

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |

The Canadian Practitioner and Review.

VOL. XXXI.

TORONTO, AUGUST, 1906.

No. 8

Original Communications.

GASTROPTOSIS.

By GRAHAM CHAMBERS, B.A., M.B., TORONTO.
Associate in Clinical Medicine, University of Toronto.

Gastroptosis is a term applied to downward displacement of the stomach. It is usually accompanied by ptoses of other abdominal organs, especially the right kidney.

Kussmaul was the first to call attention to some displacements of the stomach and their connection with clinical symptoms. However, it was Glenard's researches on enteroptosis which drew general attention to the frequent occurrence of downward displacements of abdominal organs and to their relation to symptoms of disease. On this account Glenard has been given the credit of priority, and dropping of abdominal organs in general is frequently designated Glenard's disease; and inasmuch as gastroptosis is generally accompanied by downward displacement of other abdominal organs they are sometimes considered together under the caption enteroptosis.

With regard to the nomenclature of the various ptoses of the abdominal viscera it is customary, following Glenard, to use the term enteroptosis to designate prolapse of the abdominal organs in general. Strictly speaking this is not correct, as, etymologically, enteroptosis means falling of the intestines. A better term for the general prolapse is splanchnoptosis. If we adopt this term we can use the term enteroptosis for downward displacement of the intestines, just as gastroptosis, hepatoptosis, splenoptosis, are used respectively for dropping of the stomach, kidney, liver and spleen.

In cases of gastroptosis it is rare to see displacement of

the cardia. The latter may be said to be the only point of the stomach which is not freely movable. The pylorus is usually displaced downwards, occasionally below the navel. The lesser and greater curvatures are always lower than normal in the abdomen. However, the different parts of the stomach are not uniformly displaced, which character, together with the fact that gastroptosis is frequently complicated by gastrectasis, gives rise to a variety of forms and positions of the stomach.

The form and position of the stomach are determined principally by the locations of the pylorus and lesser curvature. These parts are frequently displaced downwards, the concavity of the lesser curvature becoming less and directed more to the right. In some cases the pylorus is prolapsed to the extent of producing an almost vertical position of the lesser curvature. Then the stomach assumes a position similar to that which is present at birth. Again there are cases in which the curvatures are prolapsed out of proportion to the pylorus. As a result the concavity of the lesser curvature is increased and kinking of the duodenum is more apt to occur. This type of displacement, sometimes called loop or crescent, is usually only observed in women with much relaxation of the abdominal muscles.

Etiology.—Gastroptosis is a very common phenomenon. It occurs in both sexes, but probably three times as frequently in women as in men. It is particularly common in women who have borne children.

In order to gain a good idea of the genesis of gastroptosis it is well to recall to mind the normal position and natural supports of the stomach.

The stomach is situated in the epigastric and left hypochondriac regions immediately under and in contact with the left lobe of the liver and left dome of the diaphragm. It is held in position by the esophagus, ligaments, and by a cushion of intestines and mesenteries situated beneath it which is itself supported by intestinal ligaments and attachments, and intra-abdominal tension produced by the tonicity of the muscles of the abdominal wall and pelvic floor. The tone and strength of these muscles and ligaments which take part in supporting the stomach may be said to depend upon three conditions, namely, hereditary influence, exercise and health. Again, the positions of the liver and diaphragm are to be considered, as they are situated immediately above the stomach and therefore when displaced downwards must necessarily cause some degree of sinking of the stomach.

A consideration of all these matters aids us in determining the causes of gastroptosis. These are as follows:

1. Hereditary weakness and defective development of the gastric ligaments and abdominal muscles. These I believe to be common causes. I have frequently seen gastroptosis in young people, especially girls, in whom no other cause could be made out. I have an impression that hereditary weakness is a much more potent etiological factor than it is generally credited to be. Some persons are born with delicate muscles and ligaments, and are therefore predisposed to gastroptosis. I believe that even in many cases of gastroptosis following pregnancy hereditary weakness is an important etiological factor. Stiller gave much prominence to hereditary influences in the etiology of gastroptosis. He thought that a movable tenth rib was a very common accompaniment. This has not been the case in many observations.

2. Diminished abdominal tension. This is usually the result of relaxation of the abdominal muscles after parturition. It occasionally follows rapid emaciation, removal of ascitic fluid and of ovarian cyst. Diminished abdominal tension is also observed in young adults in whom deficient exercise and hereditary weakness appear to be the causative factors.

3. Constriction of the lower part of the thorax. Tight lacing and the wearing of skirts suspended from the waist-band are the usual causes of this deformity. The contracted waist of gastroptosis is about the level of the ensiform cartilage.

4. Deformities of thorax. In flat chest, frequently seen in persons predisposed to tuberculosis, the diaphragm is usually displaced downwards. This, together with the delicacy and weakness of tissue of persons with this form of thorax, tends to produce downward displacement of the stomach.

5. Excessive eating, particularly during convalescence of infections such as typhoid fever and influenza, is sometimes the cause of gastroptosis as well as of gastrectasis.

Symptoms.—The onset of gastroptosis may be insidious or sudden. All the cases of sudden onset which I have observed have followed parturition. Some persons with downward displacement of the stomach, movable kidney, and flabby abdomen have no complaints except, probably, constipation. On the other hand, others are emaciated, weak, continually complaining of indigestion and of a great variety of nervous symptoms. In the diagnosis, therefore, of the disease we

depend upon the objective symptoms, and of these prolapse of the stomach is the only distinctive sign. We should, however, be familiar with all the symptoms, objective and subjective, as well as the functional signs which characterized the disease. The objective symptoms are:

1. Emaciation. This is a very common and important symptom. Indeed, it is so common that when an emaciated patient with indigestion and nervous disturbance consults me I always think of gastroptosis as a possible cause of the complaints.

2. Diminished tension of abdominal muscles. This is not a constant sign, as gastroptosis occurs with no relaxation of abdominal muscles. In cases following pregnancy a flabby abdomen is invariably present.

3. Depressed epigastrium and pulsating abdominal aorta. In patients in whom there is much emaciation the head of the pancreas may occasionally be palpated.

4. Movable kidney, usually the right.

5. Splashing sound below the normal lower limit of the stomach.

6. Prolapse of the stomach. This is the only constant physical sign. Both the lesser and greater curvature are displaced downwards. In some cases the stomach may be seen moving up and down in the abdomen during deep respiration. In many cases it is necessary to distend the stomach with air or carbon dioxide in order to determine the positions.

7. Visible peristalsis. Pyloric obstruction due to duodenal kinking is the usual cause of this phenomenon in gastroptosis. The loop or crescent type of displacement is generally present.

8. Downward displacement of the liver and spleen. These are uncommon, particularly of the spleen.

9. Prolapse of the uterus. In gastroptosis this displacement is invariably associated with diminished abdominal tension.

The functional signs of gastroptosis may with advantage be next considered. All the functions, motor and secretory and sensory, are frequently perverted.

The gastric motility is usually more or less diminished. In some cases this is so slight as not to give rise to symptoms of indigestion. In others it may be so marked as to produce stagnation of food, with resulting fermentation and gastric irritation. This motor insufficiency may be due either to the anomalous posture of the stomach, requiring greater peristalsis for the propulsion of the chyme into the duodenum or

to obstruction, the result of duodenal kinking. It may also be due to gastrectasis, with weakness of the gastric muscles, a common accompaniment of gastroptosis.

Hyperchloric acidity may be normal, increased or decreased. Hyperacidity is present in the majority of cases. It is the usual finding in women with relaxed abdominal muscles. The excessive hydrochloric acid may be due to the irritation of the stagnating food, and the nervous disturbances which are so frequently present in cases of gastroptosis, as well as to the causes of the disease called hyperchlorhydria.

The sensory function of the stomach is generally increased. This is shown by the frequency of hyperesthesia of the gastric mucosa, a cause of a good deal of the distress in some cases of gastroptosis.

As stated above, the subjective symptoms are very variable. The usual complaints are gastro-intestinal and nervous. The appetite is generally good, though the patient is afraid to eat lest it cause distress. Constipation is common, and pain and a sensation of fulness in the epigastrium after eating are frequently present, particularly in cases complicated by hyperchlorhydria. In some cases the pain appears one to three hours after ingestion of food, and is partly or wholly relieved by eating or by taking baking soda. This type of pain is usually caused by excessive hydrochloric acid in the gastric contents, and is usually associated with other symptoms of hyperchlorhydria, such as pyrosis, headache, drowsiness, sluggishness after eating, etc.

In cases of gastroptosis in which there is motor insufficiency belching is a common symptom. This is usually due to fermentation, the result of stagnation of food. In some cases, however, the eructations are principally of neurotic origin. Rumbling in the abdomen, particularly on the left side, is another common and very annoying symptom. It is generally observed in patients with a flabby abdomen, and is precipitated by deep breathing or by excitement. It only occurs during gastric digestion, and is generally intensified by the wearing of corsets. This last character has led some to suggest that the rumbling sounds are stenotic in origin.

The nervous symptoms of gastroptosis are very similar to those of neurasthenia. Patients frequently complain of sleeplessness, irritability, inability to do mental work, headache, backache, palpitation, coldness of the extremities and of many other symptoms which characterize neurasthenia. In persons predisposed to neuroses hysterical symptoms may supervene.

Diagnosis.—Gastroptosis, as a rule, may be said to be a composite disease, as the displacement of the stomach is usually accompanied by some other organic or functional gastric disturbance. The diagnosis of the displacement itself is easy. The condition is suggested by loss of weight, weakness, indigestion, neurasthenic complaints, relaxation of abdominal muscles, and ptoses of other abdominal viscera, and is definitely determined by observing the position of the lesser curvature lower than normally in the abdomen. Having determined the presence of the displacement we should examine the patient with the object of determining the presence or absence of gastric affections, which are frequently associated with gastroptosis, such as perversions of gastric functions and gastrectasis. We should also remember that the stomach in its displacement is liable to the same diseases as it is in the normal position. We must, therefore, determine the presence or absence of all organic and functional diseases of the stomach before our knowledge is sufficiently complete to formulate a method of treatment.

Treatment.—The treatment of gastroptosis is one of the most successful in gastrotherapy. Correct treatment produces almost immediate improvement in the condition of the patient, but it must be continued for a considerable time in order to produce a cure. The following are the most important therapeutic indications:

1. To replace the stomach and to support it by an abdominal band, applied to the lower abdomen.
2. To increase abdominal tension and strengthen the natural supports of the stomach.
3. To increase the capacity of the upper abdomen.
4. To correct perversions of the secretory, motor and sensory functions.
5. To regulate the bowels.
6. To improve the general condition of the patient and particularly the tone and strength of the nervous system.

The replacement of the stomach in its normal position is the most important indication in treatment. In many cases, as soon as the stomach is in its normal position, there is an immediate improvement in the condition of the digestion and of the nervous system. The gastric functions become normal and the patient quickly gains in weight. With the increase of weight there is a deposit of fat in the abdomen, which raises the abdominal tension and tends to prevent prolapse of the stomach. The increase in weight is usually accom-

panied by an improvement in the condition of the nervous system and in the tone of the gastric ligaments and abdominal muscles. The question is, How may the stomach be raised? In cases in which the abdomen is flabby, any well-fitting abdominal band, applied between the navel and the pubes is usually sufficient. It should be applied while the patient is in the recumbent position, the stomach being first forced up into the epigastrium. In place of a band I frequently use strips of adhesive plaster applied horizontally as well as diagonally across the lower abdomen. Physical exercise and massage are also of much value in improving the tone of the muscles of the abdominal wall, particularly of the recti. The best method of giving exercise to these muscles is while lying down to bend the trunk upon the thighs, rising from the recumbent to the sitting posture. While performing these movements the feet should be placed under some fixed structure. Another movement very useful in strengthening the recti is, while lying on the back, to raise the legs from the horizontal to the vertical position. Massage is also an important therapeutic measure. I have found it most effective in cases with marked neurasthenic symptoms.

With the object of increasing the capacity of the upper abdomen the patient should be instructed to practice deep breathing. Deep breathing not only tends to expand the upper part of the abdomen but also to improve the tone of the gastric ligaments and abdominal muscles. Tight lacing and the wearing of heavy skirts suspended from the waist-band are antagonistic to the expansion and should be prohibited.

In the correction of perversions of functions, after replacing the stomach, we adopt the same methods as we do in the treatment of these disturbances as independent affections. Thus, in cases characterized by hyperacidity, we give antacids after food and a soothing, easily digested diet. When motor insufficiency is a symptom strychnine is useful, and the diet should be soothing, easily digested and propelled into the duodenum.

The improvement of the general condition of the patient frequently requires other measures than those directed to correct digestive disturbances. The nervous system in particular requires special attention. Many patients with gastroptosis suffer from neurasthenia. In the treatment, therefore, of gastroptosis with neurasthenia we institute measures for the relief of both affections. The improvement in digestion and the removal of all irritation in the digestive tract always

aids in relieving nervous symptoms. Sleep is improved, and the patient is less depressed and has greater application for mental work. In some cases the rest cure gives excellent results. It is the rest cure, with the ingestion of large quantities of milk and other foods, which is indicated. In following out the treatment particular attention is to be directed to the weight of the patient. An increase in weight not only indicates an improvement in the condition, but also, by increasing abdominal tension, becomes itself a therapeutic factor.

Selected Article.

THE HIGH RANGE OF NORMAL TEMPERATURE AND PULSE THROUGHOUT THE PUERPERIUM.

By E. HASTINGS TWEEDY, F.R.C.P.I.,
Master, Rotunda Hospital, Dublin.

Amongst the many myths of our profession there is none more common than the belief that puerperal sepsis has long since ceased to be a scourge, and this is the belief generally entertained by practitioners concerning their own districts. One cannot peruse current periodicals even for a short time without the prevalence of this idea becoming apparent. There appears to be an almost universal assumption that this black scourge of the past has ceased to be a terror to the lying-in women because of increased knowledge and greater precision in obstetrical technique.

A reference to the Registrar-General's reports, however, shows little, if any, improvement in the death-rate from sepsis. This is flippantly accounted for by the assumption of a higher diagnostic skill among the younger race of practitioners as compared with those who went before them, and by the increased carefulness which is now displayed in furnishing statistical figures. Have we not all long since been satiated by the assertions of our friends as to the immunity from sepsis enjoyed by their patients? and are they not ever ready to refer us to longer or shorter periods in which no record of such a cause of death can be found in their practice?

It is known to us all that many fatalities from sepsis are not registered as such. We are also aware that memory often fails to recall disasters of a distant past, and that statistical results quoted from memory are the most fallacious of fallacious figures. Even were we disposed to ignore these sources of error, and accept without reservation these honest beliefs, they would nevertheless utterly fail as proof of the non-existence of septic infection.

Success in obstetrical practice, as it exists in the larger maternity hospitals, or in the district of the private practitioner, is more accurately gauged by a low percentage of morbid cases than by any table of septic mortality.

