 102°; pulse, 110 to 120, small and weak; pain severe, general abdominal; tenderness, general abdominal with maximum at appendix; facial expression Hippocratic; respiration costal, rapid, irregular; vomiting may become stercoral. Great exhaustion and prostration.

Finally, collapse and heart failure will close the scene.

It must be borne in mind that a fulminating case may cause death by peritoneal sepsis without the production of

septic peritonitis.

It is most unfortunate that no well-defined rule can be given for determining which is a benign case and which is a malignant one. This has to be decided by one set of symptoms in one instance, and on entirely different grounds in another. In one case the character of the pulse is most important, in another the temperature may decide the question, but usually one must judge by the patient's general condition, and by a careful study of all the symptoms, and of the relation of one symptom to the others.

Concerning the treatment of appendicitis the cases may be classed in three groups:

First. Those in which operation is unnecessary and in

which expectant treatment should succeed.

Second. Those in which operation is advisable and justifiable, but in which delay may not do harm.

Third. Those in which operation is imperative, and is

the only safe method of treatment.

The first group is limited to the cases of primary catarrhal and primary parietal appendicitis without suppuration and without gangrene.

The second group embraces all cases of recurrent and

relapsing appendicitis.

The third group embraces all the forms of appendicitis which I have classed as malignant—i. e., all cases of suppurative or gangrenous appendicitis with periappendicular abscess and the fulminating type.

Before leaving the first group, let me set down briefly

the proper method of expectant treatment:

Put the patient to bed and keep him there. Apply over the whole of the right iliac region a soap "poultice," consisting of a thick layer of green soap spread on a single thickness of muslin or sheet lint,

Over this apply a broad ice bag-better still, an ice coil.

Relieve the bowels by a soap-and-water enema.

Keep the stomach at rest while vomiting exists.

Restrict the patient to milk, if he can take it; if not, give him clear broth.

Note the temperature, pulse and respiration every four hours.

Give no drugs.

Never give opium or morphine in cases of appendicitis, except in case of abdominal shock from rupture of appendix or abscess.

Any case that does not improve under this plan of treatment will be found to be of one of the severer types.

The operative procedures may be described as pertaining to four classes of cases.

First. Cases of recurrent and relapsing appendicitis, without acute local peritonitis between attacks.

Second. Cases of acute, suppurative, or gangrenous appendicitis with local peritonitis, with or without periappendicular abscess.

Third: Chronic cases with persistent sinus.

Fourth. Fulminating appendicitis with rupture or perforation and general peritoneal involvement.

There are certain general rules which apply to all of these forms of operation. I shall touch on those at once, and then take up the special indications and procedures. I always insist upon having one of my own assistants when it is possible to do so. I consider that the man who has charge of the protecting sponges and packings is of more importance than the one who does the operating.

I also prefer to have a nurse who has been accustomed

to my method of operating.

The entire abdominal surface should be sterilized as completely as possible.

A proper operating table is very necessary. The Tren-

delenburg posture should not be used.

Hand sponges and flat laparotomy sponges should be made of sterilized gauze. For catching and removing the pus, I use very small marine sponges on holders.

The patient should be slowly and carefully anæsthetized.

This is very important.

A careful final examination should be made when the patient is thoroughly narcotized and the muscles are relaxed.

The operation should be done deliberately and carefully,

but with all compatible speed.

We shall now take up the special form of operation.

First. For relapsing and recurrent appendicitis without acute local peritonitis.

The propriety of operating on these cases must depend on the nature of the attacks, the frequency of the attacks and their severity, the amount of disability they cause the patient, and the patient's condition of general health—that is to say, whether he is a fit subject for an operation or not.

In a patient of good general health and vigor this opera-

tion is free from danger.

After the patient has been thoroughly anæsthetized, the skin properly prepared, the whole operation field properly protected by sterilized coverings, and the final examination made, the operation is done as follows:

An incision is made down to the external oblique muscle. In a thin subject this incision may not need to be over an inch and a half in length. It must correspond to the thickness of the abdominal wall. It should be in a direction parallel to the fibres of the external oblique. Its middle point should be on a line drawn from the umbilicus to the anterior superior spine of the ilium. It should be external to the rectus muscle.

Next, the external oblique should be opened, by separating its fibres, not cutting, as far as the full length of the above incision. With this wound carefully held open the internal oblique should be cut, not split, in the same direction as the wound. The transversalis is divided in the same manner.

When the peritonæum is reached it should be lifted by

two mouse-toothed forceps and divided, such care being taken as to positively insure against wounding the intestine, whether there be any adhesion or not. Of course, before opening the peritonæum, all bleeding should be arrested and the wound thoroughly dried.

When the peritonæum has been sufficiently opened, the index finger is introduced and the region of the appendix explored. If many adhesions are found, the entire wound should at once be so enlarged that the necessary separating and dissection can be done with facility and in plain view.

If this is not the case, the appendix should be sought for, and, if it be free, its tip should be brought out of the wound. Then, as you come to its mesentery, it should be ligated with fine catgut and divided. The mesentery will require one or several ligations, according to its width.

When the appendix is separated from the intestine, except at its base, it and a portion of the intestine should be brought out of the wound, so that the ablation can be done extraperitoneally. I pass the appendix through a hole in the centre of a flat sponge, so that a very small surface of the intestine is exposed.

I prefer Dawbarn's method of closing the intestine, which is done as follows: A purse-string suture of fine silk is passed completely around the base of the appendix, about a quarter of an inch from the orifice of the appendix, involving only the peritoneal coat, the ends left untied.

The appendix is now cut off about half an inch from its base. Its canal is now probed to see if it be pervious. If not, it is made so by means of a small cautery point, and next the divided end of the appendix is grasped by a fine thumb forceps and pushed into the bowel by a complete invagination. The silk suture is now half tied and drawn tight. As the forceps is withdrawn the closure is complete and the full knot tied.

If all this has been carefully and satisfactorily done there will be no infection. The wound may be closed at once.

I close the wound by a single row of silkworm-gut sutures passed through the entire wall. Simple pad dressing.

I do this operation as an aseptic one, using no fluids after the final cleansing. The operation will take from fifteen to twenty minutes to perform.

I do not believe in McBurney's method of splitting both the internal and external obliques. It necessitates a larger wound, and it requires an unnecessary damage to the abdominal wall, for it means a tearing apart and separation of its layers. I strive as far as possible to keep the various layers in apposition. The after treatment of these cases is very simple—i. e., fluid diet for four days; enema daily; stitches removed on the seventh day; first dressing removed on seventh day; patient up and well on ninth to fourteenth day.

I never have a patient wear an abdominal supporter un-

less the wound has necessarily been unusually long.

Second. Operation for acute, suppurative, or gangrenous appendicitis with local peritonitis, with or without peri-

appendicular abscess,

After the above described preparation of the patient and operation field an incision is made similar to the one above described, but it must be extended at each end, and should be at least four inches in length

be at least four inches in length.

The external oblique is opened by blunt dissection; the rest of the layers should be clean cut, and care should be taken not to separate one layer of the wall from another. If the aponeurosis and fascia are stripped bare they are very apt to slough, and thus leave a weak wall.

The essential part of this operation consists in the intraperitoneal work in searching for and treating the abscess, if one exists, and in searching for and dealing with the appendix

if there be no abscess.

The most important thing of all is the protection of the uninvaded peritonæum. This requires the exercise of sound judgment to determine how much to do, and of knowledge and skill to do it properly.

As soon as the peritonæum is opened sponge packing

should be begun.

Throughout the operation this must be done in such a manner that no infected tissue nor disease product can come in contact with healthy peritonæum.

The first assistant must take entire charge of this.

When all the open spaces around the mass of adhesions have been completely closed by dry gauze pads, the wound should be well retracted and the tumor gently entered by separating adhesions and by blunt dissection. When an abscess is reached I make a pin-hole opening, and at once prevent the escape of pus by pressure of a small sponge held in an artery clamp. After a minute the sponge is replaced by a clean one and the pus is removed drop by drop, all of it being absorbed by these sponges and none of it allowed to escape into the wound.

After pressure is sufficiently reduced by emptying the abscess, the opening is gradually enlarged, and finally the

cavity can be thoroughly sponged out.

Now it should be freely opened and its interior disinfected with hydrogen peroxide. The size of the abscess will depend upon the duration of the disease.

Its walls are composed of adherent intestines thickly

coated with plastic lymph, and the ruptured or perforated

appendix usually forms some part of this wall.

We have now reached the point when the average of the results will depend upon the judgment of the operator. If he is wise, he will remove the appendix in only those cases in which it can be readily found and removed without separating many adhesions. If he is rash, he will unduly persist in his manipulations, and in many cases he will break through Nature's safeguard at some point unseen and cause the death of his patient by secondary infection.

If the appendix can with safety be removed, it should be separated from the intestine with great care and gentleness, its mesentery properly ligated; then it should be ablated about a quarter of an inch from its base, and the canal thor-

oughly sterilized with the cautery.

Now a single ligature of catgut should be tied around the appendix, including all its coats, then the superfluous stump beyond this ligature trimmed away with the cautery or scissors. Now the operator should thoroughly resterilize his hands, and all towels, etc., about the wound should be replaced by clean ones. One or two sutures may be used at each end of the wound, but an ample opening must be left, for the wound must be treated by packing.

Remember that in packing a wound for drainage you must not proceed as you would if you were calking a ship

to prevent leakage.

These wounds, whether the appendix has been removed or not, should be packed as follows: One piece of iodoform gauze, folded longitudinally, is passed to the bottom of the abscess cavity and brought out of the wound, and turned to the outer side of the wound.

It should be large enough to completely fill the cavity, but not to stuff it. Now, as the first assistant slowly removes his gauze pads, they should be replaced by pads of iodoform gauze which must be carefully protected from any contamination.

These pads must completely close any spaces where adhesions are wanting, and they must come in contact with healthy peritonaeum and separate it from all infected areas.

Careful note must be kept of the number of pieces used. Now the entire wound should be covered by first a pad of iodoform and then several pads of plain, sterilized gauze; flat ones are the best. These should be firmly held by strips of adhesive plaster. Over this a thick layer of absorbent cotton is placed and secured by an abdominal binder.

In case the operation is done before the appendix has broken down, and there is no circumappendicular abscess, the procedure should be the same as the one just described; but the appendix can be removed in nearly all instances.

The after-treatment of these cases is most important. It should be as follows: Complete rest of the stomach for

twelve hours. Peptonized milk in small quantity after twelve hours, if there is no nausea or vomiting.

Patient should be kept quiet on his back for four days. Enema of soap and water every day; if there is much

tympanites, turpentine should be added.

The outside dressing should be removed at the end of twenty-four hours, and changed as often after that as it becomes saturated.

The packing should not be removed until the fifth day-

that is, on the fourth day after operation.

This needs be done as carefully as the operation itself. Retractors should be used and the wound well opened.

Then the gauze should be removed from the tumor cavity. This should be thoroughly cleaned by dry sponging. No fluids should be used. Now this cavity should be carefully repacked, and then the protecting pads should be gently scparated from the adhesions they have caused and new pieces substituted.

After this the wound should be dressed every third day. Soon a single packing will be sufficient, and this should be reduced in size at each dressing. The patient should be kept on fluid diet for one or two weeks, and be kept in bed until the wound is healed to a narrow sinus, which it will be in from three to five weeks. When the patient gets up he should wear an elastic binder for one year to prevent hernia.

No drug treatment will be needed. I insist on my rule concerning morphine. These patients will be comfortable and free from pain if they have not been reinfected at the operation, unless the case were already one of progressing

peritonitis.

Third. Chronic cases with persisting sinus. Of this operation I shall write briefly. I make an oval incision which shall include the sinus; the next step is to enter the general peritoneal cavity at some point free from adhesious. Now the intraperitoneal dissection is begun, and the mass containing the sinus is slowly separated and pushed outward, while the healthy intestines are pushed toward the median line, and ample gauze packing is interposed. The sinus will usually lead to a diseased appendix.

The entire diseased mass should be dissected and removed without opening the sinus or appendix, except, of

course, when the latter is amputated.

The appendix stump should be closed by Dawbarn's method, and if the wound has not been subjected to contamination it may be closed by suture. If there be any doubt about this, it should be packed and drained.