We need constantly to be reminded nowadays that septic deaths did not occur as a rule in the private practice of obstetric physicians living in the pre-antiseptic era to an extent sufficient to excite local alarm. Then, as now, men practiced midwifery for long periods with an entire freedom from septic mortality, and these periods of immunity extended also to the maternity hospitals.

It will probably come as a surprise to some that, in the year 1766, 611 women were delivered within the walls of the Rotunda Hospital, with a maternal mortality from all causes of three, nor is this seen to be a very exceptional year, for a low death-rate is also recorded during many other yearly periods. In fact, a perusal of the old records makes one at first rub one's eyes with astonishment at the comparatively good results obtained.

It is not until we compare figures by the thousand that the superiority of the present-day methods asserts itself, and this superiority is seen to be overwhelming if our judgment be not based on a death standard alone.

It rarely falls to the lot of the private practitioner to be able accurately to tabulate his cases by thousands, and therefore, from a statistical standpoint, individual experience expressed by a mortality-rate is for the most part of little value. In a standard of morbidity, however, we possess a ready and certain means for determining success either in private or hospital practice, whether the number of those attended be few or many.

In the early history of the Rotunda Hospital about the period before alluded to (1766 to 1780), maternity patients slept two in each bed. They lay on tick bedding, in a condition none too clean. The water supply to the hospital was provided by means of a pump drawing a well which must almost certainly have been contaminated. In the report from which I have obtained this information, the Master seeks permission from the Governors of the hospital to employ two men to clean out the hospital cesspool, which had become a grievous nuisance to his patients and to the neighborhood. In spite of all these disadvantages the total yearly death-rate frequently stood at seven with a total of 800 or 900, or even at a lower figure.

If figures such as these prove anything, they prove that the majority of women will survive the processes of childbirth under the most disadvantageous circumstances. If, however, there should be neglect in carrying out the well-recognized

principles of asepsis, a small minority alone will pass through this ordeal unscathed.

In proof of the latter statement I adduce the temperature records of the Rotunda Hospital for a portion of two months in the years 1879 and 1880. These charts, which have fortunately been preserved, contain the temperatures registered of ninety-nine patients, and a reference to the ward books of the same periods proves conclusively that the hospital was in a more than usually healthy condition at this time. Carbolic acid and Condy's fluid were in general use, and the hygienic state of the institution had markedly improved, and yet an analysis of these ninety-nine records cannot fail to surprise us.

Forty-eight out of these ninety-nine charts record a morbid state of temperature; of these, nine reached up to or above 105 deg. F., eighteen more were up to 103 deg. F., whilst in only five instances is the range of temperature up to but not above 101 deg. F. Moreover, in reading the notes of the apparently normal cases, one is compelled to suspect that the temperature did not accurately express the true condition of affairs. I find the following notes appended to no less than ten of these, all occurring in one of the two bound books containing forty-nine and fifty charts respectively:

1. Chill, pain in abdomen.
2. Chill, erysipelatous patch over buttocks.
3. Succession of chills, headache.
4. Great pain in abdomen.
5. Great pain in abdomen, also down legs.
6. Chill.
7. Chill.
8. Feeling very weak and faint when sitting up.
9. Chills, lochia fetid and scanty.
10. Series of chills, face flushed, lochia very fetid and scanty.

Results such as these compare badly with our present-day statistics, which show for the six months ending April 20th, 1905; that amongst 918 women delivered in the wards of the hospital, there were 58 cases recorded as morbid, a percentage of 6.31.

An analysis of these 58 cases will show that our results are still more favorable than the bald statement of the figures would lead one to believe. In 48 instances the temperature and pulse did not remain above the normal for longer than four days, and of the remaining 10, morbidity in 5 cases did

not exceed five days' duration. In the other 5 the morbid state persisted for twenty-one, sixteen, eleven, eleven, and eight days respectively. Until private practitioners can produce results as good, if not better, than these, they may be perfectly certain that their technique lacks perfection.

It is necessary to add that none of these cases gave rise to serious anxiety, and all save two had normal records of temperature and pulse for thirty-six hours before leaving the hospital.

It may possibly be argued that an apyrexial puerperium is neither normal nor to be desired, and that a temperature elevated within reasonable limits exercises no injurious influences.

We all know that numberless women have passed through the ordeal of sepsis with constitutions irrevocably shattered, and important organs hopelessly damaged or destroyed. It is, moreover, probable that vital forces are never fully restored to those who have suffered from a septic disease, even in a mild form, and none can doubt that the exhausting influences of childbearing are due to a septic dyscrasia rather than to the exercise of a normal function.

The question now arises, What are the physical indications of puerperal morbidity? and the answer, strange to say, is one on which there is at present no definite agreement.

Some years ago it was considered that slight pyrexia should be looked on as due to physiological processes, and to mark its high limit an arbitrary line was placed at a temperature of 100.4 deg. F. by Continental authorities. In the Rotunda Hospital this arbitrary line has until lately been fixed at 100.8 deg. F. Modern authorities, however, have nearly all arrived at the opinion that the processes of childbearing have none but the most transitory effects in elevating temperature above that which is considered normal in health. Our maternity charts clearly demonstrate the truth of this belief, and, moreover, show the fallacy of estimating morbidity by any arbitrary range of temperature when taken without consideration of another important factor—the pulse.

I cannot too strongly urge on my professional brethren the importance of arriving at some common basis for determining morbidity other than that of this most unsatisfactory temperature limit. I trust that this subject will be seriously taken in hand by those members of our Association interested in the subject, and I for one will gladly co-operate with the heads of other maternity hospitals in an effort to establish a common standard on which to base our returns of morbidity. Only in

this way can we gain a clear insight into the efficiency of our methods, for the adoption of a common standard would enable us to compare our results with other statistics compiled on a similar basis.

It is only by being armed with such precise data that we will be enabled with force to urge the adoption in practice of the means which procure the smallest percentage of morbidity.

There are many objections to be urged against the arbitrary limit to a temperature of 100.4 deg. F. It is an unsatisfactory indication of the well-being of the lying-in woman. Were such a temperature maintained for even a few consecutive days the woman would certainly be in an abnormal condition. Again, it is unsatisfactory because of the fact that it takes no account of the sudden and transitory rises of temperature which may easily extend beyond this limit without adversely affecting the patient, and without being even remotely allied to septic absorption as we understand the term. It is an unreliable indication in that it depends entirely upon the accuracy of a clinical thermometer, and those of us who know how frequently these instruments are at fault can appreciate the uncertainty of statistics relying on such a basis alone.

A morbid state, if of septic origin, will most certainly show itself by an acceleration of the pulse as well as by a rise of temperature, and it is upon the knowledge of this fact that our present method of estimating morbidity in the Rotunda Hospital is based.

Our bed charts are arranged so as to make these two records apparent at a passing glance. The high range of normal temperature is placed at 99 deg. F., that of the pulse at 90 beats per minute. It is certain that even a mild condition of septic absorption will prove sufficiently potent to cause these limits to be overstepped, and will at once put us on our guard, and enable us to take prompt means to deal with the abnormal condition.

The pulse chart acts, too, as a ready corrective of faults of the thermometer, and the two taken together greatly aid us in detecting mistakes in either.

In order to eliminate the sudden and unimportant exacerbations of temperature from our morbidity list, we do not enter in our records as morbid any case where morning and evening pulse and temperature are not recorded as abnormal on three consecutive occasions, or, to put it in other words, until the abnormal condition has made itself apparent for twenty-four hours. Furthermore, we do not take into account

the irregularities of pulse or temperature so frequently observed within twenty-four hours of the period following delivery.

It is conceivable that a hectic temperature might be present without fulfilling these conditions, but such an eventuality need not be seriously considered.

We have sufficient proof in the Rotunda Hospital that the method I have indicated works with smoothness and absolute simplicity. It enables one to notice at once the true condition of the patient, and it directs the attention to deviations from the normal where a definition of morbidity based on temperature alone would at times fail to ensure the early recognition of the patient's state.

The above paper was presented in the Section of Obstetrics and Gynecology at the annual meeting of the British Medical Association at Leicester, in 1905 (see *British Medical Journal*.) In consequence, a committee was appointed on puerperal morbidity. The committee has collected a great amount of valuable information, and has prepared the following report:

“*Resolved*,—That it is desirable that maternity hospitals should adopt a uniform standard of puerperal morbidity, so that doubtful cases should no longer be included in one set of statistics and excluded from another, as is the case at present. A criterion of morbidity, necessarily arbitrary, is therefore recommended in the hope that it may be adopted in British and colonial hospitals.

“*Recommendations*.—The committee accordingly beg to submit the recommendations embodied in the following six resolutions:

“1. That irregularities in temperature occurring during the twenty-four hours following delivery should not be considered for statistical purposes.

“2. That as the time puerperal patients remain in hospital varies in different institutions, statistical tables should be formed from the records up to the end of the eighth day after delivery.

“3. That statistical records should relate only to patients delivered after the sixth lunar month of pregnancy.*

“4. That records of pulse and temperature should be taken

* It is recommended that cases delivered before the end of the sixth lunar month of pregnancy should be tabulated separately.

twice a day in every case, the following precautions being observed:

“(a) The temperature to be taken night and morning—if possible between the hours of 7 and 9 a.m. for the morning, and between the hours of 5 and 7 p.m. for the evening record.

“(b) The temperature to be taken in the mouth.

“(c) The thermometer to be left in the mouth for four minutes.

“5. That the table of puerperal morbidity should include all fatal cases, and also all cases in which the temperature reaches 100 deg. F. on any two of the bi-daily readings from the end of the first to the end of the eighth day after delivery.†

“6. That all cases which according to this convention are ‘morbid’ should be tabulated in statistics, the probable cause of the illness and its duration in days being given.”

†Dr. Tweedy urged that the table should, in addition, include all cases where on three consecutive bi-daily readings the pulse-rate exceeded 90 per minute and the temperature 99 F., but the majority of the Committee were of opinion that the introduction of a double standard was not advisable at present.

Progress of Medical Science.

SURGERY.

IN CHARGE OF EDMUND E. KING, GEORGE A. BINGHAM, C. B. SEUTELLWORTH
AND F. W. MARLOW.

Syphilis and Enlarged Glands.

A good many years ago Virchow pointed out that smooth atrophy of the lymphoid masses, normally present at the base of the tongue, took place in cases of late syphilis. This symptom has since been further investigated without any definite conclusions.

The recognition of syphilis may, at times, be exceedingly difficult, especially when the primary lesion has been overlooked, and the secondary symptoms slight or not recognized until perhaps some obscure tertiary lesion occurs, and from a therapeutical standpoint makes the diagnosis of antecedent specific disease all important.

The recognition of any symptom which will aid in diagnosis will be appreciated by the clinician.

Dr. N. B. Potter (*Boston Med. and Surg. Jour.*, March 8th, 1906) made a study of three hundred cases of various kinds to ascertain whether the atrophy of the glands at the base of the tongue was constantly found in syphilis. He found the symptom present in about 50 per cent. of syphilitic patients, and only in 10 per cent. in cases without a syphilitic taint.

The tongue is protruded as far as possible, and the organ is wrapped in a towel and grasped by the left hand of the observer. The right index finger is then introduced to the region behind the circumvallate papillae and the area carefully palpated. If the glands are normal, syphilis is probably to be excluded, while typical atrophy is indicative of syphilis. A moderate degree of atrophy is, however, of little diagnostic importance.

C. B. S.

Cancer of the Tongue.

In the *Brit. Med. Jour.* of May 26th, 1906, Mr. Henry T. Butlin contributes an article on very early conditions of cancer of the tongue. The object of the communication is to draw the attention of medical men to the diagnosis of early malignant disease of the tongue, apparently so insignificant as to be easily overlooked.

He considers three stages in the development of the large majority of cases of cancer of the tongue:

1. *Predisposing conditions*, such as leucoplakia, ichthyosis, chronic superficial glossitis, which may not lead to a cancerous condition, but undoubtedly render the individual much more liable to malignant changes.

2. *Precancerous conditions*, such as warty growths, thick plaques, sore places, which, though not actually cancerous, inevitably proceed to cancer unless completely removed.

3. *Actual cancer*, in one of its various forms, when it is obvious to the surgeon, and which even excites suspicion in the lay mind.

The author furnished seven specimens of lesions excised during the precancerous stage on request of the Imperial Cancer Research. To the surprise of Mr. Butlin, all seven turned out to be young epitheliomata, on microscopic examination, in continuous sections.

The author doubts whether there are really any conditions perceptible to human sight and touch which are truly precancerous in the usual acceptation of the term, but are rather cases of early malignant disease.

The paper is accompanied by a beautifully colored plate showing the tongues from which the specimens were taken and also of the microscopic sections of the parts removed.

C. B. S.

Oblique Inguinal Hernia.

Mr. R. W. Murray (*B. M. J.*, June 16th, 1906) discusses the etiology and treatment of oblique inguinal hernia. He holds the view that in a large percentage of hernias in adults the sac is preformed, or, in other words, the bowel or omentum descends into a patent processus vaginalis. In the majority of mammals the muscular and aponeurotic structures forming the inguinal canal are practically the same as in man. The natural posture of the animal, whether horizontal or vertical, determines the potency or otherwise of the processus vaginalis testis. In quadrupeds this process invariably communicates with the general peritoneal cavity, and in rodents, although the opening is so free as to allow the testes to pass periodically from the abdomen to the scrotum, yet hernia does not occur in these animals. In the quadrumana, whose bodies are as often vertical as horizontal, the funicular process is very narrow, and in the higher apes and man the process is normally completely obliterated.

The author believes, from both clinical and post-mortem

observations, that although a potential hernial sac exists in quite a large percentage of all persons, yet hernia does not necessarily occur. He contends that the main factor in the production of a hernia is a weak "inguinal sphincter," by which he refers to the structures guarding the internal abdominal ring. If the processus vaginalis is not obliterated and the internal abdominal ring is small and the muscles guarding it are powerful, the probability of a hernia occurring is slight. If, on the other hand, the ring be large and the muscles weak, the chances of a hernia occurring are considerable. This would account for the frequency of the inguinal variety in infants. The increased muscular strain at puberty and the weakening of the muscular fibres later on in life, would account for the onset of a hernia during these two periods.

Mr. Murray states that in infants, where the protrusion is not large, a cure may be brought about by a truss, because the instrument prevents the bowel or omentum descending, and maintaining the potency and dilating the funicular process and at the same time stretching the injured sphincter. The lumen of the process thus becomes extremely small and makes the descent of the bowel very difficult. It is improbable, however, that obliteration of the patent funicular process is ever brought about in this manner,

On account of the uncertainty of a cure by means of a truss, and the subsequent dangers of a potential hernial sac, the author strongly advocates operation during early life, in bottle-fed babies, even as early as three months; and in breast-fed infants, after the eighth month. He lays great stress upon tying the sac at the level of the internal ring, and to insure this he always splits the fibres of the external oblique aponeurosis to the level of the internal ring, ties off the sac as high as possible, in order to present as far as possible a smooth, flat, and unbroken peritoneal surface. He then overlaps the two flaps of the split external oblique, and in this way narrows and lengthens the inguinal canal. No attempt is made to stitch the conjoined tendon to Poupart's ligament.