Fourth. Operation in fulminating appendicitis, with rupture or perforation of appendix, with general peritoneal

involvement.

This operation must accomplish removal of the appendix and of all infective material and the cleansing toilet of the entire peritonaeum.

When the diagnosis of this condition is positive, a large median incision should be made. The right iliac region should first receive attention. If the appendix is still attached, it should be removed and the stump secured. If the appendix has sloughed off, the intestinal orifice must be closed.

With one hand in the abdomen, a separate opening in

this region should be made for special drainage.

Now every portion of the visceral and parietal peritonaeum must be cleansed by thorough sponging, which shall remove all inflammatory products and all foreign material. After this is done, every portion of the peritoneal surface must be washed again and again with hot salt solution (6 to 1,000).

If the patient's strength will permit it, the intestines should be systematically, coil by coil, washed outside of the

abdomen.

The work *should* be done thoroughly; but it *must* be done rapidly, for these patients are always in a bad condition.

Often you will be obliged to be incomplete in your

work to avoid death on the table.

After the cleansing is accomplished, gauze packing should be used so as to drain the entire abdominal cavity.

Enough suturing should be done to prevent escape of

the intestines into the dressings.

A very large dressing must be applied externally; this should be changed in a few hours.

In these cases opium is called for to relieve the pain and as a stimulant against shock. A full dose should be given

before operation.

Acting in the main on the principles set forth in this paper, I have been operating in cases of appendicitis during the last eight years. Of five cases with general peritonitis I have lost three patients.

I have lost no other patient with appendicitis.

New York, 60 West Forty-seventh Street.

Progress of Medical Science.

SURGERY.

IN CHARGE OF

FRANK R. ENGLAND, MD.,

Prof. of Clinical Surgery University of Bishop's College; Surgeon Western Hospital,

GEORGE FISK, M.D.,

Instructor in Surgery University of Bishop's College; Assistant Surgeon Western Hospital.

THE TREATMENT OF THE HYPERTROPHIED PROSTATE BY THE GALVANO CAUTERY.

Bottini (Archiv für klin Chir., 1897, Band liv. Heft 1)describes a new method of treating the diuresis accompanying the hypertrophied prostate, which he has perfected, and which has produced both in his own hands and in the hands of other eminent surgeons results that are all that could be desired.

He describes the instruments, which he has had constructed according to his own designs, and the technique of the operation, illustrating his subject by the report of three clinical observations.

He claims for the operation the following points:

- 1. The unmistakable efficiency of the operation—a patient who has not urinated for years passing his urine of himself a few hours after the operation.
- 2. The harmlessness of the operation even in patients over eighty years of age with foul urine.
- 3. The permanency of the cure, no case as yet having been known to recur.
- 2 4. No post-operative bad effect or effect upon the morale of the patient.
- 5. The operation is painless, and can be done without anæsthesia. (American Fournal of the Medical Sciences.)

A NEW METHOD OF REMOVING POLYPOID GROWTHS FROM THE BLADDER.

By GEORGE CHISMORE, M.D., San Francisco.

So far as I know, no one has hitherto undertaken to remove vesical polypi by the method which is the object of this paper to describe.

Although my experience is limited to the two cases here reported—purely accidental in the first, entirely intentional in the last—the immediate results—checking a dangerous

hemorrhage and relieving an over-distended bladder—were so easily attained, that, whether the cure proves permanent or not, I believe the procedure of sufficient value to bring it to your attention, and to recommend it for trial at your hands.

The principle on which the operation is based is that of, by aid of the suction exerted by an aspirator attached to a litholapaxy catheter, or other suitable tube, catching the growth, or growths, in the eye of the instrument, when, by gentle traction and slight to and fro movements, they are torn from their attachments and drop into the reservoir of the wash-bottle.

To accomplish this I use an ordinary curved litholapaxy tube, of available size, to empty the bladder, then couple on my evacuator, which is so shaped as to fit the hand and give one full control of the point of the catheter; inject two or three fluid ounces of a borated solution as hot as can be borne, to which cocaine is added if needed to control the pain. Then systematically go over the interior surface of the viscus with the point of the catheter, at the same time compressing and relaxing the bulb, trying by touch to locate the site of the growth. If the outflow is arrested when the point is in contact with the bladder wall, the instrument is held stationary a few moments, the hand holding the bulb, regulating the amount of suction exerted, then gentle traction, accompanied by a slight sawing motion, is made.

If the occluding body be a polypus it will soon givesway and quickly find its way into the reservoir. I find it ea y to determine whether it be the healthy wall of the bladder that is caught or not, by the absence of the well-remembered thud and the evidence of pain that all who have done a litho-

lapaxy will recall.

When a polypus is caught the check of the outflow is not nearly so abrupt; there is no expression of pain from the patient, the point of the occluded catheter i somewhat moveable, and not, as in the first case, apparently glued to a fixed spot; besides, in cases of pedunculated tumors the stoppage may take place while the eye of the catheter is not nearly in contact with the bladder wall. It is hard to convey in words the slight variations in the sense of touch, but I was astonished and delighted in my last case to observe how easily and clearly I located the site of the growths, and with what ease the tumors here submitted for your inspection were brought away.

I had supposed from my first case that the growth would have to be large enough to fill completely the eye of the catheter in order to make suction effective. The second, however, clearly demonstrated that such was not the fact.

You will note many small polypi entirely too little to close the eye of the No. 25 F. catheter which I used. Either their bases must have been sessile, several caught at once, or some alterations have taken place in the mucous coat from which they sprung that enabled the suction to exert sufficient power to drag them away.

For reasons that are obvious no estimate of the ultimate results of such an operation can be predicted, but it is contended that enough has been shown to make recourse to this simple and painless procedure justifiable in cases of emergency, where necessary time to remove a patient to the hospital, or other preliminaries to more radical measures, are to be gained, particularly in those cases where the bladder is filled with clots, and retention from overdistention is present with its attendant suffering.

CASE 1.—On March 21, 1893, I was called, in consultation, by Dr. James F. Sullivan to see W. B. W., aged fifty-two, German drayman, suffering from retention due to clots in the bladder. He had been bleeding profusely per wrethram for several weeks, was very anemic, cachectic in appearance, and suffering great pain.

The twenty-four hours previous he had passed 1600 c.c., in eight voidings, of dark bloody urine containing large clots; odor of blood, acid, sp. gr. 1026, solid on boiling, one per cent. urea, and containing small pavement cells, blood-and-

pus-corpuscles.

I introduced a No. 22 F. litholapaxy catheter and by aid of my aspirator broke up and removed about twenty ounces of clot and bright, bloody urine, then partly filled the bladder with hot borated solution containing about four per cent. cocaine. While searching for remaining clots I felt a sudden stoppage of the outflow, and almost at once it gave way and a small piece of tissue appeared in the reservoir. This was saved and sent to Dr. Douglass W. Montgomery for microscopic examination. He returned a guarded opinion that, "it was not, certainly, malignant."

The bleeding ceased, and the next day Dr. Sullivan reported that it had not recurred. Fourteen days after, the patient came to my office, greatly improved in appearance, stating that "until that morning he had had no trouble; now his urine was again colored." Thinking the styptic effect of the cocaine responsible for the arrest of the hemorrhage, I again used the solution as before. Once more the outflow was checked, but this time I was clearly aware that I had caught something. The aspirator was a new one, with a good strong pull; so much so that I thought best to diminish it somewhat by mild compression. After a few moments I made a little traction, when, ploub—the obstruction gave way,

the bag filled, and a polypus nearly an inch in length and half an inch in diameter dropped into the reservoir.

I saw the patient last July 20, 1893, four months after the first visit, and he reported himself well, at work, and not a sign of blood since last operation. I made a brief verbal report of this case at the 1893 meeting of this Association.

In preparing this paper I saw Dr. James F. Sullivan, to learn, if possible, if the relief had been permanent. He reported that he had not seen the patient since; that he had heard that he had died in the care of an "irregular"—he could not learn when nor from what cause.

CASE II.-P. N. R., aged fifty-nine, French, accountant. Family history contains nothing bearing on his case with the exception of death from a cancer of one sister, aged forty-six. At the age of eighteen he had some "liver trouble," for which he was tapped several times. Was sent to Mexico, where he regained his health and remained well until October, 1896, when he noticed that his urine was cloudy. This led him to consult a physician, who placed him for sixty days on a milk diet and told him he had "kidney disease." During this time, about November 20th, he began to pass bloody urine, which gradually became worse until retention took place, and he came to my office January 14, 1897, in great pain, not having passed a drop of urine in sixteen hours. He was very anemic, with marked cachexia. With a No. 25 F. litholapaxy catheter I drew twenty-four ounces of dark, tarry fluid. looking and smelling precisely like fluid extract of ergot.

Placing him upon the table in my office, with the end of the catheter I easily made out a soft mass in the upper anterior wall of the bladder a little to the left of the median line. Pursuing the method already described, I rapidly removed about a dram or more of tissue, made up of numerous papillomata, upon which Dr. Douglass W. Montgomery reports as follows: "I have examined several slides made both from the tissue sent me on the paper and that in the bottle, and find the growth to be a villous papilloma. villus has a delicate core of well-formed connective tissue. carrying numerous thin-walled blood-vessels. The epithelium covering the villi is well and regularly formed, and does not have the appearance of growing with unnatural rapidity, as it frequently has when such a papilloma has undergone, or threatens to undergo, cancerous degeneration. I therefore, from my observation of this growth, would say that it is a villous papilloma of the bladder, showing no evidences of cancerous degeneration."

He went home after the operation, which was quite painless and occupied but a few minutes, but did not regain the ability to evacuate his bladder without recourse to the catheter for several days. There was no more bleeding for eight days, when the urine again became quite bloody. Once more, in my office I searched the bladder and the site of the former mass appeared quite normal to the touch, but I discerned another patch near the mouth of the right ureter, and again removed a dram or more of the same kind of tissue. After this he improved rapidly in health and resumed his occupation. There was no more bleeding until March 20th, when there was a slight discoloration, and I again repeated the same measure, this time, getting five very small pieces. Since then he has been perfectly free from hematuria. and has apparently quite regained his health and strength.— Fournal of Cutaneous and Genito-Urinary Discases, July, 1897.

TETANUS CAUSED BY BITE OF APE, TREATED WITH ANTITOXIN; RECOVERY.

A student of the Budapest Veterinary College who had been bitten by an ape on the palm of his left hand was imprudent enough to dissect on the same day a horse which had died from tetanus, and on the following night he was seized with pain in his left hand, but waited till next morning, when he went to Professor Reczey's clinic. The wound of the hand was at once enlarged, thoroughly cleansed with a solution of perchlorid of mecury and subsequently cauterized with caustic potash. He was then sent home, and, although advised to present himself at the clinic next day, did not do so, but stayed at home, where he was seized on the follownight (November 12) with tetanic convulsions. neighboring practitioner who was called in ordered large doses chloral hydrate to be taken every two hours. On November 13 the convulsions increased in frequency and intensity. The patient was conscious, his secretions and excretions were normal, he perspired freely, and his temperature was 107.3 degrees F. He was now given a subcutaneous injection of pilocarpin, which arrested the convulsions for a few hours, but in the evening he was seized again every thirty minutes with convulsions lasting from a minute to a minute and a half. On November 14 pilocarpin was again administered, giving relief for several hours. On November 15 the pilocarpin ceased to be effective, the convulsions came on again twice every hour, and sometimes respiration stopped owing to the spasm of the respiratory muscles, so that artificial respiration had to be resorted to. It was consequently resolved to give the tetanus antitoxin a trial. The antitoxin was given in doses of 3 c. c. thrice daily on November 15, 16 and 17, and once on November 18. The patient's nights were quieter from the beginning of this treatment, and the

last of the fits occurred during the night between November 17 and 18. He has been free from convulsions ever since, and may be safely considered as recovered. His highest temperature was 109.7 degrees F. on November 17, and the lowest was 95.3 degrees F. on November 20. features of this case were: 1. The early development of the tetanus, the period of incubation lasting generally from eight to fourteen days; this rapid onset may be attributed to the obvious fact that the disease was in this case not due to bacillary infection but rather to the absorption of toxins. 2. The absence of trismus and the absence of troubles connected with the secretory and excretory functions. 3. The marked predominance of very violent clonic convulsions, the characteristic tonic contractions being but little marked.—London Lancet, January 23 - Journal Am. Medical Association, April 10, 1897.