The same principles of treatment hold good in adults. The essential point is to remove the sac, so as to avoid leaving a depression at the internal abdominal ring, and at the same time to do nothing to impair the action of an already weak and stretched inguinal sphincter.

The author finds fault with the majority of modern methods of cure by operation as being too elaborate and med-

dlesome, the intention being to fill a gap rather than to restore lost muscular power. He attributes the success of the usual operations to the fact that the sac is ligatured high, and he expresses doubt that structures which are transposed and stitched together remain permanently in such a position.

Mr. Murray has used with much success the same simple method of operation in adults. Professor Kocher, of Berne, recommends a very similar procedure.

In elderly patients, where the sac is wide and the application of a truss is impossible, the writer advocates the use of a thick rubber pad, having an aperture for the transmission of the cord and vessels. This pad is imbedded in the tissues, and is held in place by sutures. He has also used gauze for the same purpose, and reports good results. c. n. s.

Observations Upon the Cause and Treatment of Perineal Abscess, and of Periurethral Suppurations Above the Triangular Ligaments.

Dr. Samuel Alexander, in *Medical Record*, October 28th, 1905, says:

It is claimed by many surgeons that periurethral abscess is sometimes not of urethral origin. These surgeons content themselves by merely incising such abscesses without opening the urethra, and include the later procedure only when there is urinary infiltration. Alexander has noted that many of these cases will recur at the original site of infection, even if, at the time of operation, no communication with the urethra is determinable. The author, from a long series of observations, believes that all cases of perineal abscess arise from the urethra; and in the cases noted above, the infection arises either through fissures in the urethra, or from infections above the triangular ligament, in the form of prostatitis, bulbitis or inflammations of the Littré or Cowper glands. Fissures in the urethra have been proven to occur by Delbet after over-distention of the urethra. For this reason Alexander condemns forced irrigations in the treatment of gonorrhœa. The infections of the Littré and Cowper glands in cases of perineal abscess have been abundantly proven after careful dissections by Matz and Bartrina in 1903. A third and obvious cause of perineal abscess is a laceration of the urethra by violence, either external or internal. The perineal infection from a Cowperitis, a Littréitis or a prostatitis may arise either by lymphatic infection along the membranous urethra or after rupture of the abscess into the urethra. The view that perineal

abscess, in cases of stricture, is due to ulceration above the point of stricture, cannot be accepted.

The facts noted above explain why it is that despite the urethral origin of all perineal abscesses, urinary infiltration does not necessarily follow; it also explains the cases of recurrence after simple incision. For these reasons, Alexander's rule at present is to open the membranous urethra in all cases throughout its entire length; all secondary abscesses above the triangular ligament are opened and drained either into the urethra or into the perineal opening. The author emphasizes the importance of early diagnosis, by careful external and internal palpation. As soon as the diagnosis is made of supuration above the triangular ligament, operation should be performed to prevent further infection.—*Amer. Jour. of Surgery.*

Report of First Congress of the International Surgical Society.

Discussion on the treatment of prostatic hypertrophy showed a marked increase in the number of friends of prostatectomy by the perineal route. Rydiger recommended perineal enucleation. Reginald Harrison prefers the suprapubic method. Roving declared that castration and the Bottini operation were abandoned, but that vasectomy deserved more consideration. The condition of the intrinsic muscles of the bladder should to a great extent determine the treatment. If the bladder wall is paralyzed, catheter life or merely perineal drainage is indicated; in soft, diffuse, parenchymatous prostates vasectomy cured 60 per cent.; an obstructing middle lobe can be cured by partial suprapubic removal. Complete prostatectomy should be performed where malignant degeneration, repeated hemorrhages or prostatic abscess are present. When vasectomy has failed suprapubic removal of the prostate is indicated. Too many prostatectomies are performed, for the gravity of this operation which abolishes the power not only to procreate but also to conjugate, is underestimated.

Hartmann favors the transvesical operation, as does Carlier. Klapp advocated spinal anesthesia. Verhoogen said that the prostatic urethra should be sacrificed, for after removal of the prostate, the neck of the bladder sinks down and the prostatic portion of the urethra becomes useless. During narcosis he prefers a ventral position of the patient. Kummel has abandoned castration because of its profound effects on the patient; he uses the Bottini method in selected cases, but prefers pros-

tatectomy. Freudenberg used the Bottini cauterization in 152 cases with 84 per cent. of cures and 7.2 per cent. mortality. He says this is the ideal method for the genito-urinary specialist, as the operation incapacitates for only a few days and the generative function is not destroyed. He prefers prostatectomy in cases with very large prostates, with tumor-like projection of the middle lobe and alkaline cystitis. Albarran reviewed the entire discussion and said that he personally favored perineal operations. Frank mentioned many recurrences he had seen after the Bottini operation.—*Am. Jour. of Surgery*—Report of First Congress of the International Surgical Society.

Editorials.

TORONTO WESTERN HOSPITAL.

In the last report of this Institution we find some interesting particulars as to its history. In the year 1896 a few Physicians of Toronto became incorporated under the Friendly Societies' Act and rented a house for Hospital purposes on Manning Avenue. Commencing with this one building it was soon found that three were required, and it became evident that a more complete organization was necessary, and consequently a special Act of Incorporation was obtained in 1899 from the Ontario Legislature. In May of that year a park lot was secured of 4 1-2 acres, and the building thereon was renovated and made suitable for hospital purposes. This building was opened December 16th, 1899, with accommodation for 35 patients and requiring 13 nurses.

The Hospital has now five buildings in use, together with many tents of various sizes with accommodation for 130 patients and a staff of over 40 nurses. Plans are now completed for another building, which will furnish additional accommodation for about 100 patients, each paying about \$3.50 a week, making the Institution one of more than 200 beds. It is hoped that ere many years the Institution will have accommodation for about 500 patients.

NEW EPILEPTIC HOSPITAL.

We are pleased to announce that the New Hospital for Epileptics has been formally opened. This very-much-needed Institution is situated in Woodstock, and is composed at present of three buildings. Of these the central or administration building is the most imposing. On either side is placed a building on the Cottage plan measuring about 90 feet wide by 40 feet long with an addition in the rear. Each of these Cottage buildings has accommodation for 20 patients. It is hoped, however, that the capacity of each will soon be increased by

the addition of a third story, and that from this small beginning will grow a large Hospital within a few years. Two additional Cottages will soon be built, and it is probable that more will follow from year to year until the Institution has altogether accommodation for several hundred patients. Dr. J. J. Williams, formerly of Lisle, is the Medical Superintendent.

THE TEACHING OF MIDWIFERY IN ENGLAND.

There has been a feeling for some time that the teaching of Midwifery in England, and especially in London, has not been in all respects satisfactory. In an interesting editorial on this subject in the *British Medical Journal* of June 9th of this year we are told that the General Medical Council has recently taken vigorous action. It sent out to every medical school a number of detailed inquiries as to the teaching of Midwifery, analyzed the answers, and published the conclusions drawn from them.

We are told that though the teaching may now be imperfect there is great improvement as compared with 30 or 40 years ago. It is stated that in some of the schools students were allowed to teach themselves Midwifery, but lately the arrangements for the teaching of Midwifery and the safety of maternity patients have been more adequate, although not yet up to the standard which the Council thinks necessary.

It seems to be exceedingly difficult in Great Britain, United States and Canada to procure proper facilities for teaching Midwifery at the bedside. In Scotland, Ireland, and the English Provincial Schools, the students get a large amount of practical teaching at Infirmaries, Dispensaries, and Lying-In Hospitals, most of which institutions are not officially connected with Medical Schools. In London the student acquires some Midwifery experience in an Out-Door Maternity Department.

The Committee of the General Medical Council in its report tells us that in Lying-In Hospitals the student "is always under the supervision of the matron, resident medical officer, or physician, and is placed in favorable circumstances to receive

bedside instructions in the progress of labor and the puerperium." Whereas, "the instruction given in Out-Door maternities during labor and the puerperium is at the best of a meagre character." Full instructions as shown may be given within the walls of a Lying-In Hospital, but in Out-Door-maternities it is not possible inasmuch as the student attends the great majority of his cases alone.

The report contains certain recommendations as follows: The student is not to attend midwifery till he has done his clerking and dressing, that is, has gained some practical experience of medicine and surgery, and he is to attend 20 cases under direct supervision in a Lying-In Hospital or the maternity charity of a General Hospital.

The Journal, in commenting on these recommendations, expresses the opinion that theoretically they may be excellent, but under present circumstances they are impracticable. It points out that at present there is only one Lying-In Hospital in London to which students are admitted, Queen Charlotte's. At this Hospital during 1905, 27 students and 24 qualified practitioners attended. If the new recommendations are to be carried into effect accommodation must be found for about 500 students annually.

Although it is easy to understand that almost insuperable difficulties stand in the way of ideal teaching we may venture to hope that a greatly improved condition of things in connection with the teaching of midwifery in England will come into existence within a few years.

ONTARIO MEDICAL COUNCIL.

The Annual Meeting of the Ontario Medical Council was held in Toronto July 2nd to 7th, inclusive.

The meeting was opened under the Chairmanship of Dr. Albert A. Macdonald, the last year's President. The first order of business was the election of officers with the following results:—

President: Dr. W. H. Moorehouse of London.

Vice-President: Dr. Wm. Spankie of Wolfe Island.

Treasurer: Dr. H. Wilberforce Aikins.

Registrar: Dr. R. A. Pyne; Counsel: Mr. H. S. Osler;
Prosecutor: Mr. Chas. Rose; Auditor: Dr. J. C. Patton.

On motion of Drs. Bray and Macdonald, it was decided to place the name of Dr. William Osler upon the Register of the Council "as a slight recognition of his great ability and the high standard he has attained in his profession."

The following discipline committee was selected for the present year: Dr. J. L. Bray, Chatham; Dr. J. A. Robertson, Stratford; Dr. G. Henderson, Strathroy; and Dr. J. Lane, Mallorytown.

NOTES.

The Thirty-Ninth annual meeting of the Canadian Medical Association will be held in Toronto on the afternoon of the 20th of August and the forenoon of the 21st. The meetings, which will be of an executive character, will be held in the New Science Building on College Street, at the head of McCaul St. The first session will convene at 2 o'clock p.m. in the North lecture room. The chief item of business will be the reception of the report of the Special Committee on Reorganization, and for this alone there should be a large and representative attendance.

Queen's Medical Faculty.

The building of the Medical Faculty of Queen's University, Kingston, was partially destroyed by fire July 12th. The many friends of Queen's will be glad to learn that the work of repairing the building is well under way. It is expected that the building will be ready for occupation about the end of August. New apparatus to replace that destroyed is now on its way from England. It unfortunately happened that the contents of the Museum were destroyed, otherwise no inconvenience would be felt during the coming winter session.

We offer our congratulations to the Canadian Journal of Medicine and Surgery, on the excellent appearance of its special July number.

University of Toronto.

The following gentlemen will constitute the Board of Governors of the University of Toronto, the Chancellor and President ex-officio:

For a two years' term—Dr. John Hoskin, K.C., Hon. S. H. Blake, Sir Mackenzie Bowell, of Belleville; Mr. Jas. L. Englebert, of Petrolia; Rev. Father Teefty, Judge Colin Snider, of Hamilton.

For a four years' term—Mr. Byron E. Walker, Mr. G. R. R. Cockburn, Mr. Chester D. Massey, Rev. D. Bruce Macdonald, Mr. W. T. White, Mr. E. C. Whitney, of Ottawa.

For a six years' term—Professor Goldwin Smith, Chief Justice Moss, Mr. E. B. Osler, M.P., Mr. J. W. Flavelle, Rev. J. A. Macdonald, Mr. H. T. Kelly.

Toronto General Hospital.

The new Board of the Toronto General Hospital is constituted as follows:—Appointed by the Government, Mr. Cawthra Mulock, Prof. A. B. Macallum, Mr. Wm. Mackenzie, Mr. W. F. MacLean, Mr. Eugene O'Keefe, Mr. W. J. Douglas, Mr. Chas. Cockshutt, Dr. J. Orlando Orr.

Representing the University of Toronto:—Acting President, Mr. M. Hutton, Dr. John Hoskin, Mr. Byron E. Walker, Rev. J. A. Macdonald, Mr. W. T. White.

Representing the City:—Mayor Coatsworth, Ald. Dunn, Ald. Noble, M.D., Ald. McGhie, Controller Jones.

Representing the Subscribers:—Mr. M. J. Haney, Mr. P. C. Larkin, Mr. J. W. Flavelle, Mr. W. E. Rundle, Mr. H. C. Cox, Mr. C. D. Massey, Mr. H. H. Fudger.

The first meeting of this Board was held at the General Hospital July 18th. Mr. J. W. Flavelle was elected Chairman and Mr. P. C. Larkin, Vice-Chairman. The following sub-committees were formed:

Executive Committee:—Mr. Flavelle, Chairman, Mr. Byron E. Walker, Mr. W. T. White, Mayor Coatsworth, Dr. Noble, Mr. Cawthra Mulock, Prof. A. B. Macallum, Mr. M. J. Haney, and Mr. P. C. Larkin.

House Committee:—Mr. P. C. Larkin, Chairman, Mr. Chas. Cockshutt, Dr. John Hoskin, Controller Jones, Mr. W. F. Maclean, Ald. Dunn, Rev. J. A. Macdonald, Mr. W. J. Douglas, Prof. Hutton.

Finance Committee:—Mr. H. H. Fudger, Chairman, Mr. W. E. Rundle, Mayor Coatsworth, Mr. Byron E. Walker,

Mr. Wm. Mackenzie, Mr. Eugene O'Keefe, Mr. N. J. Haney, Mr. H. C. Cox, Mr. Cawthra Mulock, and Mr. P. C. Larkin.

Building Committee:—Mr. M. J. Haney, Chairman, Mr. H. C. Cox, Ald. McGhie, Dr. Orr, Mr. Chester Massey, Mr. Cawthra Mulock, Mr. Eugene O'Keefe, Mayor Coatsworth, Mr. W. T. White, and Prof. A. B. Macallum.

Tuberculosis Exhibition.

An exhibition with the above title will be given in Toronto in the latter part of August and the first few days in September. It will commence August 21st and continue about two weeks, that is, during the meeting of the British Medical Association and the first week of Dr. Orr's exhibition.

The first exhibition of this sort was held in New York, and was conducted by the National Association, for the study and prevention of Tuberculosis, under the leadership of such men as Dr. Knorr, Vincent Bowdige and other well-known physicians.

It is stated that there will be over 100 different exhibits, including large exhibits from Paris, Switzerland, Baltimore, Philadelphia, Denver, Col., Adirondacks, Muskoka and Toronto.

Other particulars as to the exhibition may be learned from Mr. J. S. Robertson of Toronto, Secretary of the National Sanitarium Association.

Ontario Medical Library Association.

Hours of Opening: The library is open to members each week-day from 10 a.m. to 1 p.m. and from 2 p.m. to 6 p.m. except Saturdays, when it closes at 1 p.m.

Loans: Books can be loaned to members for two weeks, periodicals for three days.

Loans outside Toronto: Books and journals will be loaned to members of the Ontario Medical Association outside of Toronto, provided:

1. That such precautions be taken in packing as to guard against any injury in transportation.

2. That the borrower shall pay express charges both ways.

The library will be glad to receive gifts of books, journals and reprints.

Recent Accessions to the Library.

Ashton: Practice of Gynaecology, 1905.

von Borgman: System of Surgery, 5 vols.

- Babcock: Diseases of the Heart, 1903.
 Barker: Spalteholz's Atlas of Human Anatomy, 1905.
 Baruch: Principles and Practice of Hydrotherapy, 1904.
 Belot: Radiotherapy, 1905.
 Barr: Mental Defectives, 1905.
 Cheyne & Burghard: Manual of Surgical Treatment, 6 vols.
 Cabot: Modern Clinical Medicine, 2 vols. published.
 Chittenden: Physiological Economy in Nutrition, 1905.
 Cushny: Pharmacology and Therapeutics, 1905.
 Edgar: Practice of Obstetrics, 1904.
 Gould: Biographic Clinics, 1905.
 Hewlett: Krehl's Clinical Pathology, 1905.
 Huntington: Anatomy of the Human Peritoneum, 1903.
 Hutchison: Food and Dietetics, 1906.
 Kelly & Hurdon: The Vermiform Appendix and its Diseases, 1905.
 Lindsay: Diseases of the Lungs and Heart, 1904.
 Mummery: After-Treatment of Operation, 1903.
 Moynihan: Abdominal Operations, 1905.
 Nothnagel: System of Medicine, 11 vols.
 Ochsner: Clinical Surgery, 1904.
 Park (Roswell); An Epitome of the History of Medicine, 1903.
 Posey & Wright: Diseases of the Eye, Ear, Nose and Throat.
 Osler: Practice of Medicine, 1905.
 Robson & Moynihan: Diseases of the Stomach, 1904.
 Sahli: Diagnostic Methods, 1905.
 Seudder: Treatment of Fractures, 1904.
 Wright (A. H.): Text-Book of Obstetrics, 1905.
 Whitman: Orthopedic Surgery, 2nd ed.

Transactions, Reports and Periodicals.

- Association of American Physicians.
 American Pediatric Soc.
 American Climatological Association.
 American Roentgen Ray Co.
 American College of Physicians.
 American Laryngological Association.
 American Laryn., Rhino. and Otol. Soc.
 Henry Phipps Institute.
 Münchener Medizinische.
 Deutsche Medizinische.

BRITISH MEDICAL ASSOCIATION.

We learn from the local Honorary Secretaries that very satisfactory arrangements have been made for the coming meeting. We are asked to give some prominence to the fact that Reception Committees exist in Montreal, Quebec, and other cities in Canada. Dr. T. J. Roderick is Chairman of the Reception Committee at Montreal; Dr. M. J. Ahearn is Chairman at Quebec; Dr. Moorhouse is Chairman at London; Dr. G. M. Campbell is Chairman at Halifax; Dr. McInerery is Chairman at St. John, N.B.; Dr. J. D. Lafferty is Chairman at Calgary; Dr. O. M. Jones is Chairman at Victoria; and Dr. Chown is Chairman at Winnipeg.

We are also indebted to the Honorary Secretaries for the following information:

OFFICERS OF THE BRITISH MEDICAL ASSOCIATION.

President—GEORGE COOPER FRANKLIN, F.R.C.S, Eng, L.R.C.P., London; Surgeon, Leicester Infirmary, Leicester.

President-Elect—RICHARD ANDREWS REEVE, B.A., M.D., LL.D., Dean of the Faculty of Medicine, University of Toronto.

Past President—WILLIAM COLLIER, M.A., F.R.C.P., Physician to the Radcliffe Infirmary, Oxford, and Litchfield Lecturer in Medicine, University of Oxford.

Charman of Representative Meetings.—SIR VICTOR HORSLEY, F.R.C.S., Eng; F.R.S.; Surgeon, University College Hospital, National Hospital for Paralysed and Epileptic; London, 25 Cavendish Square, W.

Charman of Council—HENRY WILLIAM BROWNE, M.D., Ch.B., F.R.C.S., Edin.; Consulting Surgeon, West Bromwich District Hospital.

Treasurer—HENRY RADCLIFFE CROCKER, M.D., F.R.C.P., Physician, Skin Department, University College Hospital, London.

Honorary Local Treasurer—JAMES FREDERICK WILLIAM ROSS, M.B., L.R.C.P., London, 481 Sherbourne Street, Toronto.

General Secretary—GUY ELLISTON, Esq., 429 Strand, London, W.C.

Honorary Local Secretaries.—FREDERIC NEWTON GISBORNE STARR, M.B., Toronto. PROF. JOHN J. MACKENZIE, B. A., M. B., Toronto. DAVID JAMES GIBB WISHART, B.A., M.D., C.M., L.R.C.P., (London), Toronto.

N.B.—All communications should be addressed to the above at the Medical Laboratories, Queen's Park, Toronto.

Cable Address.—Stamawis—Toronto.

Ladies Entertainment.—*Convener:* MRS. R. A. REEVE, 48 Bloor Street E., *Secretary:* MRS. H. T. MACHELL, 95 Bellevue Avenue, MRS. E. B. OSLER, 13 Beau Street, Rosedale, MRS. JAMES SCOTT, 90 Carlton Street, MRS. J. ROSS ROBERTSON, 291 Sherbourne Street, MRS. ALEX. MCPHEDRAN, 151 Bloor Street W., MRS. F. N. G. STARR, 112 College Street, MRS. ADAM WRIGHT, 30 Gerrard Street E., MRS. F. LEM. GRASSETT, 208 Simcoe Street, MRS. STOWE GULLEN, 461 Spadina Avenue, MRS. TEMPLE BLACKWOOD, 307 Sherbourne Street.

PROVISIONAL PROGRAMME.

TUESDAY, AUGUST 21st.

- 9.30-12.30 a.m. Meetings of Sections.
 1.00 p.m. Luncheon for Visiting Ladies.
 2.00 p.m. Address of Welcome, Introduction of Guests, Delegates, etc., and President's Address.
 4.30-6.00 p.m. Reception and Garden Party, by His Honor the Lieutenant-Governor and Mrs. Clarke at Government House.
 6.30 p.m. President's Dinner.
 8.00 p.m. General Meeting.
 8.30 p.m. Address on Obstetrics, Dr. W. S. A. Griffith.
 9.30 p.m. Reception by the President and Mrs. Reeve in the University Quadrangle.

WEDNESDAY, AUGUST 22nd.

- 9.30-12.30 a.m. Meetings of Sections.
 1.00 p.m. Luncheon by invitation of the Dominion Alliance.
 2.30 p.m. Address on Medicine, Sir James Barr, M.D.
 3.30 p.m. Garden Party (for ladies), University Women's Club, at Annesley Hall.
 4.30 p.m. Garden Party, J. W. Flavelle, Esq., J.L.D.
 8.30 p.m. Address on Surgery, Sir Victor Horsley, F.R.S.
 9.30 p.m. Reception by the Mayor and the City Council, at the City Hall.

THURSDAY, AUGUST 23rd.

- 8.00 a.m. Ladies Excursion to Niagara Falls.
 9.30-12.30 a.m. Meetings of Sections.

- 1.30 p.m. Luncheon at the Lakeside Home (limited).
 2.30 p.m. International Golf Matches at Toronto and Lambton Golf Clubs.
 7.30 p.m. Annual Dinner.
 8.00 p.m. Reception for Ladies.

FRIDAY, AUGUST 24th.

- 9.30-12.30 a.m. Meetings of Sections.
 1.00 p.m. Luncheon for Visiting Ladies.
 2.30 p.m. General Meeting.
 4.30 p.m. Garden Party, E. B. Osler, Esq., M.P.
 8.30 p.m. Reception by the Royal Canadian Yacht Club at the Island.

SATURDAY, AUGUST 25th.

- Excursion to the Niagara Power Company's Works, through the courtesy of Sir Henry M. Pellatt (limited).
 Excursion to Muskoka Lakes (limited).
 Excursion to Lambton Golf Links, through the courtesy of the President, A. W. Austin, Esq. (limited).
 Excursion to Ontario Agricultural College, Guelph (limited).
 Excursion probably to Hamilton (limited).

ADDRESSES.

An Address in Medicine will be delivered by SIR JAMES BARR, M.D., F.R.C.P., F.R.S.E.—Subject: The circulation viewed from the peripheral standpoint.

An Address in SURGERY will be delivered by SIR VICTOR HORSLEY, M.B., F.R.C.S., F.R.S.—Subject: The Technique of operations on the Central Nervous System.

An Address in OBSTETRICS will be delivered by WALTER SPENCER ANDERSON GRIFFITH, M.D., F.R.C.P.—Subject: Not yet announced.

The order given below will not necessarily be followed in the final programme.

SECTION IN ANATOMY.

The following subjects have been selected for discussion:

(a) "The structure of the Cardiac Glands of Mammals and their phylgenetic significance. a reply to G. Haane," by Dr. R. R. Bensley, University of Chicago.

(b) "Reports from the Hull Laboratory of Anatomy, University of Chicago," by Dr. R. R. Bensley, Chicago.

(c) "The Cytological character of the Cellular Components of the islets of Langerhans," (N. A. Lane), by Dr. R. R. Bensley, Chicago.

(d) "The Structure of the Lachrymal and Harderian Glands of Mammals," (J. Sundwall), by Dr. R. R. Bensley, Chicago.

(e) "The anatomical relations and blood supply of the palatine tonsil," by Dr. J. C. Wilson, Chicago.

(f) "An unusual peritoneal anomaly simulating retro-peritoneal hernia," by Dr. J. C. Wilson, Chicago.

(g) "On the Chromatin character of certain parietal cells," by Dr. B. C. Harvey, Chicago.

(h) "On a case of polydactylism in the foot," by Dr. B. C. Harvey, Chicago.

(i) "A case of innervation of M. rectus lateralis oculi by the N. oculomotorius, with absence of N. abducens," by Dr. B. C. Harvey, Chicago.

(j) "The development of the stria vascularis," by Dr. C. E. Shambaugh, Chicago.

(k) "Mucous stains of the Cardiac Glands of the pig," by Dr. R. R. Bensley, Chicago.

(l) "Preparations of the islets of Langerhans to illustrate the characters of the different kinds of cells composing them," by Dr. R. R. Bensley, Chicago.

(m) "Sections of the Lachrymal Glands," by Dr. R. R. Bensley, Chicago.

(n) "A heart in which the single right pulmonary vein opens opposite the septum atriorum which is incomplete posteriorly," by Dr. J. C. Wilson, Chicago.

(o) "Preparations of the human stomach to illustrate the methods of differentiating the cellular components," by Dr. D. G. Revell, Chicago.

(p) "The circulation in the labyrinth of the ear in the pig," by Dr. C. E. Shambaugh, Chicago.

(q) "The development and variation of the nerves of the posterior limb in man," by Prof. C. R. Bardeen, University of Wisconsin.

(r) "The Arteriae Rectae of the Mammalian Kidney," by Prof. Carl Huber, University of Michigan.

(s) "The form of the Uriniferous Tubules of certain of the lower vertebrates," by Prof. C. Huber, University of Michigan.

(t) "The Morphology of the Hip-Joint," by Dr. Jenkins, King's College.

(u) "The Marginal sinus," by Dr. Jenkins, King's College.

(v) "A Symelian Monser," by Dr. Gladstone, Middlesex Hospital.

Papers have also been promised by Prof. J. Playfair McMurrich, University of Michigan; Dr. Ross E. Harrison, University of Johns Hopkins, Baltimore; Dr. Knower, Baltimore; Dr. Streeter, Baltimore; Dr. Waterson, Edinburgh University; Dr. Donald Armour, London; Dr. Sanders, London; Dr. Paterson, Liverpool.

SECTION IN DERMATOLOGY.

The following subjects have been selected for discussion:

(a) "The Teaching of Dermatology," by Dr. Norman Walker, Edinburgh.

(b) "Eczema," to be opened by Dr. A. J. Hall, Sheffield.

(c) "Psoriasis and light," by Dr. J. N. Hyde, Chicago.

(d) "Errors in the treatment of Cutaneous Cancer," by Dr. A. R. Robinson, New York.

(e) "The wrong and right uses of milk in certain diseases of the skin," by Dr. L. D. Buckley, New York.

(f) "Dermatitis Vegetans," by Dr. Williams Thomas Corbett, Cleveland.

(g) "Multiple and Successive Chaneres and Pathology of Syphilitic Infection," by Dr. R. W. Taylor, New York.

(h) Lantern slide demonstration, by Dr. J. A. Fordyce, New York.

(i) Photographs, by Dr. F. J. Shepherd, Montreal.

(j) Papers will also be given by Dr. Gilchrist, Baltimore; J. C. Johnston, New York; and S. Pollitzer, New York.

SECTION IN LARYNGOLOGY AND OTOTOLOGY.

The following subjects have been selected for discussion.

(a) "Operations for the correction of deviations of the Nasal Septum," to be opened by Dr. St. Clair Thomson, London; and followed by Dr. Roe, Rochester; Dr. McDonagh, Toronto; Dr. Freer, Chicago, and others.

(b) "On the Laryngeal disturbances produced by Voice Use," to be opened by Dr. Middlemas Hunt, of Liverpool, followed by Dr. Chappell, of New York; Dr. Birkett, of Montreal; Dr. Casselberry, of Chicago, and others.

(c) "On the Indications for the Ligation of the Jugular Vein in Otitic Pyæmia," to be opened by Dr. Hugh Jones, Liverpool, and followed by Dr. McKernon, New York, and others.

(d) "On Laryngeal Stenoses in Infants," to be opened by Dr. Logan Turner, Edinburgh, followed by Dr. Ashby, Manchester, and others.

The latter discussion will be before a Session held jointly with the Section on Children's Diseases.

The following Papers have also been offered:

(a) "The Pathogenic Influence of Aural Lesions on Systemic Disease," by Dr. MacCuen Smith, Philadelphia.

(b) "Polypus," by Dr. Eugene Yonge, Manchester.

(c) "To what extent is it advisable to adopt conservative methods in the treatment of Aural Diseases," by Dr. Bacon, New York.