TREATMENT OF BURNS AND SCALDS WITH PICRIC ACID.

In the St. Louis Medical Review of February 20, 1897, Therapeutic Gazette, June, Thompson contributes a practical article on this subject. He begins by pointing out a fact well known to the readers of the Gazette, namely, that picric acid has been recommended by French surgeons as being the nearest approach to an ideal treatment of burns. It was subjected by them to several years of experimental use, and their reports have been most flattering. In this official capacity as Dispensary Physician of the St. Louis Health Department, the writer has had large opportunities to thoroughly rest the value of the drug. His experience consists of the study of some sixty cases—all emergency ones and they presented a great variation as to cause and condition: they were burns and scalds from explosion of gasoline, gas reservoirs, lamps, contact with electric wires, hot water, hot tar, steam, molten metals, colored fires, etc. In all cases picric acid was used as a local treatment, and it was so agreeable to the patient and so successful from a scientific standpoint that there was no desire to return to the older methods.

Picric acid has long been known and valued as a laboratory reagent. It is one of the most valuable microscopical stains; it is the reagent in Esbach's quantitative test for albumen; and it appears in a pretty sugar reaction. Its properties are as follows: it is a local anæsthetic, it coagulates albumen, is a stringent and antiseptic. It can be applied in most any manner; the dry powder can be sprinkled on, or gauze compresses saturated with a solution of the acid can be applied; or, if the burn is universal, the body may be

immersed in a both of the solution. For minor burns we find it very satisfactory to allow the patient to procure some of the acid and bathe the surface every few hours or as often as pain returns. No toxic effects come from the absorption of the drug, even if it colors the urine a deep yellow.

The acid is not very soluble in water, two drachms saturating a quart; the solubility can be increased by the addition of one ounce of alcohol to a quart of water. For emergency work any amount of the acid can be added to the water, which being stirred is ready for use. The first and most gratifying effect of the acid is the almost instantaneous relief of pain, even in cases where the epidermis has peeled off, exposing the papillæ to the air. In most cases the pain will be entirely eliminated, and in all it will be reduced to a minor symptom. A remarkable fact is that the acid will prevent blistering if applied soon enough, and it will limit the blistering if it has already begun. The acid is a strong astringent, and it contracts the superficial vessels and consequently checks the escape of serum from them. coagulates albumen. If the epidermis is disorganized by the heat, the acid will fix it in a firm coagulated layer, and healing will take place, as it were, under a scar. a scar is always a desired method of tissue repair.

The timely use of the acid is a great safeguard against suppuration, because it is antiseptic and because it contracts the vessels, thereby preventing pressure necrosis of the cells.

The effect of the use of picric acid is remarkable, and in the writer's experience of more than half a hundred cases he is convinced that its worth has not been exaggerated. The results are uniformly good; healing will be rapid, with little

scarring or deformity.

There are a few practical points to be remembered. In the first place, the blisters which are formed should never be incised—it will expose the naked papilla to the air and increase the pain and danger of infection; they should be punctured and the serum forced out; the epithelium will then collapse on the corium, and rapid subcutaneous healing will follow. It is also wise to let the shreds of clothing which have been burned into the skin remain until the second dressing; the cloth will be burned and asepticized, and it will do no harm by remaining, while its removal can only be accomplished by stripping away the flesh. The cloth will act as a capillary drain into the skin, and it will promote a permeation of the acid solution into the injured tissue. At a second dressing the thoroughly soaked fibres can be more easily removed.

It is a very noticeable fact that dressings soaked in a picric acid solution do not stick as fast as other applications;

this may be due to the astringent effect of the acid on the secretions.

In handling the solution of the acid the hands of the attendant will be stained a deep yellow color; this unsightly staining can be prevented by a preliminary application of vaseline to the hands, and by a final scouring of them with soap and boric acid.

If suppuration takes place the dressing should always be of gauze or some hydrophile substance. Drainage is most essential. The writer has not experimented with picric acid in the treatment of pus cases and cannot speak of its value in such, but as an emergency first dressing of burns and scalds it has no equal.

Medical Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 12th, 1897.

J. GEORGE ADAMI, MD., FIRST VICE-PRESIDENT, IN THE CHAIR.

Discussion on Isolation and Disinfection of Scarlet Fever, Measles and Diphtheria.

Dr. G. GORDON CAMPBELL exhibited a table which he had compiled showing the facts, so far established, concerning the period of incubation, duration of infection, date of appearance of the eruption, etc., in these three diseases.

Dr. E. P. LACHAPELLE discussed first the management of infected cases in the house. With regard to scarlet fever, isolation should last from the time of diagnosis for forty or fifty days and should be absolute; the nurse chosen should be one who had previously had the disease. The patient, before leaving the room, should be thoroughly disinfected and dressed in clean clothes, and then the room also should be thoroughly disinfected before other members of the family were admitted.

Diphtheria, with ordinary precautions, was much more easily isolated, as air was not a medium of transmission of the infection. It was impossible to determine how long isolation was necessary; it should be kept up as long as bacilli were found in the throat.

Of the three diseases, measles was much the most difficult to isolate at home, and, as the contagion was well marked even before the diagnosis could be made, the whole family would already have become contaminated. The whole household must therefore be quarantined, and as the disease was not a long one, this was not a very great hardship. Though not usually fatal, statistics showed that measles in a large proportion of cases left serious sequelæ; the physicians were not careful enough in making the family understand that strict isolation would do away with the periodical outbreaks at present experienced.

The question of transmission of these diseases by the attending physician was a very important one. He must remember that he was liable to convey the disease unless proper precautions were taken to prevent it. Dr. Lachapelle advised that the infectious cases should be seen last, and that the physician should have a wrapper or overall in the passage near the door of the patient's room to wear while making his visit. This garment should be put aside and disinfected before the next visit. He should also disinfect his hands and face before leaving the house. These procedures would not only protect other families but would serve to educate the public to the necessity of taking rigid precautions against infection, and the physician must also make them understand that they must give up all social engagements, shopping, etc., and that, if the head of the family must attend to his work, he must live elsewhere.

On making a diagnosis, the first duty of every physician was to report to the local Board of Health so that they could, in some measure, control the spread of the disease. The Board might also aid the doctor in the discharge of his duties by having a little pamphlet, instructing people in the methods of isolation, etc., which could be distributed by the officer whose duty it was to placard the house.

Dr. WYATT JOHNSTON stated that by order of the Provincial Board of Health he had recently been investigating the question of disinfection, especially by means of formaldehyde. In discussing the usual means of house disinfection after contagious disease, he pointed out the necessity of waiting until the inmates of the house were no longer a source of infection before disinfecting the premises. In the case of diphtheria, the throat should be free from the bacilli.

In disinfecting articles of clothing, bedding, etc., it was necessary to have a rapid and certain method which would not damage the goods. Steam under pressure answered these requirements well for most articles, the only precaution needed being that of warming the articles to about 180°F., and thus avoid condensation before letting in the steam, as it was moisture from condensation and not that in the steam vapour itself which did mischief.

Expensive and fine goods, such as laces, silks and velvets, stood steam disinfection better than the cheaply dyed fabrics belonging to the poor. The colours of the latter were liable to run.

With reference to sulphur gas, it appeared now to be generally admitted that this was only a surface disinfectant, and had not sufficient powers of penetration to disinfect

bedding, clothing, carpets and hangings.

In the absence of better means of disinfection, sulphur could be used, but all that could be reasonably expected of it would be the destruction of germs on the bare walls and floors. There was some epidemiological evidence to prove that in the case of smallpox and yellow fever sulphur was more efficient than in other infectious diseases.

Sulphur gas to be efficient required the presence of moisture, and this was liable to injure delicate goods. Chlorine or hydrochloric acid gas were both powerful but very destructive germicides; for disinfecting stables and outbuildings they were excellent.

A large number of things were injured by steam treatment, such as furs, leather, books and toys and upholstered furniture. These, for the same reason, could not be thoroughly treated with antiseptic solutions. For these the use of formalin vapour was admirably suited, as it gave complete disin ection without any injury to the textures of colors. Prolonged contact with formalin solutions would, however, act on iron somewhat. Formaldehyde vapour also offered a good means of sterilising walls, hangings and curtains. A sufficient quantity of the gas could be disengaged in a room to thoroughly sterilise the exposed surfaces and even to secure a certain amount of penetration. For this latter object, however, the disinfection in a closed chamber was more certain and economical, as it enabled more work to be done with less material.

The Health Board of the City of New York proposed issuing formaldehyde for treating certain goods. Formaldehyde was officially recognized as a disinfectant in the State of Maine.

Formaldehyde could be generated in the room by means of a lamp converting methyl alcohol quickly. In this case at least one quart of alcohol per 1000 cubic feet should be used, and the lamp should be capable of converting at least one quart per hour.

A better means of evolving the vapour was by regenerating it from a solution, for example, of formalin by treating it under pressure and allowing it to escape under a pressure of about three atmospheres. The presence of calcium chloride in the solution apparently ensured the gas being given off in a more effective state. Equal parts of formalin and a 10 p. c. or even 20 p. c. solution of calcium chloride in water formed a convenient formula. From this mixture the gas was generally

to be all supposed disengaged before the water had evaporated.*

The proper amount to be used was not yet fully determined. The Board of Health of the Province of Quebec, as the result of a number of experiments, advised at least one pound of formalin per 1000 cubic feet, while double that amount would be of advantage when penetration of bedding and upholstery was considered necessary. These amounts were larger than those usually recommended, and the printed directions generally given by the vendors of special patented appliances for this were usually far below the safety limit.

In disinfecting a room the doors and windows, as well as any other openings, are usually pasted up and the gas blown in through the key-hole for a period of a half to two hours, according to the effect desired. The room was then left closed for two or three hours more. When opened, the fumes of formalin could be instantly neutralised by ammonia vapour. The resulting *formamide* compound had no noticeable smell, but was liable later on to decompose and liberate formal-dehyde afresh, hence repeated applications of ammonia might be necessary. By simply opening the windows and waiting a few hours this late evolution of formaldehyde could be avoided.

Formaldehyde vapour penetrates clothing and bedding much more slowly than steam, but it is very efficacious in the dry state.

The capacity of formaldehyde for killing spores is relatively high, whereas sulphur gas has practically no action upon spores.

Much of the apparatus sold for formaldehyde disinfection is very inefficient.

Dr. A. D. BLACKADER pointed out the possibility in some cases of effectually isolating scarlet fever even after the disease had actually commenced. He cited the following case. In a family of two children, brother and sister, the boy while suffering from vomiting, soar throat and fever, was repeatedly kissed by the little girl who lay beside him on the sofa with her arms around his neck. The patient was seen by him thirteen hours later, at once isolated, and later on developed a moderately severe case of scarlet fever, and yet the little sister escaped. He had isolated scarlet fever as late

^{*} A statement which does not appear to be very satisfactorily proved .- W. J.

[†] A number of different models of formaldehyde apparatus, the property of the Board of Health of the Province of Quebec, were shown at the meeting. The officials of the Board are willing to furnish any information in their power as to the most efficient forms obtainable. Changes and improvements in the apparatus are so frequent and considerable that it does not appear desirable to specify here which forms comply with the requirements mentioned above.

as sixty hours after the appearance of the rash and in no case was there an outbreak in the family.

With regard to the length of the time the infection lasted, he thought we were not able to speak in an absolute way, and that it depended upon the duration of desquamation, which in some cases it was possible to shorten so as to allow isolation to be completed at four weeks. The physician should also take into account the condition of the nose, throat and ears in determining this point.

He thought that in children returned from hospital more or less isolation should be kept up for a few days, as Ashby's statistics showed that from two to four per cent. of returned

cases communicated the disease.

In measles, probably more could be done in the way of isolation than was generally supposed. The probability of the physician carrying disease from one house to another was not great where proper care was exercised, and he thought the plan suggested by Dr. Lachapelle, of having a coat for the physician's use while in the house, a very desirable one.

Dr. MACPHAIL considered the time had come for a revision of our views upon disinfection and isolation, just as the views upon antiseptics and quarantine had been revised, and that the present discussion tended in that direction. believed that isolation should hold first place, combined with instant destruction of all the infected secretions and excretions of the patient in the same definite way as is practised in the laboratory. If, he said, in cases of diphtheria and scarlet fever, the secretions from the air passages were received and burned, and if, in case of intestinal infection, the discharges were properly sterilized at the time, it would be a far safer method depending upon indiscriminate disinfection. From bacteriologic evidence he showed the difficulty in the way of effective household disinfection. It was quite impossible in ordinary cases to ensure even a reasonable degree of isolation: it should be made a public duty and a public charge.

Dr. D. F. GURD thought that, if the doctor would wear his overcoat buttoned up at infectious cases and take it off before entering the rooms of non-infectious ones, the danger of carrying infection would be minimized. He always followed this practice and had never carried any disease to his own or anybody else's children. The linen duster mentioned by Dr. Lachapelle would be a source of increased danger, for if kept in the sick room it must surely put contagion on the doctor's clothes, and, if brought and kept out of the room, it would rightly frighten the well persons.

Dr. F. W. CAMPBELL had understood Dr. Lachapelle to say that, if these three diseases had been effectively isolated, they would have been got rid of just as in the case of small-

pox. He did not agree with him here, but considered that we were free from smallpox because of vaccination rather than isolation.

Dr. Wesley Mills thought that the principle of educating the public on the subject of isolation and disinfection, as advocated by Dr. Lachapelle, was the most powerful means

of all of preventing the spread of these diseases.

Dr. J. G. ADAMI felt that it was the duty of the physician to ostentatiously educate the patients in these principles, and it would be ridiculous to demand precautions from others we did not observe ourselves. Among the poor the only way of entirely stamping out these diseases would be by compulsory isolation in a proper fever hospital.

Dr. LACHAPELLE, in replying to Dr. Campbell, said that he did not intend to classify these three diseases with small-pox, but, if isolation were properly carried out, they would be checked or reduced to a minimum. Though the real cause was unknown one case certainly followed another, and if the first case were isolated there would be no epidemic.

In replying to Dr. Gurd, he thought that visiting with

one's overcoat on was not a safe practice.

Stated Meeting, March 26th, 1897.

GEORGE WILKINS, M.D., PRESIDENT IN THE CHAIR.

LEFORT'S AMPUTATION OF THE FOOT.

Dr. J. H. HOGLE reported for Dr. Armstrong the follow-

ing case, and exhibited the patient:-

C. I. F. was admitted to the wards of the Montreal General Hospital on February 20, 1897, suffering from severe laceration of the foot. The bones of the tarsus were fractured and displaced, leaving the foot hanging by the skin of the plantar surface. Immediate operation was advised, and Lefort's modification of Syme's operation was performed. incision, commencing half an inch below the external malleolus, was made across the front of the ankle with a slight convexity downwards to the corresponding point half an inch behind the internal malleolus, and the ends connected by an incision transversely across the sole from point to point, slanting a little forward. The joint was then opened. The foot being depressed the lateral ligaments and the tendo Achillis were divided. The malleoli were removed, leaving the surface convex. The articular surface of the oscalcis was then sawn through, leaving a concave surface. The posterior tibial artery was carefully avoided, the tendons were shortened, hæmorrhage checked, the bony surfaces brought together and wired with silver wire (No. 4), and the flaps sutured with silk-worm gut. Drainage was left at the most dependant

part for forty-eight hours. Union took place by first intention, and the patient was able to stand on the stump of the foot four weeks after the operation.

COMPOUND DEPRESSED FRACTURE OF THE SKULL.

Dr. J. H. HOGLE exhibited the case for Dr. Armstrong,

and read the following report:-

J. H., male, æt. 50, was admitted to the Montreal General Hospital with a compound depressed fracture of the skull. Over the squamous portion of the temporal bone there was a large hæmatoma with a punctured wound in the centre admitting a large probe. Fracture of the skull was made out just above the auricle. The patient was in a semi-conscious condition, with pupils dilated, acting sluggishly to light, but there were no changes in the fundus. He remained in the same condition for two days when operation was advised. The incision was enlarged for two inches, the tissues were reflected and the fracture exposed. The thin squamous portion of the temporal bone had been fractured in a number of pieces with fissures running into the sphenoid. The pieces of bone were depressed, making a considerable indentation in the membranes. The blood clot was all turned out, twelve pieces of bone removed and placed in a warm carbolic solution. Considerable hæmorrhage followed, but was checked. Six pieces of bone were replaced over the membranes and the incision brought together, with drainage for forty-eight hours. Union resulted by first intention. The patient was discharged in three weeks in good condition, and on return three weeks later he showed no signs of necrosis of bone.

SUFFOCATION AND INTUSSUSCEPTION.

Dr. Andrew Macphail showed the specimens, a trachea and cesophagus occluded with a piece of meat, and an intestine obstructed by the process of intussusception. In the former case the piece of meat was impacted in the upper part of the gullet, and a small projection from the side was inserted beneath the epiglottis into the windpipe. The intestine was obstructed for the space of six inches, the bowel intensely congested, but no appearance of lymph or gross signs of peritonitis. The patient was picked up on the street and died, it was thought, from chloral poisoning, so marked was the intestinal lesion.

Dr. WYATT JOHNSTON thought the condition of suffocation was more common than was generally supposed, and that many cases were mistaken for sudden syncopal attacks. In sudden obstruction of the larynx a person might fall dead without a symptom. Statistics of autopsies of sudden death showed six per cent due to this particular cause. An instance

was recorded where a man falling off a load of grain got a

grain of wheat in his larynx and died of suffocation.

The President referred to a case reported in Taylor's Legal Medicine in which a sudden death occurred after a brawl, and the cause of death given at the autopsy was congestion of the brain. Further investigation proved it to be due to suffocation from a small piece of meat in the larynx:

PLAGUE BACILLI.

Dr. J. G. ADAMI gave a demonstration of the plague bacilli, and showed a rat killed by the disease, and exhibiting the characteristic glandular enlargements.

DOCTORS AND LAW.

Mr. PEERS DAVIDSON, of the Montreal Bar, read this paper.

Stated Meeting, April 9th, 1897.

J. GEORGE ADAMI, M.D., FIRST VICE-PRESIDENT, IN THE CHAIR. APPARENT PRIMARY CANCER OF THE INGUINAL GLANDS.

Dr. A. E. GARROW reported this case.

Dr. F. J. Shepherd asked how Dr. Garrow explained the enlargement of the corresponding glands on the opposite side, seeing that there was no connection through the lymphatics.

Dr. J. G. ADAMI drew attention to the fact that it was not unusual to find in mammary cancer both glands affected. The explanation might be that there were two primary foci.

- Dr. J. C. WEBSTER stated that the so-called primary cancer of the inguinal glands in women was sometimes secondary to cancer of the cervix or side of the bladder, the connection between the inguinal and hypogastric glands being through the glands of Guerin. He, therefore, asked if a careful examination of the inside of the pelvis had been made.
- Dr. A. E. Garrow in replying stated that a careful examination of the pelvis had revealed nothing more than an enlarged prostate. On his patient's first visit Dr. Garrow had detected an indurated mass on the dorsum of the penis, but a tight foreskin had prevented examination, and he had since refused operation.

PERFORATED GASTRIC ULCER.

Dr. R. C. KIRKPATRICK exhibited a patient, and gave the following account of the case:—

The patient whom you see before you was taken suddenly ill on the morning of March 3rd. She complained of

intense pain in the upper part of the abdomen. She had previously been in good health with the exception of a slight amount of indigestion. On this morning she had gone to her work as usual and about eleven o'clock was suddenly seized with intense pain in the region of the stomach. became very faint but did not lose consciousness. conveyed to her home, where I saw her shortly after one o'clock. At that time she was pale, with a rapid pulse and sub-normal temperature. On examination, the whole abdomen was tender, but the point of maximum tenderness was in the epigastric region. She was removed to the Montreal General Hospital, and at three o'clock, four hours after the onset of the attack, the abdomen was opened. Stomach contents escaped as soon as the peritoneum was cut through, and a short search discovered a perforation in the anterior wall of the stomach, four inches from the cardiac orifice and near the lesser curvature. The opening was about the size of a bean. The edges were drawn together by a row of continuous sutures and then inverted by a double row of Lembert sutures. The peritoneum in the vicinity was cleansed by sponging, no irrigation being used. A rubber drain was inserted and the abdomen closed. A glass drainage tube was inserted into the pelvis through a small opening made just above the pubes, and from this latter opening fully a pint of turbid serous fluid escaped. The upper tube was removed in twenty-four hours and the lower tube in forty-eight. twelve hours small quantities of hot water were given by the mouth, and in twenty-four hours milk and lime water was given. The patient made an uninterrupted recovery.

The diagnosis was based on the suddenness of the onset, the signs of peritoneal irritation with the point of maximum tenderness over the region of the stomach, and the previous history, indefinite though it was, of derangement of the stomach. Such a combination of symptoms point very

strongly to a perforated gastric ulcer.

Dr. JAS. BELL emphasized the fact that in early operations success was almost certain, but if a number of hours was allowed to elapse one would be almost sure of failure.

EPITHELIOMA OF THE FLOOR OF THE MOUTH.

Dr. JAS. BELL exhibited this patient.

BRAINS OF FOUR EPILEPTICS.

Dr. J. A. MACPHAIL exhibited the brains of four epileptics, in course of preparation by Jones' method, which were not yet examined in sections. They formed part of a series of ten epileptic brains, prepared for examination in various

ways. The gross appearance of the brains varied greatly, depending upon such associated or causative conditions as those arising from alcoholism or connective tissue changes. It was mentioned that the brains examined showed a uniform appearance, namely, a fatty degeneration and a vacuolation of the nuclei, when stained with aniline blue black. He thought the statement would have to be altered that "the changes in the nerve centres in epilepsy elude the most minute research."

RESECTION OF GANGRENOUS INTESTINE.

Dr. JAS. Bell showed a section of intestine removed for gangrene and exhibiting some unusual features.

THREE CASES OF HIGH OPERATION FOR CANCER OF THE RECTUM.

Dr. JAS. BELL read a paper on this subject.

Dr. F. J. SHEPHERD agreed with Dr. BELL that the sacral was the only proper method. He thought preliminary colotomy was a very important point in the treatment, as it was possible by this means to keep the bowel clean. He felt that an uncontrollable anus low down was not as valuable as a controllable one higher up.

Dr. G. E. Armstrong felt that the sacral incision could be made safely and successfully when inguinal colotomy pre-iously performed ensured asepsis. Heinecke's incision allowed of the greatest degree of access to the pelvis and the whole of the rectum, thus hæmorrhage could be controlled and the operation performed with a minimum loss of blood. He referred to a man shown before the Society a year ago, upon whom he had practiced the high operation, and was still well and defecating through his colotomy wound.

Early diagnosis was a most important point, and he felt that every man getting up in years, anæmic, loosing weight and complaining of diarrhœa, should have his rectum examined.

THE

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Editorial.

BRITISH MEDICAL ASSOCIATION.

MONTREAL MEETING.

The time of the great medical event of the year at Montreal is not very far distant, and it behooves all who may not have decided to be present at the Meeting to speedily make up their minds, and, if the visit is contemplated, to at once inform the Committee at Montreal of the fact. that they are very anxious to know approximately how many they will have to entertain, and urgently request all who intend going to notify the Local Secretary, Dr. J. Anderson Springle, 2204 St. Catherine street. The probable attendance of medical men is estimated at the present time to be about 1000, 250 from England, 300 from the United States and 400 Canadians; also 50 from other Colonies, Three or four lady members have signified their intention of coming across the Atlantic, among them Mrs. Garrett Anderson. Dr. Saundby Dr. Barnes and Mr. Fowke will arrive in Montreal on the 14th of August by the "Parisian."

Dr. Adami writes that the names of members who intend coming across are coming in daily, but when he wrote was not certain that a special steamer would be required, but he is prepared at any moment to charter a vessel in the event of a sufficient number of late applicants appearing.

Several eminent men who cannot be present at the Meeting have promised to send demonstration specimens.

The English Secretaries are generally working in that direction.