(d) "The value of the Blood-clot as a primary dressing* in Mastoid Operations," by Dr. Clarence Blake, Boston.

(e) "Skiagraphy as an aid in the diagnosis of treatment in the diseases of Accessory Sinuses of the nose," with lantern exhibition of negatives, by Dr. Coakley, New York.

(f) "Some Cases of Suppurative Frontal Sinus Disease presenting unusual features," by Dr. Perry Goldsmith, Belleville.

(g) "Abductor Paralysis with a report of two cases," by Dr. George L. Richards, Fall River, Mass.

(h) "Exhibition of specimens, drawings and instruments in connection with the Submucous Resection of the deviated Nasal Septum," by Dr. W. L. Ballenger, Chicago.

(i) "The use of the Cold Wire Snare in removing Hypertrophied Tonsils," by Dr. Alice G. Bryant, Boston.

(j) "Thyrotomy and Laryngectomy for malignant disease of the Larynx," by Dr. Chevalier Jackson, Pittsburg.

(k) "A study of the Anatomy of the Accessory Sinuses of the Nose from reconstructions," exhibition of drawings and preparations by Dr. H. W. Loeb, St. Louis.

(l) "The origin of Sputa," by Dr. W. Peyre Porcher, Charleston.

Papers are also expected from Dr. Smurthwaite, Newcastle; Dr. Watson Williams, Dr. Herbert Tilley, and others.

SECTION IN MEDICINE.

The following subjects have been selected for discussion :

TUESDAY, AUGUST 21.—Discussion: "Blood Pressure in Relation to Disease." The subject will be treated under the following headings:

(a) "Physiological Introduction," by Dr. Percy M. Dawson, Baltimore.

(b) "Clinical Methods of Investigating Blood Pressure," by Dr. G. A. Gibson, Edinburgh

(c) "Pathology and Therapeutics of Morbid Blood Pressure," by Sir Wm. Broadbent, London.

(d) "The Relation of Blood Pressure to Arterial Sclerosis," by Prof. Clifford Allbutt, Cambridge. The following will also take part: Dr. J. Mackenzie, Burney; Sir James Barr, Liverpool; and others.

WEDNESDAY, AUGUST 22.—A joint discussion with the Section of Physiology on "Over Nutrition and Under Nutrition, with special reference to Proteid Metabolism," to be opened by Prof. Chittenden, Yale; to be followed by Professor Halliburton, London; Professor Wm. Osler, Oxford; Dr. Otto Folin, Waverley, Mass.; Dr. R. Hutchison, London; and others.

THURSDAY, AUGUST 23.—"Some Aspects of Heart Block," by Professor Wm. Osler, Oxford, Dr. J. Mackenzie, Burnley, Dr. Erlanger, Baltimore, Dr. Aschoff, Freiburg, Dr. W. S. Morrow, Montreal, Dr. G. A. Gibson, Edinburgh, and others.

FRIDAY, AUGUST 24.—Papers.

The following papers have been arranged for:

(a) "Some Clinical Manifestations Visceral and General, of Arterio-sclerosis," by Dr. Alfred Stengel, Philadelphia.

(b) "Paracentesis of the Pericardium; Indications and Methods," by Dr. George Dock, Ann Arbor.

(c) "Gastric Neurasthenia," by Dr. Hugh A. McCallum, London, Ont.

(d) "Syringomyelia, with a Cavity traced from the Sacral Region to the Upper Part of the Internal Capsule," by Dr. W. G. Spiller, Philadelphia.

(e) "The Treatment of Typhoid," by Dr. F. T. Smith, London.

(f) "The Treatment of Typhoid," by Dr. W. B. Thistle, Toronto.

(g) "The Pathology of Neurasthenia," by Dr. T. D. Savill, London.

(h) "Amino-acids and Metabolism," by Dr. L. F. Barker, Baltimore.

(i) "Four Cases of Gangrene of the Lung; Operations, Recovery," by Dr. Ridley MacKenzie, Montreal.

(j) "The Present Status of Military Medical Arrangements in Canada," by Dr. J. T. Fotheringham, Toronto.

(k) "The Treatment of Neurasthenia in General Hospitals," by Dr. D. C. Meyers, Toronto.

(l) "The Effect of Posture upon the Position of the Heart," by Dr. R. D. Rudolf and Dr. S. Cummings, Toronto.

(m) "The Relation of Gastric Motility to the Process of Digestion," by Dr. Alex. McPhedran, Toronto.

(n) "Neurotic Affections of the Respiratory System," by Dr. A. R. Gordon, Toronto.

(o) Title not yet announced, paper by Dr. J. J. Putnam, Boston.

SECTION IN OBSTETRICS AND GYNECOLOGY.

The following subjects have been selected for discussion :

(a) "The Changes in Uterine Fibroids after the Menopause, with Special Reference to Operations," to be opened by Dr. C. L. A. Reed, Montreal.

(b) "Hyperemesis Gravidarum," to be opened by Dr. J. C. Cameron, Montreal.

(c) "The Appendix Vermiformis in Relation to Pelvic Inflammation," to be opened by Dr. T. Arthur Helme.

The following papers are also promised :

(a) "The Treatment of Eclampsia," by Dr. D. J. Evans, Montreal.

(b) "Indications for Cesarean Section, other than Pelvic Deformities or Tumors," by Dr. H. L. Reddy, Montreal.

(c) "Ectopic Gestation," by Dr. J. F. W. Ross, Toronto.

(d) "Metrorrhagia from Conditions of Uterus, other than Neoplastic formations," by Dr. Wm. Gardner, and Dr. J. R. Goodall, Montreal.

(e) "The Value of Conservative Treatment of the Ovaries in View of the After History of Many Patients," by Dr. Joseph Price, Philadelphia.

(f) "The Surgical and Serum Treatment of Puerperal Sepsis," by Dr. Louis S. McMurtry, Louisville.

(g) "Uterine Myomata and their degenerative changes," (with Lantern demonstrations), by Thos. S. Cullen, Baltimore.

(h) "Concealed Accidental Hemorrhage," by Dr. A. H. Wright, Toronto.

SECTION IN OPHTHALMOLOGY.

The following subjects have been selected for discussion :

TUESDAY, AUGUST 21.—"Rare forms of Choroiditis," to be opened by Mr. J. B. Lawford, London, and followed by Dr. Hill Griffith, Manchester ; Dr. H. Knapp, New York, and Dr. C. Bull, New York.

(a) "Recent Cases of Wood Alcohol Poisoning," by Mr. Casey Wood, Chicago.

(b) "Trachoma," by Dr. G. S. Ryerson, Toronto.

(c) "Peridectomy," by Dr. L. Webster Fox, Philadelphia.

(*d*) "Obstruction of Central Retinal Vein," (with lantern demonstrations), by F. H. Verhoeff, Boston.

(*e*) "Transillumination of the eye with demonstration of the new Ocular Transilluminator, by Dr. H. V. Wurdeman, Milwaukee.

WEDNESDAY, AUGUST 22.—"Sympathetic Ophthalmia," to be opened by Dr. G. H. Burnham, Toronto, and followed by Dr. Charles A. Oliver, Philadelphia; Mr. Arnold Lawson, London, and Dr. J. W. Stirling, Montreal.

(*a*) "On Sympathetic Degeneration," by Mr. Freeland Fergus, Glasgow.

(*b*) "Sympathetic Ophthalmia after Mules Operation," by Dr. W. G. M. Byers, Montreal.

(*c*) "Relation between Muscular Imbalance and Gastric Symptoms," by Dr. Lucien Howe, Buffalo.

(*d*) "The dependence of Accommodation and Motility on the Refraction of the Eye," by Dr. H. Knapp, New York.

(*e*) "Influence of defective eyesight on the mental development of children," by Thomas A. Woodruff, Chicago.

THURSDAY, AUGUST 23—"Affections of the Lachrymal Passages," to be opened by Dr. A. B. Osborn, Hamilton, and followed by Dr. S. Risley, Philadelphia, and Dr. Theobald, Baltimore.

(*a*) "On the Treatment of Lachrymal Stricture," by Mr. Brailey, London.

(*b*) "On Accommodation after Middle Life and its Practical Importance," by Dr. Eduard Jackson, Denver.

(*c*) "Tenotomy of the Inferior Oblique as a Remedy for Some Forms of Ocular Deviation," by Dr. Alex. Duane, New York.

(*d*) "Two cases of orbital Phlegmon simulating a malignant tumor, caused by Disease of the Ethmoid cells," by Dr. Dunbar Roy, Atlanta.

FRIDAY, AUGUST 24.—"Visual Tests for Public Services,"

"Marine and Railroad Services," to be opened by Dr. T. H. Bickerton, Liverpool, Dr. Williams, Boston, followed by Dr. Allport, Chicago.

"Military Services," to be opened by Mr. Arnold Lawson, London.

"On the Work which can be performed by a One Eyed Man," by Mr. Freeland Fergus, Glasgow.

“Plastographic Tests for Binocular Vision,” by Mr. Freeland Fergus, Glasgow.

(a) “Dislocation of the eyeball,” by Dr. James Moores Ball, St. Louis.

(b) “Fundus Examination before Ca aract Extraction,” by Dr. J. P. Merton, Hamilton.

SECTION IN PÆDIATRICS.

The following subjects have been selected for discussion :

(a) “Congenital Pyloric Stenosis,” the medical aspect being introduced by Dr. Edmund Cautley, London, and the surgical aspect by Dr. Harold J. Stiles, Edinburgh.

(b) “Pneumococcal Infection,” introduced by Dr. Henry Ashby, Manchester.

(c) “Pathology of Pneumococcal Infection,” by Dr. Stewart MacDonald, Edinburgh.

(d) “A Symposium on Entero-colitis,” under the following headings:

1. “Etiology and Symptoms.”
2. “Pathology and Bacteriology.”
3. “Diagnosis and Prognosis.”
4. “Dietetic Treatment,” by Dr. J. L. Morse, Boston.
5. “Medical Treatment,” by Dr. Lafetra, New York.

(e) “Rheumatism in Children,” introduced by Dr. A. D. Blackader, Montreal.

Among those taking part in the discussion on “Rheumatism in Children” are Dr. E. W. Saunders, St. Louis.

Discussion: “On Laryngeal Stenoses in Infants,” to be opened by Dr. Logan Turner, of Edinburgh, followed by Dr. Ashby, of Manchester, and others. *In joint Session with Section in Laryngology and Otology.*

The following papers will be read:

(a) “Prevention of the Acute Intestinal Diseases of Infants during the summer,” by Dr. C. G. Kerley, New York.

(b) “A Study of the Absorption of Fats and Carbo-hydrates in Infants,” by T. P. Shaw and Dr. L. Guilday, Montreal.

(c) “The Treatment of Tuberculous Abscess,” by Dr. C. L. Starr, Toronto.

(d) “Osteogenesis Imperfecta and Allied Conditions,” by Drs. Robert W. Lovett and Edward H. Nichols, Boston.

(e) “Spontaneous Haemorrhages in the New Born,” by Dr. Allen Baines and H. T. Machell, Toronto.

SECTION IN PATHOLOGY AND BACTERIOLOGY.

The following subjects have been selected for discussion:

TUESDAY, AUGUST 21—(a) On "Pathology and Physiology of the Nucleus," to be opened by Professors Adami, Montreal, and A. B. Macallum, Toronto, and followed by Dr. Gustav Mann, Oxford, Prof. E. Wace Carlier, Birmingham, Prof. A. S. F. Grunbaum, Leeds, and Dr. H. E. Roaf, Liverpool

This will be a joint discussion with the Section in Physiology.

(b) "Concerning the Production of Somatogenic Cytotoxins by the Injection of Nucleoproteids," by Richard M. Pearce, and Holmes C. Jackson, Bender Hygienic Laboratory, Albany, N.Y.

(c) "An Antitoxin for Poisonous Mushrooms," by Dr. W. W. Ford, Johns Hopkins University, Baltimore.

(d) "The Application of Physical Chemistry to Serum Pathology," by Prof. W. H. Mainwaring, Indiana University.

(e) Dr. Robert Muir, Glasgow, will read a paper (title not received).

(f) "Gastric Erosions," by Dr. F. J. Smith and Dr. Miller, Pathological Department, London Hospital.

(g) "The urinary excretion of Potassium Iodide in various morbid conditions," by Dr. O. J. Kauffmann, Birmingham.

WEDNESDAY, AUGUST 22—(a) On the "Etiology and Life History of Malignant New Growths." To be opened by Prof. H. R. Gaylord, Buffalo; Dr. Clowes, Buffalo; Prof. Gary Calkins, New York; Dr. Ewing, New York, and Dr. Beebe, New York. Prof. G. Sims Woodhead, Cambridge; Prof. A. S. F. Grunbaum, Leeds; Dr. Robert Muir, Glasgow, and others are expected to take part in the discussion.

(b) "Some Results of the Experimental Investigation of Tumors," by Dr. Leo Loeb, Pennsylvania University, Philadelphia.

(c) "Investigation under the Imperial Cancer Research Fund and their Results" (with lantern demonstration), by Dr. E. F. Bashford, London.

(d) "The Leucoblastomata," by Prof. A. S. Warthin, Ann Arbor.

THURSDAY, AUGUST 23—(a) "The Forms of Arterio-sclerosis, their Classification and Experimental Production." To be opened by Prof. W. H. Welch, Johns Hopkins University, Baltimore; Dr. Klotz, Montreal; and Prof. J. J. MacKenzie, Toronto, and followed by Prof. L. Aschoff, Freiburg; Prof. Leith, Birmingham; Prof. Clifford Allbutt, Cambridge; Prof. W. Beattie, Edinburgh and Dr. Robert Muir, Glasgow.

(b) "Fluid Crystals and their Relationship to Arteriosclerosis and other Pathological Conditions," by Prof. Adami, Montreal.

(c) "On the Elastic Tissue of Arteries," by Dr. Miller, Birmingham (communicated by Prof. Leith).

FRIDAY, AUGUST 24—(a) "Pathogenic Protozoa," by Dr. F. W. Mott, F.R.S., London.

(Acute and Chronic Changes in the Nervous System Produced by Trypanosoma Infections).

(b) "The Nature of Spirochaetes and the Prevention and Cure of Relapsing Fever" (with lantern demonstration), by Prof. F. G. Novy, Ann Arbor.

(c) "Spirochaetes and Trypanosomas," by Dr. J. W. W. Stephens, Johnston Laboratory, Liverpool.

(d) "On the Life-History and Cultivations of Certain Pathogenic Protozoa," by Dr. J. Ballah, Montreal.

(e) "The Diagnosis of Cholera Asiatica," by Dr. Armand Ruffer, Ramleh, Egypt.

(f) "A Beri-Beri-like Disease of the Monkey and the Pathological Histology of Beri-Beri," by Prof. R. T. Hewlett, King's College, London, together with Dr. DeKorte, London.