Among the interesting discussions which are likely to be arranged for is one on syphilis, between the Dermatological and Pharmacological Sections, introduced by Dr. Whitla of Belfast, Ireland; members of other sections of course being invited to attend.

Full arrangements will be made in advance whereby members intending to land at Quebec may obtain cards of membership entitling them to half fare and the privileges granted by the Customs Department. Vessels conveying members will probably be met at Rimouski by Canadian representatives.

One of the most interesting and pleasant of the many excursions will be the one arranged for to Ottawa, probably on Saturday. Dr. Roddick met the profession in Ottawa some days ago, and the Finance Committee of the City Council subsequently promised to undertake all the expenses connected with the giving of a luncheon to the members of the Association.

During Dr. Roddick's recent visit to Toronto, he spent some time with Professor Macallum, Secretary of the B.A. A. S., from whom much information was obtained regarding the arrangements for the Meeting. He found that a great many proposed attending both Meetings, more especially those belonging to the physiological section. Dr. Roddick arranged with the President of the Branch, Dr, I. H. Cameron, to have any members of the B.M.A. entertained during their stay in Toronto. He found the profession as a whole very enthusiastic regarding the Meeting, and very anxious to assist their Montreal brethren in every way.

It was Dr. Roddick's intention to have formed other branches in Western Ontario, in such places as London and Hamilton; but there was a feeling on the part of the medical men of these places that there was not room for branches which might interfere with the existing local medical societies.

The Rev. Dr. Norton has kindly offered the Association the English Cathedral for a special service, and Dr. Adami will arrange with either Bishop Courtney, Bishop Dumoulin or Bishop Sullivan, who are now attending the Lambeth Conference, to officiate.

Some 600 invitations have already been sent out, and replies have been received from 221 accepting. Among those who have intimated their intention to be present are:-A. C. Abbott, John Ashhurst, jr., L. D. Bulkley, W. T. Bull, H. T. Byford, H. P. Bowditch, J. Solis-Cohen, T. M. Cheesman, D. W. Cheever, W. B. Coley, J. McKeen Cattell, Fred. S. Dennis, D. B. Delavan, Reginald Fitz, Geo. H. Fox, Frank P. Foster, Christian Fenger, Virgil Gibney, H. G. Garrigues, E. H. Grandin, Landon Carter Gray, Geo. M. Gould, Hobart A. Hare, C. A. Herter, James Nevin Hyde, E. Hodenpyl, B. C. Hirst, A. Jacobi, Chas. Jewett, M. McKeen, Howard A. Kelly, Wm. W. Keen, C. A. Lindsley, John H. Musser, W. F. Mittendorf, Hunter McGuire, Thos. G. Morton, H. H. Mudd, J. B. Murphy, Paul F. Munde, W. P. Northrup, Wm. Pepper, Roswell Parke, Fred C. Shattuck, Louis Starr, M. Allen Starr, J. V. Shoemaker, E. C. Sitzka, Geo. F. Shrady, E. L. Trudeau, James Tyson, Hiram N. Vineberg, Wm. H. Welch and Casey A. Wood.

The English list of members coming has already appeared in the British Medical Journal and the daily papers, but it will be of interest to be reminded that those attending the meeting will have the privilege of listening to such men as Professor Chas. B. Ball, William Mitchell Banks, Henry Barnes, Prof. R. Boyce, Watson Cheyne, Sidney Coupland, J. Ward Cousins, J. H. Crocker, Prof. E. M. Crookshank, C. Heath, Arthur Kelsey, D. J. Leech, Right Hon. Lord Lister, Harvey Littlejohn, Donald MacAlister, Stephen Mackenzie, Thos. M. Madden, Malcolm Morris, E. Nettleship. Robt. Saundby, W. J. Sinclair, Prof. W. Whitla, Dawson Williams and Professor Richet, of Paris. Replies have been received from 12 of the Branches accepting the invitations tendered requesting them to send delegates.

The Museum Committee report that all their space has been taken up, and they probably will have to secure another building besides the large Victoria Skating Rink. This department will prove one of the most interesting features of the Meeting. A rare opportunity will be afforded to see pharmaceutical preparations, surgical and medical appliances,

and everything that interests the physician, from the leading firms of the United States and Canada as well as from acress the Atlantic. Among the leading surgical instrument manufacturers will be Collin, of Paris, and Down Bros., of London, the latter making a special exhibition of antiseptic furniture which will be well worthy of inspection. Among the leading pharmaceutical houses that are making elaborate displays will be H. K. Mulford & Co., of St. Louis; Parke Davis & Co., of Detroit; Wyeth, of Philadelphia; Sharpe & Dohme, of Baltimore, and others. Zeiss is making a special display of microscopical apparatus. There will also be a great variety of exhibits from leading firms in Vienna, Berlin, Edinburgh, London, Paris and New York.

The Local Entertainment Committee are being assisted by a Committee of ladies, consisting of the wives of the proession in Montreal and others. Among the entertainments, provided for, in addition to those mentioned before, are a number of afternoon tea and garden parties. The Ladies' Committee will specially interest themselves in looking after lady visitors, and will make ample provision for continuously entertaining them during the progress of the Meeting, so that members may without hesitation bring their ladies with them, and be assured, while they themselves are fully occupied with the essential features of the meeting, the former will be so well looked after that the time will not hang heavily. The Annual Dinner will be held at Windsor Hotel. The large dining room will accommodate 600. The dinner will cost five dollars, including wines.

The Excursions Committee have arranged an attractive and varied programme which cannot fail to meet the desire of all. The printed outlines of some of the excursions which was issued recently appeared in our last number.

Among other excursions, not noted on the printed list, is the one on Lake Memphremagog to Newport and Magog. This is one of the most picturesque spots in the Province of Quebec, and the trip will carry the tourist through one of the most fertile portions of Canada, with scenery of mountainlake and river, fairly typical of what is characteristic of the Province, and to be seen more especially in almost endless variety in the Laurentian District, which for want of time

cannot be visited. A special train will be provided which will enable the party to return in the evening. The steamer will accommodate about 800. Lunch will be taken at Newport, or probably at the foot of Owl's Head Mountain if it is found that the Hotel there can supply refreshments for the number expected to go. The excursion will be arranged for Saturday, and it is thought probable that, for those desiring it, the privilege of remaining over Sunday and returning on Monday will be obtained.

A trip is also proposed to Shawenagan Falls, on the St. Maurice River, which are said to almost rival Niagara.

Among other local trips on different afternoons are a ride round the Mountain on the electric cars and through some of the more interesting parts of the City; a trip to the top of Mount Royal, where a lunch will be served by the Mayor and Corporation of Montreal. The Incline Railway, carriages or bicycles may be the means of arriving there; a steamboat trip down the St. Lawrence; another to Ste. Anne and down the Lachine Rapids. It can be gained from what we have indicated that those going to the Montreal Meeting will not only be benefited from a medical point of view by coming in contact with the leading members of the profession from Britain, United States and Canada, and taking in the various discussions and papers which may be expected to represent the most recent advances, but that they will also be fully regaled by a varied and full round of social entertainments and pleasure trips such as has not been privileged to the members at any previous meeting.

BRITISH MEDICAL ASSOCIATION.

SIXTY-FIFTH ANNUAL MEETING.

The adjourned annual meeting of the British Medical Association will be held at Montreal on Tuesday, Wednesday, Thursday and Friday, August 31st, September 1st, 2nd, and 3rd, 1897.

President.—Henry Barnes, M.D., F.R.S.C., Senior Physician to the Cumberland Infirmary, Carlisle.

President-Elect.-T. G. Roddick, M.D., Professor of Sur-

gery in McGill University, Montreal.

President of the Council.—Robert Saundby, M.D., F.R.C.P., Physician to the General Hospital, Birmingham.

Treasurer.—Charles Parsons, M.D., Dover.

An Address in Medicine will be delivered by W. Osler, M.D., F.R.C.P., Professor of Medicine in the Johns Hopkins University, Baltimore, U.S.A.

An Address in Surgery will be delivered by William Mitchell Banks, F.R.C.S., Surgeon to the Liverpool Royal

Infirmary.

An address in Public Medicine will be delivered by Herman M, Biggs, M.D., Director of the Bacteriological Laboratory of the Health Department, New York City.

The Scientific Business of the Meeting will be conducted

in Eleven Sections, as follows, namely;

A. MEDICINE.

Macdonald Chemical Building.

President.—Stephen Mackenzie, M.D., London. Vice-Presidents: J. E. Graham, M.D., Toronto; W. Bayard, M.D., St. John, N.B.; J P. Rottot, M.D., Montreal; F. W. Campbell, M.D., Montreal; James Stewart, M.D., Montreal; H. P. Wright, M.D., Ottawa. Hon. Secretaries: H. A. Lafleur, M.D., Montreal; W. F. Hamilton, M.D., Montreal; William Pasteur, M.D., 4 Chandos Street, Cavendish Square, London W.

The following discussions will take place:

1. The Dietetic Treatment of Diabetes, to be opened by

Dr. Robert Saundby (Birmingham).

2. Arthritis Deformans (Rheumatoid Arthritis), more especially its Relation to Rheumatism, Nervous Disease and Tuberculosis, to be opened by Dr. James Stewart (Montreal).

3. Cholelithiasis; its Causation, Symptomatology, Diagnosis and Treatment, to be opened by Dr. William

Hunter (London) and Dr. Graham (Toronto).

The following, among others, are expected to take part in the Discussions in this section: Dr. Reginald Fitz (Boston), Dr. Jacobi (New York), Dr. Musser (Philadelphia), Dr. Pepper (Philadelphia), Dr. F. C. Shattuck (Boston), Dr. E. L. Trudeau (Saranac Lake, N. Y.), Dr. Jas. Tyson (Philadelphia, Dr. Wyman (Marine Hospital Service, Washington), Dr. R. L. Bowes (London), Mr. Wm. Armstrong (Buxton), Dr. Sydney Coupland (London), Professor Osler (Baltimore), Dr. S. Monckton Copeman (London), Dr. H. Handford (Nottingham), Dr. Myrtle (Harrogate), Dr. Graham (Toronto).

The following papers have been promised:-

Armstrong, William, M.R.C.S. The Exciting Cause of Rheumatoid Arthritis.

Bowles, Dr. R. L. (London.) Further experience of dangers connected with Respiration and their avoidance, with special reference to Anæsthesia, Hæmoptysis, Drowning, Apoplexy, and all Paralysed and Unconscious Conditions.

Fussell, Dr. M. H. (Philadelphia). Two Cases of Hæmophilia. Graham, Dr. J. E. (Toronto.) A Case of Crossed Hemiplegia,

the result of injury to the Pons Varolii.

Hamilton, Surgeon-Major-General (P.M.O. Plymouth). The Enteric Fever of Armies, contrasting the Disease in Tropical, Subtropical and Temperate Climates.

Osler, Dr. Wm. Exophthalmic Goître (a) Development of Maniacal Symptoms in, (b) Scleroderma with, (c) Myxœdema follow-

Pepper, Dr. Wm., and Stengel, Dr. Alfred (Philadelphia).

A Contribution to the Clinical Study of Venesection.

Star, Dr. M. Allen (New York). A Contribution to the Subject of Brain Tumours and their Surgical Treatment.

Stockton, Dr. Chas. G. (Buffalo). A type of Diarrhœa

associated with Gastric Anacidity.

Tyson, Dr. James (Philadelphia). Note on the Proper Use of Terms to denote Myocardial Changes.

Whittaker, Dr. James T. (Cincinnati). Generalisations from seven years' Use of Tuberculin.

McConnell, Dr. J. Bradford (Montreal). Pyopericardium following Pleuro-pneumonia. Pericardiotomy.

B. Surgery.

Large Lecture Room, McGill Medical College.

President: Christopher Heath, F.R.C.S., London, Vice Presidents: Hon. Sir William Hingston, M.D., Montreal; Hon. M. Sullivan, M.D., Kingston, Ontario; Hon. E. Farrell, M.D., Halifax, Nova Scotia; I. H. Cameron, M.D., Toronto; F. Le M. Grasett, M.D., Toronto; James Bell, M.D., Montreal; George E. Armstrong, M.D., Montreal. Hon.-Secretaries: Robert C. Kirkpatrick, M.D., Montreal; Thomas Walker, M.D., St. John, N.B.; Jordan Lloyd, F.R.C.S., Broad Street, Birmingham.