(g) "A Demonstration of Bilharzial Preparations," by Prof. W. St. C. Symmers, Queen's College, Belfast.

(h) "The Virus of Smallpox and Vaccinia," by Dr. DeKorte, London (paper communicated from Prof. Hewlett).

Contributions of great interest on other subjects are promised.

SECTION IN PHYSIOLOGY.

The following papers have been offered for this Section:

(a) "Muscle Proteid Immunity," by Dr. S. P. Beebe, New York.

(b) "The Functions of the Renal Tubules and Glomeruli," by Prof. T. G. Brodie, London.

(c) "Demonstration of the Sphintharoscope," by Prof. F. Gotch, Oxford.

(d) "Proteid Nomenclature," by Prof. W. D. Halliburton, London.

(e) "Structures and Physiological Functions of Amoeba Proteus," by Prof. C. F. Hodge, Worcester, Mass.

(f) "Differentiation of Contractile Protoplasm," by Prof. C. F. Hodge and M. F. Duncan, Worcester, Mass.

(g) "The Absorption of Proteids from the Intestine," by Prof. W. H. Howell, Baltimore.

(h) "Physiology of Renal Tubules," by Prof. G. C. Huber, Ann Arbor.

- (i) "Blood-platelets," by Prof. G. T. Kemp, Champaign, Ill.
- (j) "Electrical Excitation of Nerves and Muscles," by Dr. Louis Lapicque, Paris.
- (k) "Structure and Functions of Nerve Fibres," by Prof. J. S. MacDonald, Sheffield.
- (l) "Experimental Glycosuria," by Prof. J. J. R. MacLeod, Cleveland, Ohio.
- (m) "A Plea for Micro-physiology," by Dr. Gustav Mann, Oxford.
- (n) "Experimental Glycosuria," by Dr. P. Moore, Dr. M. Eadie, Dr. Speace, and Dr. H. E. Roaf, Liverpool.
- (o) "Effect of Ions on Growth and Cell Division," by Prof. B. Moore, Dr. E. Whitley, and Dr. H. E. Roaf, Liverpool.
- (p) "The Functional Significance of the Convolutional Pattern in the Primates," by Dr. F. W. Mott, London.
- (q) "Chloroform Anaesthesia and a Simple Method of Estimating Chloroform," by Dr. Maurice Nicloux, Paris.
- (r) "Lock-jaw," by Prof. C. S. Sherrington and Dr. H. E. Roaf, Liverpool.
- (s) "The Causes of Fatigue in Certain Pathological States," by Prof. F. S. Lee, New York.
- (t) "The Physiological Action of certain Choline Derivatives," by Dr. Reid Hunt and Dr. R. de M. Taveau, Washington.
- (u) "Acapnia as a Factor in Shock," by Prof. Yandell Henderson, Yale, New Haven.
- (v) "The Metabolism of Kreatin and Kreatinin," by Dr. Otto Folin, Waverley, Mass.
- (w) "The Preservation of Frogs for Physiological Purposes," by Prof. Westley Mills, Montreal.
- (x) "A Vago-Oesophageal Reflex," by Dr. S. J. Meltzer, New York.
- (y) "The Various forms of the Negative or Physiological Venous Pulse," by Dr. W. S. Morrow, Montreal.
- (z) "Chemical Studies on Growth," by Prof. Lafayette B. Mendel, Yale, New Haven.
- (z1) "On the Point of Action of Drugs on the Heart." by Dr. A. J. Carlson, Chicago.

Papers are also promised by the following: Dr. P. T. Herring, Edinburgh; Dr. F. G. Hopkins, Cambridge; Dr. Sutherland Simpson, Edinburgh; Prof. Jacques Loeb, Berkeley; and Dr. P. A. Levene, New York.

Discussion: 1. (With Section on Pathology, Tuesday) "On the Physiology and Pathology of the Nucleus."

2. (With Section on Medicine, Wednesday) "Over Nutrition and Under Nutrition, with Special References to Proteid Metabolism in Health and Disease," to be opened by Prof. R. H. Chittenden, New Haven.

SECTION IN PSYCHOLOGY.

The following subjects have been selected for discussion:

TUESDAY, AUGUST 21—(a) "Reflexes among the Insane," by Dr. Daniel Clark, Toronto.

(b) "The New Psychology," by Dr. Schofield, London.

(c) "Cerebral Localization in the Study of Psychiatry," by Dr. C. K. Mills, Philadelphia.

(d) "Etiology of General Paresis," by Dr. A. R. Diefendorf, Connecticut.

(e) Discussion: "General Paresis," introduced by the President, Dr. Julius Mickle, London, and followed by Dr. Joseph Collins, New York; Dr. Cowles, Boston; Dr. B. Sachs, New York (Pseudo General Paresis).

WEDNESDAY, AUGUST 22—(a) "Methods of Staining the Central Nervous System," by Dr. Turner, Brentwood Asylum.

(b) "Diagnosis and Treatment of Peripheral Nerve Lesions," by Dr. Shirres, McGill University, Montreal.

(c) "Feeble Minded Children," by Dr. Shuttleworth, London.

(d) "Relation of Epilepsy to the Blood and Central Nervous System," by Dr. Turner, Brentwood Asylum.

(e) "Epilepsy Exhibited by Kinetoscope," by Dr. Spratling, Sonyea.

(f) Discussion: "Epilepsy—Psychic Fits," introduced by Dr. Alden Turner, London, Eng., and followed by Dr. Shuttleworth, London, Dr. Spratling, New York, Dr. W. G. Spiller, Philadelphia; Dr. Angell, Rochester.

THURSDAY, AUGUST 23—(a) "Insanity of Inebriety," by Dr. Crothers, Hartford.

(b) "Sterilization of Undesirable Degenerates," by Dr. Renault, Liverpool.

(c) "Types of the Devolutional Psychoses," by Dr. Farrar, Baltimore.

(d) "A Comparison of the Cells of the Human Cerebrum in Point of Resistance to Disease," by Dr. E. E. Southard, Harvard University.

(e) Discussion: "Dementia Praecox," introduced by Dr. C. K. Clarke, and followed by Dr. Adolph Meyer, New York; Dr. F. X. Dercum, Philadelphia; Dr. Shuttleworth, London.

FRIDAY, AUGUST 24—(a) "Application of Modern Hospital Methods to the Treatment of Insanity," by Dr. Ryan, Superintendent of Asylum, Kingston.

(b) "Occupation as a Factor in the Treatment of the Insane," by Dr. Mohr, Superintendent of Asylum, Brockville.

(c) "After Treatment of Discharged and Convalescent Cases," by Dr. Dewey, Wauwitosa.

(d) "Mental Processes Produced by Bodily Diseases," by Dr. Savill, London.

(e) "Rational Psycho-Therapeutics," by Prof. Dubois, Berne.

(f) "Discussion: 'Mind in Medicine,' introduced by Dr. Schofield, London, and followed by Pres. Hall, Clark University, Dr. Cowie, Bournemouth, and Dr. A. E. Macdonald, New York.

In addition others will take part who have not yet formally stated their subjects.

We expect also to have papers by Dr. C. L. Dana, New York; Dr. August Hoch, New York; Dr. Hattie, Halifax; Dr. Burgess, Montreal; Dr. Corning; Dr. Diefendorf; Dr. Hurd, Buffalo, and Dr. Hurd of Baltimore.

SECTION IN STATE MEDICINE.

The following subjects have been selected for discussion:

(a) "Protection and Control of Milk Supply."

(b) "Prevention of Tuberculosis."

(c) "Training and Supervision of Midwives."

(d) "Notification of Phthisis."

(e) "Provision and Administration of Isolation Hospitals."

(f) "Isolation Hospitals and 'return' Cases."

(g) "Medical inspection of Children attending Elementary Schools.

(h) "Quarantine and Inspection of Shipping."

(i) "Medical Examination of Immigrants."

(j) "Supply of 'Water Gas'" and "Dangers of Carbon Monoxide Poisoning."

The following papers have been promised:

(a) "The Prevention of Tuberculosis," by Dr. Jas. Roberts, Hamilton.

(b) "Hygiene of the Home," by Dr. J. J. Cassidy, Toronto.

(c) "Tuberculosis" (in some phase), by Dr. J. H. Elliott, Gravenhurst.

(e) "Medical Inspection of Schools," by Dr. Helen MacMurchy, Toronto.

(e) "Medical Inspection of Schools," Wm. Scott, B.A., Toronto.

(f) "Gas Supplies, their Dangers, etc.," by A. McGill, B.A., Ottawa.

(g) "The State Control of Health," Dr. Jennie Drennan, St. Thomas.

(h) "Artificial Purification of Water Supplies," Dr. W. J. Robinson, Guelph.

(i) "The Protection and Control of Milk Supplies," Prof. R. Harcourt, Guelph.

(j) "The Protection and Control of Milk Supplies," Dr. Chas. Harrington, Boston.

(k) "Water Supplies from the Sanitary Standpoint," Dr. H. W. Hill, Minneapolis.

(l) (a) "Water Gas Poisoning," (b) "Administration Control of Milk Supply," Prof. John Glaister, Glasgow.

SECTION IN SURGERY.

The following subjects have been selected for discussion:

(a) "Treatment of Prostatic Hypertrophy," by Dr. Geo. A. Bingham, Toronto; followed by Mr. J. Lynn Thomas, C.B., Cardiff.

(b) "Treatment of Ascites secondary to Chronic Hepatitis," by Mr. Sinclair White, Sheffield; followed by Dr. Stewart, Halifax, and Mr. George Grey Turner, Newcastle-on-Tyne.

(c) "Ulcer of the Duodenum and its surgical Treatment," by Dr. W. J. Mayo, Rochester, Minn.; followed by Mr. George Cooper Franklin, Leicester.

(d) "Treatment of Acute Septic Peritonitis," by Mr. Charles John Bond, Leicester; followed by Dr. William Howitt, Guelph, and Dr. O. M. Jones, Victoria.

Among other subjects which will be discussed are:

(a) "Transplantation of the Ureters in Ectopia Vesicae," by Dr. Geo. A. Peters, Toronto.

(b) "The Surgery of Banti's diseases," by Dr. Geo. Armstrong, Montreal.

(c) "Intestinal Obstruction in Association with the Vermiform Appendix," by Mr. George Grey Turner, Newcastle-on-Tyne.

(d) "Posture as an Aid in Surgery," by Dr. Murray MacLaren, St. John.

(e) "Injuries to the semilunar Cartilages," by Dr. James Bell, Montreal.

(f) "Appendicitis," by Dr. Herbert A. Bruce, Toronto.

(g) Paper—Title to be selected, by Dr. Francis J. Shepherd, Montreal.

(*h*) "Surgical Treatment of Ulcerative Colitis," by Dr. Ingersoll Olmsted, Hamilton.

Arrangements are being made for the holding of a Surgical Clinic at which a number of interesting cases will be presented by members of the Association.

SECTION IN THERAPEUTICS.

TUESDAY, AUGUST 21—(*a*) "The Kidney, its Pharmacology and its Therapeutics," Prof. T. G. Brodie, London.

(*b*) "The Treatment of Acute Nephritis," Dr. A. O. J. Kelly, Philadelphia; To be discussed by Dr. C. G. Stockton, Buffalo.

(*c*) "The Treatment of Uraemia," Dr. E. Lefevre, New York; To be discussed by Dr. J. Caven, Toronto.

(*d*) "The Treatment of Chronic Nephritis," Dr. H. A. Hare, Philadelphia; To be discussed by Dr. Geo. Hodge, London.

WEDNESDAY, AUGUST 22—(*a*) "Opsonines and Animal Vaccines," Dr. G. W. Ross, London.

(*b*) "The Action of Drugs in Vascular Hypertension," Dr. T. L. Coley, Philadelphia.

(*c*) "The Therapeutics of Acute Acquired Insanities," Dr. D. R. Brower, Chicago.

(*d*) "The Respective Spheres of Hygienic and Medicinal Measures in the Treatment of Pulmonary Tuberculosis," Dr. S. S. Cohen, Philadelphia.

(*e*) "The Working Bulletin System for the Collective Investigation of the Newer Materia Medica," Dr. F. E. Stewart, West Orange.

THURSDAY, AUGUST 23—Joint Sessions with the Section of Medicine on the Subject of "Heart-Block."

FRIDAY, AUGUST 24—I. "The Value of Alcohol in Treatment," Dr. A. D. Blacader, Montreal; to be discussed by Dr. S. J. Meltzer, New York, Dr. R. C. Cabot, Boston; Prof. G. S. Woodhead, Cambridge, Eng.; Dr. W. H. Moorhouse, London, Ont.

II. The Place of Materia Medica and Therapeutics in the Medical Curriculum.

(*a*) "The Teaching of Materia Medica and Pharmacology," Prof. J. T. Halsey, Tulane University, New Orleans.

(*b*) "The Teaching of Therapeutics," Prof. T. McCrac, Johns Hopkins University, Baltimore.

(*c*) "The Place of Materia Medica and Therapeutics in the Medical Curriculum," Prof. C. R. Marshall, University of St. Andrews.

(d) "The Place of Materia Medica and Therapeutics in the Medical Curriculum," Prof. R. B. Wild, University of Manchester. To be discussed by Prof. Osborne, Yale; Prof. Hatcher, Cornell; Dr. J. M. Anders, Philadelphia.

III. The Need and the Place of Psychic Therapeutics in the Medical Curriculum. By Dr. R. C. Cabot, Boston.

GENERAL INFORMATION.

ITEMS OF SPECIAL INTEREST.

In the Main Building of the University of Toronto will be found:

1. An elaborate Museum of Exhibits, of Instruments, Drugs, Medical Publications, Foods, etc. Visitors will do well to inspect this exhibit carefully, and it is suggested as a suitable rendezvous.

2. In the exhibit halls will be found an interesting collection of Indian Pictures from the brush of Paul Kane (loaned by E. B. Osler, Fsq., M.P.)

3. Adjoining the exhibit are
 Information Bureau,
 Registration Bureau,
 Post Office,
 Express and Telegraph offices,
 Offices of the General and Honorary Local Secretaries,
 and of the Editor of the British Medical Journal.
 Ladies' Reception and Writing rooms.
 Public Stenographers.

4. A Restaurant (west wing and Dean's Garden).

5. Office of G. H. Webster, general viséing agent for all railroads.

The Toronto Industrial Exhibition opens on Saturday, August 25th, and continues for two weeks. This will afford an unrivalled opportunity to visitors to obtain an idea of Canadian progress in Agriculture, Manufacture, etc.

At the time of the meeting there will be held in Toronto a Tuberculosis exhibit, which visitors will do well to examine.

Members and guests attending with their motor cars will find Garage accommodation at

The Franco-British Motor Garage, the Mutual Street Rink.

The Dominion Automobile Co. (Limited), cor. Bay and Temperance Streets.

The Automobile Supply Co., 24 Temperance Street.

Hyslop Bros., 209 Yonge Street.

EXCURSIONS AND SIDE TRIPS.

Excursion (limited) to Niagara Power Works, Niagara Falls, August 25th.

Excursion to Muskoka (limited), August 25th to 27th.

Excursion to the Ontario Agricultural College, Guelph. (limited), August 25th.

	Distance	Cost (Association Rate One Way)
Quebec to St. John.....	600 miles	\$13.90
Quebec to Halifax.....	674 "	14.85
Quebec to Sydney.....	826 "	18.20
Quebec to Saguenay.....	225 "	4.50
Toronto to Muskoka.....	175 "	7.06
Toronto to Niagara Falls.....	50 "	2.50
Toronto to 1000 Islands.....	216 "	5.95
Toronto to Georgian Bay.....	150 "	5.10
Toronto to Sault Ste. Marie.....	400 "	11.65
Toronto to Temagami.....	300 "	9.05
Toronto to Kawartha Lake.....	70 "	3.05
Toronto to Brampton (Dale Estate Rosaries).....	22 "	0.65
Toronto to Couchiching.....	90 "	2.60
Toronto to Vancouver (return via Yellowstone Park if desired).....	2,600 "	67.75

British visitors may visit all other points in Canada at *half the lowest one way first class fare going and returning*. It is not necessary to travel by the same route. The Certificate supplied by the Eastern Canadian Passenger Association and countersigned by the Secretary must always be presented. For the *transcontinental trip* both British, American and Canadian guests should notify the Honorary Local Secretaries, Medical Building, Toronto, at once, and when possible the names of groups that would like to travel together should be supplied. At present the intention is to send groups of from eighteen to twenty-five in a special sleeper on each of the regular outgoing transcontinental trains, though it is just possible that a special train be sent through as far as Winnipeg and broken up into groups there. Information regarding trips may be obtained from C. B. Foster, District Passenger Agent, C.P.R., 71 Yonge Street, Toronto; J. D. McDonald, G. T. R., Union Station, Toronto; H. F. Chafee, 2 King Street E., Toronto, Richelieu and Ontario Navigation Co; C. H. Nicholson, Northern Navigation Co., Sarnia, Ont.; Wm. Phillips, Canadian Northern Railway Co., King and Toronto Streets, Toronto; W. H. Moore, James Bay Railway Co., King and Toronto Streets, Toronto; N. Weatherston, Intercolonial Railway, 51 King Street E., Toronto.

Personals.

Dr. Ten Eyck has moved to 11 College Street.

Dr. D. H. Hutchison has removed from Ingersoll to Pt. Rowan.

Dr. E. D. Carder has commenced practice in Vancouver, B. C.

Dr. Thos. Fletcher, of Baltimore, visited Toronto about the middle of July.

Dr. W. P. Caven is spending a two months' holiday on his farm near St. Mary's.

Dr. Wm. J. Brown, of Lindsay, was married to Miss Touchbourne, July 10th.

Dr. Francis J. Shepherd has been elected President of the Montreal Art Association.

Dr. G. A. Richardson, of Toronto, went to Muskoka for a month's holiday, July 20th.

Dr. Wm. Nixon, of Westaskawin, Alta., was married to Miss Bruff, of Toronto, June 12th.

Dr. Frederick C. Hood, of Toronto, started on a trip to the Eastern Provinces, July 15th.

Dr. Fred W. Marlowe, of Toronto, was married to Miss Walton, of Thorold, July 12th.

Dr. E. Herbert Adams, of Toronto, returned to his home after a visit to Japan, July 8th.

Dr. A. W. Mayberry, of Toronto, has removed from 253 Spadina Ave. to 569 Spadina Ave.

Dr. D. M. Anderson, of Toronto was married to Miss Gertrude Bell, of Washington, D.C., June 16th.

Dr. G. Sterling Ryerson is spending a portion of the summer at his summer residence, Sturgeon Point.

Dr. V. C. Thorn was married to Miss Clare McCullough, daughter of Dr. J. McCullough, July 11th, 1906.

Dr. T. S. Sproule, M.P., of Markdale, Supreme Grand Master of the Grand Orange Lodge of British America, was elected President of the Imperial Grand Orange Council of the World at the recent meeting in Toronto, July 18th.

Dr. A. B. Atherton, of Fredericton, N.B., has been elected President of the Maritime Medical Association for the coming year.

Dr. Chas. O'Reilly has commenced practice at 52 College Street, Toronto, and will devote himself chiefly to office consultation work.

Professor Morris Hutton, President of the University College, has been appointed temporary President of the University of Toronto by the Board of Governors.

Dr. Murray MacFarlane, of Toronto, went to New Jersey July 12th; after spending a few days there, went on to Quebec, and expects to return to Toronto about the middle of August.

At a meeting of the Governors of the University of Toronto held July 18th, a retiring allowance of the ex-President, Dr. Loudon, was fixed at full pay, \$5,500 per annum, in accordance with the recommendation of the Government.

Obituary.

W. A. McINTOSH, M.D.

We have to announce with deep regret the death of a bright young physician, Dr. McIntosh, which occurred in Toronto July 18th. He was formerly a resident of Toronto, studied medicine in Trinity Medical College, and graduated M.D. from Trinity University in 1900. He then went to Deer Creek, Minnesota, where he soon established a good practice. On account of ill health he first removed to Cleveland and then to his home in Toronto about six months ago. He was supposed to be recovering and suddenly grew worse, and was removed to Grace Hospital, and died a few minutes after his admission to that institution.

JOHN WALLACE SLAVEN, M.D.

Dr. Slaven, of Orillia, died at his family residence July 7th, aged 71. He was born in Prince Edward County and graduated M.D., but gave up medical practice shortly after graduating and was engaged for many years in business pursuits in Orillia.

Mrs. Atkinson, wife of Dr. E. L. Atkinson, of Gananoque, died July 10th.

Dr. Robert Craik, of Montreal, who was for many years Dean of the Medical Faculty of McGill University, died June 28th, aged 77.

Selections.

SURGICAL HINTS.

A film of collodion is an excellent protective material for granulating wounds. It can be made in the manner recommended by Stuart McGuire, by pouring collodion on an aseptic glass plate, and after it has hardened carefully cutting it into strips.

In cases of greenstick fractures of the forearm it is generally advisable to complete the fracture; otherwise there is apt to be considerable deformity owing to the formation of a mass of callus on one side at the seat of fracture, destroying the symmetry of the limb.

In lacerated wounds of the hand free drainage is of paramount importance. Tissues irredeemably destroyed should be snipped away with scissors, as more can thus be saved than with the knife. In suturing the rule is few stitches and no tension. Amputation must always be the last resort.

In a syphilitic, as in a tuberculous, individual joint affections may follow a sprain, and the two conditions may resemble each other so closely that a diagnosis is very difficult. In cases of doubtful tuberculous arthritis, especially in adults, it is well to examine for evidences of syphilis and to try the effects of specific medication.

Neurasthenic persons are apt to imagine that they suffer from all sorts of diseases. If such a patient once gets the idea of having appendicitis he is very likely to develop hypersensitiveness and painful areas over the abdomen, as over McBurney's point. Given such a combination of extreme tenderness over this area with constipation and abdominal distention due to intestinal gases, and it is sometimes difficult to diagnose the case from chronic appendicitis.—*International Journal of Surgery.*

The Treatment of Diabetes Mellitus.

In the *Medical Chronicle* Williamson gives an interesting summary of the latest contributions to this subject.

M. Lauritzen, of Copenhagen, has given a useful summary (*Medizinische Klinik*, 1905, No. 39) of the results obtained by various observers with respect to the use of carbohydrate articles of food in diabetes mellitus, and has added his own valuable observations.

1. As regards the treatment of diabetes mellitus with large quantities of milk, Lauritzen concludes from his own observations that a rigid milk diet may cause the diabetic symptoms to disappear, for a time, in the mild cases, and in cases of medium severity; but a permanent cure cannot be obtained, and better results follow an ordinary rigid diabetic diet.

The milk diet, however, is of great value when certain complications are present, viz., chronic nephritis with cardiovascular changes, arteriosclerosis, with degeneration of the myocardium or aortitis, diseases of the liver, skin affections, acute febrile diseases such as pneumonia and typhoid fever.

In cases of diabetes associated with chronic nephritis, when dyspnea and edema occur, Lauritzen recommends one liter of milk and a half liter of cream daily. When improvement is obtained the quantity of milk may be diminished and a mixed diet gradually allowed.

In severe cases of diabetes when acid intoxication (acidosis) occurs, and coma is threatening, a milk diet is indicated, along with large doses of alkalis, with aperients, and cardiac tonics. When the risk of coma does not appear so great, and when dyspepsia and constipation are prominent symptoms, a mixed milk diet is better, along with alkalis and aperients.

In recent and moderately severe cases, in which there is only slight acidosis, the milk diet is not indicated.

2. The "oatmeal treatment" has been recommended by von Noorden. The oatmeal was given in the form of soup; oatmeal (Knorr's) 250 grammes, butter 300 grammes, roborat 100 grammes. A portion of this soup was given every two hours, and at the same time a little wine, cognac or coffee. The oatmeal treatment is continued for two or three weeks. Though oatmeal (Knorr's) contains 73.6 per cent. of carbohydrates the following were the results obtained by von Noorden:

In ten severe cases the tolerance for other carbohydrates

was increased, and the general condition of the patient remained the same or improved.

In a series of cases threatening coma the prodromal symptoms of this affection disappeared under the oatmeal treatment, but there was no improvement as regards the tolerance of carbohydrates. Often the oatmeal treatment caused a diminution in the excretion of sugar, but the urine did not become free from sugar.

In other cases the oatmeal treatment had no good effect; the glycosuria increased, and there was no improvement as regards the excretion of acetone and ammonia.

In mild cases, without diaceturia, the oatmeal treatment caused a diminution of the tolerance of carbohydrates.

The oatmeal treatment is difficult to carry out, it is not suitable in all cases, it requires much care, it should only be given when the patient can be carefully watched and in a certain class of cases.

Lauritzen thinks that the oatmeal treatment is indicated when the usual dietetic treatment fails to alter the sugar excretion, when the weight is diminishing, and the signs of acidosis remain unaltered in spite of the alkaline treatment.

The dose of alkalis should not be changed when the oatmeal treatment is given. In the preparation of the oatmeal soup Lauritzen recommends that the oatmeal should be boiled for a long time in water, and then the butter and vegetable albumen added. He adds 100 to 200 grammes of butter to 200 to 250 grammes of oatmeal, 50 or 100 grammes of roborat, and 2 to 6 eggs. Sometimes a portion of oatmeal was given as porridge. In commencing coma he prefers the milk diet.

3. A few years ago Mossé published a series of observations on the use of potatoes in place of bread in diabetes mellitus. These observations appear to show that some diabetic patients can tolerate potatoes better than an equivalent amount of bread.

Mossé has shown that potatoes may be employed more frequently in mild cases of diabetes than was formerly thought advisable; but in the medium and severe forms of the disease, as a rule, potatoes should not be given.

The milk treatment is of service in cases of complicated mild and severe diabetes. The value of the oatmeal treatment remains to be decided. In a few cases it has a beneficial effect on the sugar excretion and acidosis; in certain conditions, in severe diabetes, the carbohydrates of oatmeal are tolerated

and are of dietetic value. As the treatment of these severe cases is so difficult, the oatmeal treatment must be regarded as a distinct advance.

Friedenwald and Ruhrah (*American Journal of the Medical Sciences*, October, 1905) recorded the result of their observations on the treatment of diabetes mellitus with milk, with potatoes, and with oatmeal.

1. Milk treatment. The authors state that they have rarely found it advisable to place any of their patients on an exclusive milk diet, except in severe cases, in which diacetic acid is present in the urine and coma threatening. But they have utilized half a liter or a liter of milk daily in many cases, in addition to other allowable food, with excellent results. The effect of the milk should be carefully watched.

2. Treatment with potatoes. In a number of cases the authors have replaced a portion of the bread taken by diabetic patients with potatoes. They have not found any bad effects from the change. "In a not inconsiderable number of cases very beneficial results were obtained," and the change of diet was very pleasing to the patient.

3. Oatmeal treatment. The authors give a summary of the observations of von Noorden and others on the oatmeal treatment: "In a general way it may be stated that the oatmeal cure is especially useful in those forms of diabetes exhibiting diacetic acid in the urine, and that in mild forms it is not only a useless form of treatment, but may even prove harmful."

In the severe forms of diabetes the authors obtained remarkable results. In certain cases they report that it was "possible to rid the urine of sugar entirely, when this is impossible on an entirely carbohydrate-free diet (standard diet)."

In another class of cases the oatmeal diet caused both sugar and diacetic acid to disappear from the urine.

In a third series of cases the diacetic acid disappeared when the patient was placed on the oatmeal treatment, but the sugar excretion continued unaltered.

Lidwill (M. C.) (*Intercolonial Medical Journal*, Aug. 20, 1905) recommends rye bread (the pumpernickel of Germany) in cases of glycosuria occurring in old or middle-aged individuals. The rye bread contains 45 to 49 per cent. of starch, and yet the sugar in the urine diminishes when the bread is taken. The probable explanation is that the rye bread is "satisfying, and that the patients only eat a small amount of it. Also, it contains but little digestible starch, and it is laxative, combating constipation."

V. Mering points out the importance of "individualizing" the treatment of diabetes mellitus. When the perchloride of iron reaction is present carbohydrates must not be entirely withdrawn from the diet. In such cases v. Mering allows 100 to 150 grammes of bread daily and one liter of milk, and gives at the same time large quantities of sodium bicarbonate.

According to v. Mering glycerin has an injurious effect on the sugar excretion, and is little better than the carbohydrates; but saccharin and kryсталlose may be used for sweetening articles of food and drink.

He believes that muscular exercise has a very beneficial influence, not only in the mild cases but also in the severe forms. Muscular exercise causes a diminution of the sugar excretion, but great caution is necessary in severe cases of diabetes, and overstrain must be avoided, since sudden death may occur in such cases through cardiac failure. He recommends massage in wasted patients. Residence at the seaside or in mountain districts in summer, and in a mild climate in winter, is advisable.

As regards drug treatment the sources of fallacy are pointed out. It is important to remember that everything which diminishes the appetite reduces sugar excretion.

According to v. Mering opium is the only drug which influences the sugar excretion favorably; but its effect is only temporary. In some mild cases sodium salicylate diminishes the sugar excretion temporarily.

For the itching of the skin he recommends sodium salicylate; for pruritus vulvæ the local application of orthoform ointment (10 per cent.); and for the "rheumatic" and neuralgic pains, antipyrin, phenacetine, and acetanilide.

When coma is threatening he advises large doses of alkalies, 450 to 750 grains daily of bicarbonate of soda; the rigid diet should be discontinued, and milk, bread, and soup (thickened with barley) should be given in moderate quantity. If coma should occur 750 grains of sodium bicarbonate dissolved in one liter of water (35 ounces) may be injected into a superficial vein.