The President will give a short introductory address.

A discussion will take place upon the Surgical Treatment of Appendicitis, which will be opened by Dr. G. E. Armstrong (Montreal). Dr. J. Ward Cousins, Professor C. B. Ball (Dublin), Mr. Jordan Lloyd (Birmingham), will take part in the discussion.

A discussion will also take place upon the Treatment of Cancer of the Rectum by Kraske's Operation, to be opened

by Dr. James Bell.

Among those who, it is anticipated, will take part in the discussions in this Section are: Dr. W. W. Keen (Philadelphia), Dr. Collins Warren (Boston), Dr. John Ashhurst (Philadelphia), Dr. Cheever (Boston), Dr. Dennis (New York), Dr. Murphy (Chicago), Dr. McGraw (Detroit,) Dr. J. C. White (Boston), Dr. Chas. T. Bull (New York), Professor C. B. Ball (Dublin), Mr. Jordan Lloyd (Birmingham).

The following gentlemen have given notice of their

intention to read papers in this Section:

Ball, Professor C. B. (Dublin). On Trans-sacral Resection of the Rectum.

Cousins, J. Ward, M.D., F.R.C.S. (Southsea). Operative

Treatment of Organic Stricture of the Urethra.

Ferguson, Dr. W. W. (Kingston, N.B.). Varicosity of the Lingual and Buccal Veins.

Garrow, Dr. A. E. (Montreal). Ventral and Umbilical Hernia

in the same Patient.

Lloyd, Jordan, F.R.C.S. Stone in the Ureter and its Treat-

Marcy, H. ()., M.D. (Boston). On the Suturing of Wounds. McGraw, Theo., M.D. (Detroit). Invagination of the Cæcum

and Vermiform Appendix.

Newman, David, M.D. (Glasgow). (1) Cases illustrating some Interesting Points in the Pathology and Surgical Treatment of Renal and Vesical Hæmaturia. (2) Transitory Hydronephrosis and Albuminuria in cases of Movable Kidney treated by Operation.

Ross, James F. W., M. D. (Toronto). Some rare Con-

ditions of the Kidney.

Bernard, F.R.C.S. (London). Analysis of One thousand Consecutive Cases of Lateral Curvature of the Spine, treated by Posture and Exercise exclusively (without mechanical supports).

Shepherd, F. J., M.D. (Montreal). A case of Abdominal Tumour, in which nearly eight feet of the small intestine were re-

Smith, Dr. A. Lapthorn (Montreal). Seven cases of Appendicitis with Pus Tubes.

Spanten, W. D., F.R.C.S. (Hanley). Two cases of Meningo-

cele successfully operated on.

Thomson, Alexis, M.D., F.R.C.S. (Edinburgh. (Stricture of Intestine as Sequel of Strangulated Hernia.

C. PUBLIC MEDICINE.

Large Lecture Room of the Redpath Museim.

President: E. P. Lachapelle, M.D., Montreal. Vice-Presidents: F. Montizambert, M.D., Quebec; Robert Craik, M.D., Montreal; P. H. Bryce, M.D., Toronto; Sir James Grant, Ottawa; R. H. Powell, M.D., Ottawa. Honorary Secretaries: Wyatt Johnston, M.D., Montreal; E. Pelletier, M.D., Montreal; Harvey Littlejohn, M.B, C.M., Surgeons Hall, Edinburgh.

The business of the Section will be carried out as

follows:

The President will give an address on Sanitation in

Canada; its Progress up to date.

Lachapelle Dr. E. P. (President of the Board of Health of the Province of Quebec, Montreal). Sanitation in Canada; its Progress up to date.

Newsholme, A., M.D. (M.O.H. Brighton). A Plea for the International Study of Diphtheria, Illustrated by Facts and Figures.

Kaye, J. R. (M.O.H. to the Council of the West Riding of the County of Yorkshire). The Relationship of the Health Officer to

the Registration and Certification of Deaths.

Dr. F. Montizambert (Superintendent of the Canadian Ouarantine Service, Grosse Ile, Ouebec), and Dr. W. Wyman (Superintendent of the Quarantine and Marine Hospital Service, Washington) will open a discussion on the Utility of Quarantines as now Conducted (Inspection, Disinfection, and Isolation Stations) in Certain Countries at Least.

Dr. P. H. Bryce (Secretary of the Provincial Board of Health, Ontario), Dr. H. Handford (M. O. H. to the County of Nottingham), and Dr. C. B. Probst (Secretary, State Board of Health, Ohio), will open a discussion on How Far should Mandatory Measures go in Dealing with (a) Measles, (b) Whooping Cough, (c) Tuberculosis, (d) Leprosy.

Johnston, Wyatt, M.D. (Bacteriologist, Board of Health, of the Province of Quebec). Experiments with Disinfectant Gases.

Janin, G., C.E. (Montreal). On the Different Processes recommended for the Treatment of Sewage; Mechanical, Chemical and Epuration by the Arable Soil.

Motter, Dr. D. Murray Galt (Washington). Underground Zoology and Legal Medicine: a Study of Fifty Disinterments, with

Additional Experimental Observations.

Kinyoun, Dr. Jos. J. (United States Marine Hospital Service,

Washington). Methods of Di in ection.

Neech, Dr. James T. (M.O.H. for Atherton). The Period of

Infection of Scarlet Fever.

Copeman, Dr. Monckton (Medical Inspector to the Local Government Foard of England). Some Alleged Dangers of Vaccination and their Prevention.

Dr. R. F. Ruttan, Chemist to the Board of Health of the Province of Ouebec, will open a discussion on the Respective Value of the Chemical and Bacteriological Methods of Water Analysis.

D. OBSTETRICS AND GYNÆCOLOGY.

Large Lecture Room, McDonald Physics Building.

President: William Japp Sinclair, M.D., Manchester. Vice-Presidents: William Gardner, M.D., Montreal; James Perrigo, M.D., Montreal; J. A. Temple, M.D., Toronto; J. C. Cameron, M.D., Montreal; T. Johnston Alloway, M.D., Montreal; James Ross, M.D., Toronto. Honorary Sccretaries: D. J. Evans, M.D., Montreal; W. Burnett, M.D., Montreal; Arthur E. Giles, M.D., 58, Harley Street, Cavendish Square, London, W.

The following discussions will, it is proposed, be held in

this Section on the days indicated:

September 1st -The Causation and Treatment Hyperemesis Gravidarum.

September 2nd.—The Vaginal versus the Abdominal

Route in dealing with Inflammatory Conditions and Tumours

in the Pelvis. To be opened by Mr. Lawson Tait.

September 3rd.—The Palliative and Radical Treatment of Uterine Flexions and Displacements. To be opened by Dr. Barton Cook Hirst (Philadelphia).

The following papers are promised.

Alloway, T. G., M.D. (Montreal). Title not announced. Anderson, Professor Winslow, M.D. (San Francisco). Uterine Fibroids, their etiology, pathology, symptoms, diagnosis, and treatment.

Barnes, Robert. M.D. (London). Notes and a drawing to

illustrate "Barnes's Boundary Line" in Placenta Prævia.

Campbell, John, M.D., F.R.C.S. Eng., (Belfast). Labour Complicated by Abnormalities of the Cervix Uteri and Vagina.

Eden, T. W., M.D. (London). Title not announced.

Garrigues, H. J., M.D. (New York). The treatment of Abortion.

Hart, D. Berry, M.D. (Edinburgh). The Pathology Treatment of Chronic Non-suppurative Conditions of the Uterus and Appendages.

Lucas, T. P., M.R.C.S. (Brisbane, Australia). Menstruation,

its Purpose and Design.

Macdonald, A. A., M.D. (foronto). Title not announced. Maclean, Ewen J., M.D. (London). The Alter-history of some

Gynæcological Operations.

Madden, T. More, M.D., F.R.C.S.I (Dublin). 1. On some Points in Modern Treatment of Tedious Labour with description of a new Traction Forces; (2) On the Conservative Treatment of Fallopian Tube Disease.

Mundé, Paul F., M.D. (New York). Pelvic Abscess.

Parsons, J. Inglis, M.D. (London). A new Method of Treat-

ment for Prolapse of the Uterus

Robson, A. W. Mayo, F.R.C.S. (Leeds), to be read by Dr. Collier (Ripon). Porro's Operation for Tumour of the Pelvis complicating Pregnancy.

Smith, Dr. (Montreal). Diagnosis and Treatment of Retro-

version of the Uterus, with Fixation.

Temple, G. Algernon, M.D. (Toronto). Title not announced. It is expected that Dr. Howard Kelly, of Baltimore, will

give a demonstration on Genital Endoscopy.

Among those who are expected to take part in the work of this Section are: Professor A. W. Mayo Robson (Leeds), Mr. Lawson Tait (Birmingham), Dr. T. W. Eden (London), Dr. Inglis Parsons (London), W. H. A. Kelly (Baltimore), Dr. P. F. Mundé (New York), W. R. Goffe (New York), and Dr. John Campbell (Belfast).

E. PHARMACOLOGY AND THERAPEUTICS.

Lecture Hall of the Wesleyan College.

President: D. I. Leech, M.D., Manchester. Vice-Presidents: A. D. Blackader, M.D., Montreal; James Thorburn, M.D., Toronto; C. R. Church, M.D., Ottawa; J. B. McConnell, M.D., Montreal; F. J. Austin, M.D., Sherbrooke; Walter George Smith, M.D., Dublin. *Honorary Secretaries*: F. X. L. de Martigny, M.D., Montreal; J. R. Spier, M.D., Montreal; C. R. Marshall, M.B., Pharmacological Laboratory, Downing College, Cambridge.

The President will delivery a short Introductory Address.
Discussions on the Treatment of Insomnia, the Treatment of Syphilis, and Diuretics will be held on September

1st, 2nd, and 3rd respectively.

I. The Treatment of Insomnia will be opened by Dr. C. K. Clarke, Physician to the Rockwood Hospital, Kingston, on General Treatment; by Dr. R. W. Wilcox, Professor of Medicine and Therapeutics in the New York Post-Graduate School on the Value of Individual Drugs, with special reference to the newer Hypnotics; by Dr. A. McPhedran on the Ill Effects and Contraindications to the Use of Drugs; and by Dr. R. Ferguson, Lecturer on Therapeutics in the Western University, on the Mode of Action of Hypnotics.

2. The Treatment of Syphilis will be opened by Dr. Whitla (Belfast). The introducer will deal with questions under the following heads: (a) How mercury and iodides are supposed to act in syphilis; (b) when should mercurial treatment be started, especially should it be given in the primary stage; (c) the various methods for its routine administration, dosage, etc., and the length of time necessary for mercurial treatment; (d) the treatment of tertiary and

congenital syphilis.

(Hypodermic and intravenous medication will be dealt

with by a dermatologist.)

The question of Diuretics will be opened from the clinical side by Dr. Barr (Liverpool), and from the experimental

by Mr. Marshall (Cambridge).

Among those who have promised to take part in the discussions are: Professor Richet (Paris), Dr. A. R. Cushny (University of Michigan, Ann Arbor), Dr. H. A. Hare (Philadelphia), Dr. A. D. Blackader (Montreal), Dr. H. Barnes (Carlisle), Dr. Saundby (Birmingham), Dr. Donald MacAlister (Cambridge), Dr. Whitla (Belfast), Dr. J. A. Campbell (Carlisle), Dr. Brookhouse (Nottingham), Mr. Jordan Lloyd (Birmingham), Dr. J. Ward Cousins (Southsea), Dr. D. Berry Hart (Edinburgh), Dr. R. C. Stewart (Leicester), Dr. H. A. McCallum (Western University), Dr. J. Cassidy (Toronto) Dr. James Watson (Southsea), and others.

Those who have promised papers are:

Hare, W. A. The Importance of Studying the Absorption and Elimination of Drugs.

Blackader, A. D. On Apocynum Cannabinum.

Cushing, A. R. A Contribution to the Pharmacology of the Mammalian Heart.

Leech, D. J. On Quillaia Bark. Phillips, C. D. F., and Pembrey, M.S. On the Physiological and Therapentical Actions of Hydrastis Canadensis.