Oskar Simon (*Prager med. Wochenschrift*, 1905, No.34) points out that in cases of slight acetouria the acetone will often disappear from the urine when butter is excluded from the diet. But in other cases withdrawal of butter from the diet has not this effect. He records three cases of severe diabetes in which withdrawal of butter from the food did not check the acetouria and diaceturia, but the addition of a

large amount of albumen in the form of Parmesan cheese (60 to 100 grammes), in addition to relatively large quantities of carbohydrate, caused the acetone and diacetic acid to disappear promptly from the urine. The patient was at the time drinking the waters at Carlsbad.

Huehard and Fiessinger (*Journal des Practiciens*, p. 710, 1905), regard alkalies, antipyrin, aspirin and arsenic as the most valuable drugs in the treatment of diabetes.

Professor Naunyn (*Deutsche med. Wochenschr.*, 1905, No. 25) gives an excellent account of the treatment of diabetes. In the dietetic treatment he forbids fruits which contain much sugar, but he allows fruits which contain only a very small amount of sugar, such as cranberries, raspberries, red currant berries, melons, oranges, green gooseberries.

He points out the importance of testing the urine with perchloride of iron for Gerhardt's reaction (diacetic acid). When this reaction (brown-red color) is present he recommends large doses of sodium bicarbonate 150 to 300 grains daily or more. He also discontinues the rigid diet and allows much milk, with a limited amount of bread and fruit. Unless the urine becomes alkaline Naunyn increases the sodium bicarbonate up to 600 grains daily. It is to his writings chiefly that we owe this useful treatment.

De Renzi (*Berliner klin. Wochenschr.*, 1904, No. 46) thinks that sodium bicarbonate is the only drug which is of service in the treatment of diabetes. In large doses, up to 600 grains daily, it often gives good results.

In the treatment of diabetic neuritis Pavy (*Lancet*, July 9, 1904) recommends first dietetic treatment to reduce the sugar in the urine. This often causes decided improvement. He also gives codeine or opium alone with the dietetic treatment, and in addition he recommends potassium iodide 5 grains and ammonium bromide 10 grains, three times a day. In obstinate cases he has obtained satisfactory results with the continuous galvanic current. When great superficial pain has been present he has found the cautious application of aconite liniment of service.—*Therapeutic Gazette*.

Diet in Tuberculosis.

Modern research has proved that the uncooked juices of meat, milk, and green vegetables contain a liberal allowance of spermin. The muscle juices expressed from red meats are relatively more rich in oxydase than those derived from proteids of the vegetable kingdom, and more easily absorbed

by the system; for the epithelial cells of the digestive tract appear to exercise something of a selective power of absorption. Cooked meat and its extractives have practically no value. The researches of Richet and Hericourt have done much to place zomotherapy on a scientific basis. To be effective, alimentation by raw meat and meat-juices must be systematic and continued, and not introduced as a mere variation in dietary to suit the passing fancy of the patient. The form of its exhibition and dosage must be regulated in the same way as we are accustomed to regulate other remedies. Absolutely fresh raw meat, freed from extraneous gristle and fat, when reduced to a pulp by passage through a mincing-machine, should be taken two or three times a day in amount varying from one-quarter to one-half pound. The flesh of hare and wild rabbits and fresh venison are also to be recommended. Lamb, veal, goose, and duck flesh are better than ordinary beef and mutton. Nitrogen retention, digestive lymphocytosis, and hæmoglobin formation, are alike increased by such treatment. Digestion becomes rapidly improved, gastro-intestinal discomfort is notably reduced, and the stools improve in character.

To overcome any preliminary distaste for raw flesh, it is well to accustom the patient by the use of oysters and raw eggs to the enjoyment of raw products. A polony sausage (prepared from raw meats four parts, cooked oddments of chicken, ham, etc., three parts, and breadcrumbs one part, finely mixed and reduced to a paste by the addition of milk and suitable seasoning) can next be tried. Once patients overcome the preliminary distaste to raw products, they eat the raw flesh with avidity and real relish. It may here be remarked that native proteids are capable of absorption without undergoing material change or conversion into albuminoses or peptones.

There can be no doubt that the serum albumin and lactalbumin of raw milk contain immunizing and protective substances similar to those found in fresh and uncooked meat-juices. The physiologic requirement that all constituents of milk must be digested before they can be absorbed into the system does not preclude the entrance into the circulation of the living ferments present in fresh, unboiled milk. Clinical experience shows that the process of absorption is more delayed and the quantity required for nourishment larger in the case of boiled, sterilized, and pasteurized milk than when milk is used in its natural state. This is because the cellular elements of milk, with the exception of the fat corpuscles, are all living cells, which retain their vitality for a considerable

time after it has been drawn from the mammary glands. The chemical effect of boiling milk is to destroy the vitality of these cells and to coagulate all their proteid constituents, notably the albuminates of fluorin and iron. Even if it be claimed that the casein of milk is altered by contact-action of the gastric juice into peptones and albuminoses, and absorbed as such, it cannot be denied that the absorption of the serum-albumin is by osmosis. Constipation, scurvy, and rickets more often follow from the use of devitalized forms of proteids than that of proteids in a living form. In milk submitted to the process of sterilization butyric acid is not infrequently met with in place of lactic acid, and the butter-fat of milk so prepared is broken up largely in the stomach, where further supplies of free butyric acid are split off. In order, therefore, to minimize the risk of the fats undergoing rancid degeneration, boiling, pasteurizing, and sterilizing are to be avoided, except in cases where the source and age of the milk cannot be ascertained.

The main argument in favor of well-cooked food (meat and milk) is that it kills the germs present in it, and prevents the transmission of bovine tuberculosis. No one claims that the toxins of the pathogenic bacteria can thus be destroyed, or the spores of all bacteria thus killed. The chemical poisons (toxins) produced are not altered by the application of heat under 300 deg. F., whilst the immunizing and protective substances are destroyed at the temperature of boiling milk. Further, milk boiled and subsequently exposed to infection is a better culture medium for bacteria than raw natural milk.

The evidence accumulated during recent years indicates that there is a difference between the tubercle bacillus met with in the lower animals and that which affects man. The bovine bacillus, when it finds lodgment in human beings, does so almost exclusively in children under the age of eleven years, whilst the micro-organism of adult tuberculosis has been allowed to grow up under the fostering care of sanitarian and antituberculosis societies, for it is already becoming very difficult to induce intelligent laymen to forswear their religious convictions of its truth, and adopt the systemic use of raw proteid products.

The juice of raw vegetables, although certainly containing valuable ferments, and therefore preferable to cooked green-stuffs, is by no means a substitute for raw animal juices and secretions. They stimulate gastro-intestinal metabolism, reduce abdominal discomfort, and supplant the use of cathartics, but, being mainly derived from plants deficient in proteids, do not

contain the immunizing substances—oxidases and katalysators—in such abundance as do the juices extracted from raw meats or even milk.

As diet is the best weapon we now have against consumption, so likewise can it be claimed that the use of raw meat products fresh from a recently-killed animal is the best form in which food can be presented for digestion and absorption.—Editorial in *Treatment*.

Mosquito Extermination.

This is another name for the prevention of mosquito breeding by obliterating the primary conditions requisite for their wholesale production. On the 11th instant the Third Annual Convention of the American Mosquito Extermination Society was held in this city, at the New York Aquarium, and supplemented in the evening by a dinner given at the Union League Club by the President, Mr. Wm. J. Matheson, in honor of several guests and Health Board officials.

At the convention it was shown that much progress had been made toward the abatement of the mosquito nuisance by a greater enlightenment of public sentiment in its favor, as evidenced through recent legislative enactments.

In the State of New Jersey, for example, where only a few years ago the suggestion of eliminating the mosquito met with ridicule, now, as a result of a more universal education and extension of information on the subject, it is reported that the State Legislature has passed almost unanimously an appropriation of \$350,000, to be expended at the rate of \$50,000 per year for the diking and ditching of the great salt marshes lying adjacent to the city of Newark and about the Hackensack River. Legislation is also in progress in the New York Legislature to the same end for the benefit of New York city.

The convention adopted what it termed a "Mosquito Brief," stating in simple language the number of species of mosquitoes that inhabit marsh lands and cesspools of the United States—that they can only breed in water; that one mosquito can lay on the average three hundred eggs a day; that the life of one mosquito is about a month. The most dangerous of Southern mosquitoes is the *Stegomyia fasciata*, the natural carrier of yellow fever germs.

At the evening dinner, Gen. Fred D. Grant, of Governor's Island, U. S. army post, gave some interesting reminiscences on mosquitoes and their effect on the health of the army. He related how he had protected a division of the army located

on one side of the Rio Grande River, in a southern section of the country, from the spread of yellow fever, which had broken out in a town situated on the opposite bank. He secured funds from Washington to carry out an effective system of screening, and said as a result that not one of his men was taken with the fever. On Governor's Island, numerous relics in the shape of 15-inch-gun shells were inverted, so as to shed water instead of holding it, which had the effect of relieving locally the generation of the insects. Even upright rifle barrels were filled with sand to avoid the collection of water.

Mr. Paul D. Cravath related an interesting record concerning the relation of the mosquito to malaria. On the north side of Long Island, about thirty miles from New York, there were certain valleys and bays where the mosquito was notoriously evident. The areas were located upon a map. Another record was made as to the extent of malaria over this section, from physicians and others, and these areas were placed upon a second duplicate map. The medical map was then superimposed over the first map, and it was found the areas in both cases pretty evenly matched each other.

This record is of special interest to all boards of health, and proves most graphically how it is possible to improve the public health by the prevention of mosquito breeding.

Other interesting remarks were made, showing how marshy places by being reclaimed and converted into public parks could easily improve land valuations and at the same time become a public benefit.—*Scientific American*.

Surgical Judgment.

That qualification which of all others I think physicians admire and respect most in a surgeon is *judgment*. It is a difficult quality to describe in words; but it consists essentially in knowing whether or not an operation is required in the case under consideration, in deciding upon the best time for performing the operation, and in selecting the special form of operation to be employed. Needless to say it is a difficult quality to acquire, and it is almost an impossibility for one surgeon to impart it to another. Although it may be developed, it appears in its origin to be largely intuitional; and those who are born without it rarely become distinguished for anything beyond the mere manual dexterity with which their operations are performed. The operations performed by such surgeons may be the most brilliant success, but many of their patients are very apt to die.—John B. Deaver in *Medicine*.

THE TREATMENT OF ARTERIOSCLEROSIS.*

BY DR. E. ROMBERG, TUEBINGEN, GERMANY.

Coronary sclerosis with or without sclerosis and insufficiency of the aortic valves is to be treated with digitalis, provided no serious cerebral arteriosclerosis is present. The signs of coronary sclerosis causing cardiac weakness are: Angina pectoris, cardiac asthma, severe dyspnoea, in conjunction with the signs of aortic involvement expressed by systolic aortic roughening, accentuation of the second aortic tone, and when the aortic valves are shrunken, the presence of a diastolic murmur over this area. Occasionally, an area of dulness is found over the dilated ascending aorta. Tincture of strophanthus may be used when prolonged medication is required. Digalen is of value in cases where rapid effect is desired. Full blooded, vigorous individuals, suffering with these attacks, may be put on a milk diet with digitalis for five or six days with good results. Digitalis is of value in those cases of angina pectoris where there is a disturbance of the heart's force and frequency, chiefly. It is of value in all cases of cardiac asthma. Here it may be necessary in addition, to give a narcotic and stimulant at bed time for the nightly attacks of asthma. Morphine is to be used only where absolutely necessary. Codeine or dionine and nitroglycerin are valuable in this connection, the last named often being prophylactic. Frequently, abdominal fulness and distress are present in plethoric cases, and should be treated by catharsis and digitalis.

Interstitial nephritis is a condition frequently met with, and here digitalis and its congeners are often of value, but its administration requires more care and should be combined with diuretics.

Carbonated baths at 92 to 95 degrees F. are of value in mild cases of arteriosclerosis, but not good for severe cases or extremely nervous cases.

Gymnastics must be carefully graduated and watched. When so given, great benefit is to be had. Otherwise, more harm than benefit accrues.

Cerebral arteriosclerosis gives rise to a feeling of fulness and heaviness in the head. The patient wakes earlier than usual, frequently with a feeling of great anxiety and precordial distress. During the day these attacks may come on resembling pseudoangina pectoris. Vertigo and digestive disturbances may arise. Mental activity and memory diminish and a change in disposition is noticed. These various neurasthenia-like symp-

* Abstract from the Deutsche medizinische Wochenschrift, 1906, No. 5. By Meisenbach.

toms arising beyond the fortieth year point to vascular degeneration and not to neurasthenia.

The treatment requires rest, regulation of diet, vacation. Plenty of water by day except in cardiac insufficiency with oedema, where the fluids must be restricted.

The appearance of psychical disturbances is of sinister import, such cases belong in an institution.

Visual disturbances are met with in arteriohæmorrhage and thrombosis of the arteries or veins.

Vomiting tympanites, constipation and abdominal pain are met with in arteriosclerosis of the abdominal vessels. In these cases, small doses of opium or atropine may give relief. Thrombosis of the mesenteric vessels and gangrene of the bowel elude positive diagnosis and are fatal.

Vascular neurosis: Intermittent claudication, Raynaud's disease, acroparaesthesia, and erythromelalgia are met with often as expressions of arteriosclerosis. These vascular neurosis should be treated by quieting agents.

The general treatment of arteriosclerosis bases itself on the administration of potassium iodide. It is of greatest value in the neurasthenic type of manifestation. Organic changes are probably not influenced by it. This remedy is not to be used in arteriosclerosis complicating Basedow's disease.

Potassium iodide should be given in doses of 2 to 5 grains five times a day, for two to three years with pauses. As suggested by Lauder Brunton, sodium bicarbonate, potassium nitrate, and sodium nitrate, taken in a pint of water on the empty stomach on rising may be used during the pauses.

Rest is essential. These persons should undergo a diet regimen and only those living exclusively sedentary lives should resort to exercise for reduction of the body weight, and then only if the disturbance is not great. Sleep is essential. Elevations of 1500 to 4000 feet are the best suited for these sufferers, the lower elevation named being appropriate for those suffering from cardiac insufficiency. Lukewarm salt baths are of value. Hot and cold baths are not to be used by arteriosclerotics. Tobacco, alcohol, tea, and coffee, in moderate amounts, are not harmful, except in very nervous or easily excitable persons. Any serious accident in these cases, such as apoplexy or anginal attacks, etc., of course, demands avoidance of these agents except in vital indications.

Mixed diet with moderate amount of meat, condiments, and considerable fluid is the best for the majority.

Results can be had only by persistence and careful attention over a long period.—A. E. Meisenbach in *St. Louis Medical Review*.