Halliday, A. (Nova Scotia). The Effect of Certain Drugs on

Gastric Secretion.

Fotheringham, I. T. (Toronto). On the Prescribing of Proprietary instead of Pharmacopæial Preparations.

Hutchison, R. On the Pharmacology of the Thyroid Gland. Marshall, C. R. On the Treatment of the Heart Failure of Arterio-sclerosis.

Marshall, C. R., and Taylor, J. J. On the Absorption of Mer-

cury.

Chisholm, M. (Halifax). The Opposite Effects of Drugs in Large and Small Doses.

Bazin, M. On Diphtheria Antitoxin.

Marshall, C. R. Furtner Experiments on Indian Hemp.

F. PATHOLOGY AND BACTERIOLOGY.

Lecture Room II, McGill Medical College.

President: Watson Chevne, F.R.C.S., F.R.S., London. Vice-Presidents: J. G. Adami, M.D., Montreal; J. Caven, M.D., Toronto; J. Stewart, M.D., Halifax: J. C. Davie, M.D., Victoria, B.C.; L. C. Prevost, M. D., Ottawa; M. T. Brennan, M.D., Montreal. Honorary Secretaries: W. T. Connell, M.D., Kingston, Ontario; C. F. Martin, M.D., Montreal; Rubert W. Boyce, M.D., University College, Liverpool; William Hunter, M.D., 54 Harley Street, Cavendish Square, W.

The following will be the subjects for discussion:

1. Serum Diagnosis and the Agglutinating Action of Serums, to be introduced by Professor Wyatt Johnston (Montreal).

2. Immunisation.

3. The Bubonic Plague.

Among those who will take part in the discussions will be Professor Welch (Johns Hopkins), Professor Crookshank (London), Dr. W. Hunter (London), Dr. A. S. Grunbaum (Liverpool), Dr. A.C. Abbott (Philadelphia), Dr. T.M. Cheesman (New York), Dr. R. Fitz (Boston), Dr. E. Hodenpyl (New York), Dr. Trudeau (Saranac), and Dr. F. F. Wesbrook (Minneapolis).

It is urged that British pathologists unable to be present should send to Dr. Rubert Boyce lantern slides and other material for demonstration bearing upon the subjects selected

for discussion.

The following papers are promised:

Adami, J. G., M.D. and Staples, E., M.D. (Montreal). On the Appendices Épiploicæ.

Barker, Lewellys F., M.D., (Baltimore). On the Changes in the Nerve Cells in Epidemic Cerebro-spinal Meningitis, with special reference to lesions in the lower motor neurons.

Boyce, R. The occurrence of the B. Tuberculosus in Milk. Caren, Professor J., M.D. (Toronto). Title of Paper not re-

ceived.

Connell, W. (Kingston, Ont.) Title of Paper not received. Copeman, S. Monckton, M.D., (London). On Vaccinia.

Flexner, Simon, M.D. (Johns Hopkins University). Pseudo tuberculosis Hominis Streptothricia.

Goldman, Professor (Freiburg). On Early Infection of Blood Vessels in Carcinoma and Sarcoma (lantern slides).

Grunbaum, A. S., M.D. The Smegma Bacillus.

Herter, C. A., M.D. (New York). Experimental Observa-tions on the Relation between Bacterial Activity in the Intestine and the Indican in the Urine.

Hodenpyl, Eugene, M.D. (New York). On the Occurrence of

Typhoid Fever without Lesions of the Small Intestine.

Manson, Patrick, M.D. On Filaria Sanguinis Hominis, with the demonstration of a new Species from Central and South America. Stiles, H. J. On the Evolution of Cancer Bodies (lantern slides).

Thomson, Alexis H. Epithelioma of Penis.

Van Gieson, Ira, M.D. (New York). On Hæmato-myelopore and its Relations to Syringomyelia.

Washbourn, J. W., M.D. Demonstration of Specimens of an

Infective Neoplasm from the Dog.

Welch, Professor (Baltimore). The Distribution and Patho-

genic Effects of the B. Aerogenes Capsulatus.

Wright, Hamilton K., M.D. (Montreal). On the Topography of the Posterior Columns.

G. Psychology.

Morris Hall, Presbyterian College.

President: R. M. Bucke, M.D., London, Ontario. Vice-Presidents: D. Clarke, M.D., Toronto; T. J. Burgess, M.D., Verdun, Quebec; A. Vallée, M.D., Quebec; G. Wilkins, M.D., Montreal. Honorary Secretaries: J. V. Anglin, M.D., Montreal; George Villeneuve, M.D., Montreal; J.G. Blandford, M.R.C.S., D.P.H., London County Asylum, Banstead, Sutton, Surrey.

The officers of this Section, believing that many of the papers already offered will be provocative of considerable debate, have determined to announce no special subjects for discussion. Among those who have offered to contribute

papers are:

Bucke, R. M., M.D. (London, Ontario, Asylum). On Mental

Clark, W., M.D. (Toronto Asylum). The Reflexes in Psy-

chiatry. Hobbs, -, M.D. (London, Ontario, Asylum). Surgical Gynæcology in Insanity.

Russell, J., M.D. (Hamilton, Ontario, Asylum). Insanity in its Relation to the State.

Villeneuve, George, M.D. (Longue Pointe). Crime and In-

sanity.

Among those who intend to take part in the business of the Section are Dr. N. H. Beemer (Mimico Asylum, Ontario), Dr. G. Alder Blumer (Utica, New York), Dr. C. K. Clark (Rockwood Hospital, Kingston, Ontario), Dr. Edward Cowles (Waverley, Mass.), Dr. T. D. Crothers (Hartford, Conn.), Dr. G. Stanley Hall (Worcester, Mass.), Dr. Hazlitt (Sunbury), Dr. Henry Hurd (Baltimore), Dr. Rogers (Asylum for the Feeble-Minded, Faribault, Minn.), Dr. George H. Rohe (Maryland Hospital for the Insane, Catonsville), Dr. Rothesay Stewart (Leicester) and Dr. A. R. Urquhart (Perth).

H. OPHTHALMOLOGY.

Lecture Room I, McDonald Engineering Building.

President: Edward Nettleship, F.R.C.S., London. Vice-Presidents: F. Buller, M.D., Montreal; R. A. Reeve, M.D., Toronto; Ed. Desjardins, M.D., Montreal; A. A. Foucher, M.D., Montreal. Honorary Secretaries: W. H. Smith, M.D., Winnipeg; J. Jehin-Prume, M.D., Montreal; Thomas Herbert Bickerton, M.R.C.S., 88 Rodney Street, Street, Liverpool.

It is intended that a discussion should take place on the Prevention of Accidents to the Eyes of Persons engaged in Industrial Employments. The Cllowing gentlemen have expressed their intention of contributing papers to the Section:

Bickerton, T. H. (Liverpool). (1) The Question of Colour Vision in the Public Services; (2) on Mules's Operation.

Buller, Dr. F. (Montreal). Abnormalities in the Functions of

the Extrinsic Ocular Muscles.

Foucher, Dr. A. A. (Montreal). Auto-Infection in Pustulous Keratitis.

Fulton, Dr. John F. (St. Paul, Minn., U.S.A.) Amblyopia of Strabismus.

Jehin-Prume, Dr. Jules (Montreal). A Contribution to the Treatment of the Syphilitic Affections of the Eye.

Lee, Charles G. (Liverpool). On an Unusual Case of Orbital Tumour.

Wurdemann, Dr. H. V. (Milwaukee, Wis., U.S.A.) Relation of Skiascopy to other Objective and Subjective Methods for the Estimation of the Ocular Refraction (with Exhibition of Hand Skiascope).

Specimens.—Specimens will be shown by Mr. Treacher Collins,

Mr. Priestley Smith and Dr. C. H. Usher.

I. LARYNGOLOGY AND OTOLOGY.

Lecture Room II, McDonald Engineering Building.

President: Greville Macdonald, M.D., London. Vice-Presidents: W. Tobin, M.D., Halifax; G. A S. Ryerson M.D., Toronto; H. S. Birkett, M.D., Monteal; G. R. Mc Donagh, M.D., Toronto. Honorary Secretaries: A. Chretien M.D., Montreal; H. D. Hamilton, M.D., Montreal; W. Per mewan, M.D., 7 Rodney Street, Liverpool.

The following papers are announced in this Section:

Bryan, J. H. (Washington). A Contribution to the Anatomy of the Fronto-Ethmoidal and Frontal Maxillary Regions.

Delavan, Dr. D. B. (New York). Surgical Treatment of Malignant Disease of the Larynx.

Farlow, Dr. Jno. W. (Boston, Mass., U.S.). Presentation of Instruments, with remarks.

Hobbs, Arthur G., M.D. (Atlanta, Ga.). When not to Inflate the Middle Ear.

Horne, Jobson, M.D., and Yearsley, MacLeod, F.R.C.S. (1) On Eucaine as a Local Anæsthetic in the Surgery of the Throat, Nose, and Ear. (2) On Turbinectomy.

Ingals, E. Fletcher, M.D. (Chicago). On the Relation of Nasal Diseases to Pulmonary Tuberculosis.

Jones, T. W. Carmallt, F.R.C.S.Ed. Some After Effects of Turbinotomy.

Knight, Chas. H., M.D. (New York). Upon a Foreign Body (Metallic Button Hook) removed from the Larynx by Laryngo-Fissure.

Mackenzie, Dr. John N. (Baltimore, Ind., U.S.). The Physiological and Pathological Relations between the Nose and the Sexual Apparatus.

O'Dwyer, J., M.D. (New York). Acute Syphilitic Stenosis of the Larynx in the Adult treated by Intubation.

Roe, John O., M.D. (Rochester, New York). The Correction of Nasal Deformities by Subcutaneous Operations.

Spicer, Scanes, M.D. (London). (1) On Reduction of the Inferior Turbinate Bone in Certain Cases of Nasal Obstruction. (2) On the Significance and Treatment of Recurrent Retention of Secretion in the Lacunæ of the Tonsils. (3) A Case of Multiple Papillomata of Larynx in a Man aged 73.

Wurdemann, Dr. H. V. (Milwaukee, Wis., U.S.A.). Phosphoric Necrosis of Temporal Bone.

Among those who intend to take part in the business of the Section are also Dr. J. Solis-Cohen (Philadelphia), Dr. Birkett (Montreal), Dr. Chretien (Montreal), Dr. G. R McDonagh (Toronto), Dr. D. B. Delavan (New York), Dr. Charles Warden (Birmingham) and Dr. J. W. Mackenzie (Baltimore).

J. ANATOMY AND PHYSIOLOGY.

Lecture Room I, McGill Medical College.

Presidents: Augustus D. Waller, M.D., F.R.S., London. Vice Presidents: F. Shepherd, M.D., Montreal; A. B. Macallum, M.D., Toronto; T. Wesley Mills, M.D., Montreal; A. Primrose, M.D., Toronto; J. B. A. Lamarche, M.D., Montreal; D. B. Fraser, M.D., Stratford, Ontario. Hon. Secretaries: J. M. Elder, M.D., Montreal; W. S. Morrow, M.D., Montreal; Robert Hutchison, M.D., Physiological Laboratory, London Hospital Medical College, Turner Street, Mile End, E.

The following have been selected as subjects for the

discussions:

September 1st. Anæsthetics, to be introduced by the President of the Section (Dr. A. Waller). Among those who are expected to take part in this discussion are Dr. Shore (Cambridge), Dr. Kemp, F.R.S. (Baltimore), Professor W. D. Halliburton, F.R.S. (London), Dr. A. B. Macallum (Toronto), Dr. H. A. Hare (Philadelphia), Dr. G. T. Kemp (Baltimore), Dr. G. Gordon Campbell (Montreal), Dr. Kenneth Cameron (Montreal).

September 2nd. The best methods of Teaching Anatomy, to be introduced by Professor Alex. Macalister (Cam-

bridge) and Dr. F. J. Shepherd (Montreal).

September 3rd. The Causation of the Heart Beat and its Modifications, introduced by Dr. Gaskell, F.R.S. (Cambridge) and Professor T. Wesley Mills (Montreal). Dr. Porter (Boston), Dr. Howell (Baltimore,) and Dr. Bowditch (Boston), Dr. W. Townsend Porter (Boston), Dr. A. B. Macallum (Toronto), Dr. T. Wesley Mills (Montreal), Dr. G. Carl Huber, (Ann Arbor, Mich.), Dr. A. P. Knight (Kingston), are expected to take part in the discussion.

The following papers have been promised:

Huber, G. Carl, M.D., Assistant Professor of Histology and Embryology, University of Michigan, Ann Arbor. A brief account of some observations on the Sympathetic Ganglia of Vertebrates.

Kemp, G. T., M.D., Ph.D. (Baltimore). Nitrous Oxide Anæsthesia.

Knight, A. P., M.A., M.D., Professor of Physiology, Queen's University, Kingston, Ontario. Action of certain Chemical Salts on the Heart Beat of Fish Embryos.

Lombard, Warren P., M.D., Professor of Physiology, University of Michigan, Ann Arbor. Anatomy of the Knee-joint- of the Frog, with special reference to the action of Flexor and Extensor Muscles.

Macalister, Professor Alex. (Cambridge). The Influence of Head Shape on Cranio-cerebral Topography.

Macallum, A. B., M.B., Ph.D., Professor of Physiology, Toronto University. Some observations on the Micro-Chemistry of Cells and Tissues.

Meltzer, S. J., M.D. (New York City). On the effect of Anæsthesia upon the Reflexes of Deglutition and of the Closure of the Glottis.

Mills, T. Wesley, M.D., L.R.C.P., Professor of Physiology, McGill University. Title of paper not yet received.

Paton, Dr. Noel, (Edinburgh). The Phosphorus Compounds and the Exchange of Phosphorus in the Salmon.

Pembrey, Dr. M. S. Title not received.

Stewart, Dr. G. N. The relation of Electrolytes to the other Constituents of Animal Cells and Liquids, with especial reference to the Blood Corpuscles and Blood Plasma.

Thompson, Professor W. H. (Belfast). Degenerations resulting from Lesions of the Sensory Area of the Cortex Cerebri.

Dr. Gustav Mann will send for exhibition specimens illustrating the Minute Histology of the Liver in Active and Resting conditions. Dr. D. A. Welsh (Edinburgh) will exhibit specimens illustrating the Histology of the Parathyroid Glands. Dr. Geo. Oliver will exhibit his new Hæmoglobinometer and Hæmocytometer.

Dr. Shore and Professor Sherrington will take part in the proceedings.

K. DERMATOLOGY.

Lecture Room III, McDonald Engineering Building.

President: Malcolm Morris, F.R.C.S.Ed., London. Vice-Presidents: J. E. Graham, M.D., Toronto; F. J. Shepherd, M.D., Montreal; J. A. S. Brunelle, Montreal; G. L. Milne, M.D. Victoria, B.C. Hon.-Secretaries: Gordon Campbell, M.D., Montreal; J. M. Jack, M.D., Montreal; James Galloway, M.D., 54 Harley Street, Cavendish Square, W.

A subject selected for discussion in this Section is the Clinical and Pathological Characteristics of Vesicular Skin Diseases, especially the Dermatitis Herpetiformis Group.

It is intended that a joint meeting should be held with the Section of Pharmacology and Therapeutics for the discussion of the subject of the Treatment of Syphilis.

The following papers are announced:

Fox, T. Colcott. Demonstration of the Biology of the Tri-chophyte.

Galloway, James (London). On Melanotic Conditions of the Skin preceding Malignant Disease of the Skin.

Among those who are expected to take part in the discussions of this Section are Dr. E. B. Bronson (New York),

Dr. L. D. Bulkley (New York), Dr. J. A. Fordyce (New York), Dr. J. N. Hyde (Chicago), Dr. G. T. Jackson (New York), Dr. Stephen Mackenzie (London), Dr. A. Eddowes (London), and Dr. White (Boston).

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 31ST, 1897.

11 a.m.—Cathedral Service.

- 2.30 p.m.—Opening Ceremonies. Welcome by His Excellency the Governor-General, Lord Aberdeen, the Mayor of Montreal, and others. Address by the President-elect, Dr. T. G. Roddick.
 - 4 p.m.—Garden Party at the Royal Victoria Hospital (Mr. W. B. Angus, President of the Royal Victoria Hospital), etc.
 - 9 p.m.—Conversazione at Laval University. Address by Professor Richet, Delegate from the French Government, etc.

WEDNESDAY, SEPTEMBER 1ST, 1897.

10 a.m.—McGill University: Opening of Sections.

- 2.30 p.m.—Windsor Hall: Address in Medicine by Dr. W. Osler.
 - 4 p.m.—Excursion down the St. Lawrence: Garden Parties, etc.
 - 9 p.m.—Reception by the Hon. Sir Donald A. Smith, High Commissioner of Canada.

THURSDAY, SEPTEMBER 2ND, 1897.

9.30 a.m.-McGill University: Sectional Meetings.

- 2.30 p.m. Windsor Hall: Address in Surgery by Mr. W. Mitchell Banks.
 - 4 p.m.—Excursion across the Island, International Golf Match, etc.
- 7.45 p.m.—Annual Dinner of the Association.

FRIDAY, SEPTEMBER 3RD, 1897.

9.30 a.m.-McGill University: Sectional Meetings.

I p.m.-Lunch on the Mountain, given by the Mayor.

- 2.30 p.m.—Windsor Hall: Address in Public Medicine by Dr. Herman Biggs; Concluding Speeches, etc.
 - 4 p.m.—Excursion down the Lachine Rapids; Garden Parties, etc.
 - 9 p.m.—Conversazione at McGill University.

SATURDAY, SEPTEMBER 4TH, 1897.

Excursions to Lake Memphremagog, Saranac, Ottawa, Quebec, etc.

ANNUAL MUSEUM.

THE PATHOLOGICAL MUSEUM.

The Pathological Museum will be established in the Dissecting Room of McGill Medical College, a large, lofty, and well-lighted room. The Secretary of the Pathological Sub-committee of the Museum Committee is Dr. C. F. Martin, McGill Medical College, Montreal, who will be glad to receive the loan of specimens, drawings, and photographs illustrative of both normal and morbid anatomy, as also any new apparatus for research in physiology, pathology, or bacteriology.

Specimens illustrating diseases peculiar to the remoter portions of the Empire are especially desired. It is proposed to make a special collection of photographs and microphotographs of morbid conditions. These will be suitably

mounted and carefully returned to the owners.

Suitable vessels and jars, and spirit and other media will be provided for moist specimens.

FOODS, DRUGS AND APPLIANCES.

Regulations Regarding Exhibits.

- 1. Communications on general matters connected with the Museum and applications from intending exhibitors should be addressed to the Honorary Secretaries, Drs. J. W. Stirling or J. M. Jack, 2204 St. Catherine Street (British Medical Association Rooms).
- 2. Applications for space must be in the hands of the Secretaries before July 25th, accompanied with a brief descriptive account of each exhibit for insertion in the Museum Catalogue. Information of the allotment of space will be furnished as promptly as possible, and on receipt of cheque for the cost of such space, a card for the admission of the exhibit will be forwarded.
- 3. All cheques to be made payable to J. W. Stirling, M.B.
- 4. All exhibits should be directed to the British Medical Museum, Victoria Skating Rink, Drummond Street, Montreal, Canada, with the name of the Section for which they are intended. Packages must also be addressed to a firm's representative at the Museum.
- 5. Exhibits must be delivered between August 27th and 28th; they must each bear a card indicating the name and address of the exhibitor; they must be arranged in their allotted space efore 2 p.m. on August 28th, and it is desirable that they, e not removed till September 6th.

- 6. Signs or placards must be so arranged as not to interfere with adjacent exhibits: on the central tables no sign or placard must reach higher than 2 feet 6 inches from the table.
- 7. The Committee will not be responsible for any risks or expenses incurred; they reserve discretionary power to exclude any exhibit they may consider unsuitable; they will only receive exhibits conditionally upon strict compliance with the foregoing regulations, and in all matters of doubt and difficulty their decision shall be final.

8. The Museum Committee or its representatives must be recognized as being in full control of the exhibition building

and its management.

Tables occupying the centre of the Hall, and other prominent positions, are to be let by private tender; other tables varying in charges from 4s. to 2s. per square foot. Certain floor space will be let at 1s per square foot.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION

MEETING AT LOUISVILLE, OCT. 5-8, 1897.

The Executive Committee met recently at Louisville in conjunction with the local Committee of Arrangements, the following being present: Drs. Stucky, Grant, Mathews, Love, Holloway and Reynolds. It was determined to make the coming meeting the largest and best in the history of the Association, and everything points to a fulfillment of this endeavor. The railroads will make a round-trip rate of one and a third fare or probably one fare. The address on Surgery will be delivered by Dr. J. B. Murphy, Chicago; the address on Medicine by Dr. John V. Shoemaker, Philadelphia. Title of papers should be sent to Dr. H. W. Loeb, Secretary, St. Louis, Mo.

Book Reviews.

Lippincott's Medical Dictionary. A Complete Vocabulary of the terms used in Medicine and the Allied Sciences. With their Pronunciation, Etymology and Signification, including much Collateral Information of a Descriptive and Encyclopædic Character. Prepared on the Basis of Thomas's Complete Medical Dictionary. By Ryland W. Greene, A. B., with the Editorial Collaboration of John Ashhurst, Jr., M.D., Ll.D., Geo. A. Piersol, M. D., and Joseph P. Remington, Ph. M., F. C. S. Imperial octavo; pp. 1154. (Pniladelphia

and London: J. B. Lippincott, 1897.) Dominion agent, Chas. Roberts, 593a Cadieux St., Montreal.

We have presented to us in this volume an ideal dictionary for the student, and one eminently fitted as a book of reference for the physician and special investigator. It is, in our opinion, the best book of its kind yet published. Of course there are many larger dictionaries and encyclopædias, but these very often contain much information useless, or at least unnecessary, to the ordinary inquirer.

The volume although large is not cumbrous, embracing in all some twelve hundred pages; the binding is exceedingly neat and the type large and clear, and in this it differs from many other dictionaries which attempt to put all the information possible in the smallest space possible, and for this purpose sacrifice readable type. Throughout it the editor has employed the new system of phonetic notation, based on the principles of phonetics recognized by all modern philologists, and here used for the first time in a medical The definitions are very concise and lucid, the simplest English words being chosen in their construction. In addition to definition, certain of the more important headings have received treatment of a descriptive and encyclopædic character: under important organs and tissues is given an outline of their structure and function; under each drug, its physiological action, therapeutic use, official preparations and doses; under chief diseases, some account of their symptoms, causes, and treatment.

It contains all the words which have lately been introduced into medical terminology, and, as is stated in the preface, the compiler and his associates thoroughly gleaned hundreds of volumes and periodicals in their desire to make this list as perfect as possible. Many of the terms which have fallen into entire disuse, and which are only to be met with in dictionaries, are completely ignored, but those of the terms of the old school which are at all in use to-day

receive recognition.

We can unhesitatingly give the work our fullest endorsation as being quite up to date and fulfilling all the requirements of a reliable, convenient Dictionary adapted to the wants of the practitioner and student.

PUBLISHERS DEPARTMENT.

IT QUIETS PAIN AND PROMOTES IT.

Rather a paradoxical statement. True, nevertheless. When pain is useless, then antikamnia quiets it; when it is necessary, the same remedy increases it. This refers to the use of antikamnia in the pains of labor and

as a promoter of labor pains.

H. C. Reemsnyder, A. M., M. D., of Philadelphia, in a recent article says that whenever there is unnecessary pain in labor he administers ten grains of antikamnia, repeated in two hours, if necessary. In this way the pain which annoys the woman without helping her is relieved, while the uterine contractions become more firm and labor is accelerated.

Dr. R. B. McCall, Hamersville, Ohio, contributes an article to the Woman's Medical Journal on this same subject. He says: "In cases marked by unusual suffering in second stage, pains of nagging sort, frequent or separated by prolonged intervals, accompanied by nervous rigors and mental forebodings, one or two doses, five grains each, of Antikamnia Tablets, promptly change all this. Indeed in any cases of labor small doses are helpful, confirming efforts of nature and shortening duration of process."