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Original Communications.

SPECIAL ADDRESS ON OPHTHALMOLOGY.*

By J. W. STIRLING, M.B.,
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Mr. President and Gentlemen.—I have to thank you for the honor you have done me in asking me to deliver the special address on ophthalmology at this meeting of the Canadian Medical Association, and more especially do I appreciate it from the fact that this meeting is held in my native city. One cannot but feel a certain amount of diffidence in addressing such a large assembly of one's fellow-workers in our noble profession, but I trust that what I have to tell you may both be of interest to you and also of some assistance in the prosecution of your professional calling.

I must claim to a certain extent the indulgence of my fellow-workers in ophthalmology, who may be here, if I do not present them anything very advanced. I would remind them of the fact that I am here to deliver an address to the profession as a whole, and that technical points which would be of interest to them might be far from interesting to the majority of my hearers. Yet what I have to say may not be lacking in interest for them.

I have chosen as the subject-matter of my paper a few salient points in the diagnosis and treatment of the more common diseases of the eye. My communication will be almost

* Delivered before the Dominion Medical Association at Halifax, August, 1905.

entirely based upon my own experience, drawn from the very large clinical material at my disposal in the Montreal General Hospital.

Conjunctivitis is one of the commonest eye diseases which confronts both specialists and general practitioners during their career, yet in no other ocular disease has there been more room for advance, both in the matter of diagnosis and of treatment. Happily, during the past few years great progress has been made in both these particulars, and the results have been crowned with success. Looking back over my comparatively short career, well do I remember how in the old hospital days in London there was a routine treatment for conjunctivitis; the diagnosis was strictly limited by the nature of the secretion and condition of the conjunctiva, and the treatment consisted in the use, or I might say the abuse, of various astringents. In some cases this treatment happily hit the mark, but in others the result was a failure or else a prolonged chronicity. With the promulgation of the germ theory, there was an opportunity for advance, yet but little was done in this direction in eye diseases for some years. Astringents were at this time dropped to a certain extent, and antiseptic lotions took their place, yet a varying amount of empiricism persisted, and results were not always so successful as one could wish for. During the past few years, however, great strides have been made by Koch-Weeks, Morax and Axenfeld; new germs have been discovered; their relationships to certain forms of ocular disease have been worked out; the conditions specially favoring their development have been studied; the symptoms they give rise to have been noted; and lastly, what is of most importance to the clinician, appropriate remedies are being discovered. There is, however, much left to be done, as evidenced, for example, by the uncertainty which overhangs the germ of that scourge, trachoma.

To start with, be it remembered the conjunctival sac in the new-born is held to be free from bacteria, but immediately the infant has entered on its existence in this world, the conjunctiva is exposed to infection from the atmosphere or from the skin, with which it is in immediate proximity at the edges of the lids. The organisms thereafter found in the eye vary greatly in their nature and pathogenicity. Their malignancy depends a great deal upon the resisting power of the organism. It would appear that it is impossible to render the conjunctival sac absolutely sterile, since any bactericide sufficiently strong to effect this would exert a deleterious influ-

ence on the eye. The tears exert a certain bactericidal action, which may be due to a mere dilution of the secretion, and this is seconded by the muscular action of the lids in winking, which force the secretion into the tear sac (the drainage system of the eye), whence it escapes into the nose. One thing is certain, the tears are a bad culture medium for bacteria.

Another important factor in limiting the development of the bacteria in the eye is the temperature of the exposed eye-ball. McGillivray, of Dundee, has worked this out very carefully, and has shown that the surface temperature of the exposed cornea is about eighteen degrees below that of the body temperature, whereas if the lids are kept closed the conjunctival and corneal surface temperature soon rises, thereby favoring the development of many bacteria. In addition to this, of course, the eyelids being closed does away with the mechanical drainage function, to which I have just referred. A good example of this is frequently met with in cases of phlyctenular disease, in which the eyes have been kept bandaged. This closure is invariably followed by a marked extension of the disease, which can be readily checked by desistence from the use of compresses, and also what amounts to the same thing, by the prevention of the child burrowing its head into pillows and cushions.

Of course, when operating on the eye we have to bandage it afterwards, but this is with the sole intention of getting a speedy union of the wound, and by this means preventing the possibility of a deep infection of the eye. As soon as firm union has taken place all closure of the lids should be abandoned.

In my clinic at the hospital all cases of conjunctivitis, tear-sac trouble and ulcerative keratitis undergo a thorough bacteriological examination before treatment is undertaken; invariably, also, a bacteriological examination of the secretion is made in all cases before operation.

The invaluable nature of this examination must, of course, be self-evident to you, firstly as a means of diagnosis, secondly as a precautionary measure, thirdly as an indication for treatment.

This bacteriological examination, short of making cultures of the germs, is by no means difficult, and should not be beyond the power of any medical man. The little extra trouble that it entails upon the practitioner will be amply rewarded by the results obtained.

I may, perhaps, be allowed to describe the very simple pro-

cess of making this examination, although doubtless the majority of you know it already.

With a small platinum wire, sterilized in a spirit lamp's flame, a small amount of the secretion is removed from the conjunctival sac and smeared over a glass slide. The great point in the smearing is to tease the secretion well out on the slide; a drop or two of gentian violet solution is dropped on the smear; after twenty-five seconds this is washed away with water; a few drops of Gram's iodine solution is dropped on and left for about fifteen seconds; it is washed off with alcohol until no more colored matter is observed to come away; the specimen is then washed with water and a five per cent. solution of safranin is dropped on the specimen and left for five seconds, when it is washed off with water. This is a routine method for the ocular secretions.

As you all know, conjunctivitis has been classified according to the nature of its secretion or conjunctival changes, *e.g.*, catarrhal, muco purulent, granular, and membranous types, but since bacteriological investigations have been carried out there is a strong likelihood that this will be changed. Similar clinical symptoms are caused by very different forms of bacteria, the treatment of which varies greatly according to the bacterial finding.

In the catarrhal type of conjunctivitis we recognize two main varieties, the acute and the chronic, the symptoms of which are too well-known to you to need repetition. The vast majority of cases of the acute type has been found to be due to the presence of the Koch-Weeks bacillus, and in only a few cases have other germs been discovered. This form of bacillus as a rule attacks children, and has even been found in the newborn. As a rule these bacilli can only be discovered during the first few days of the disease.

The bacilli lie between the leucocytes and also within the protoplasm. Sometimes they even extend into chains of two or three links side by side; they are decolorized by Gram's iodine; they have an incubation period of two or three days; and the second eye is generally infected two or three days after the first; they seem to penetrate into the superficial layers of the epithelium and not into the deeper tissues; they do not give rise to chronic conjunctivitis. The bacilli appear as very short, fine rods, staining less deeply than the nuclei of the cells; the ends are rounded and also show a deeper polar stain. I have a specimen under the microscope for your observation.

The treatment of this form of conjunctivitis consists in the

application of nitrate of silver, two per cent. solution, or the three per cent. solution of largin.

Entirely distinct from this form is a chronic variety of catarrhal conjunctivitis affecting mainly the conjunctiva of the lids and especially well marked at the inner and outer canthi. This disease sometimes goes by the name of angular conjunctivitis; there is a slight mucous secretion, the conjunctival papillæ are not swollen, the inner canthus and the lid margins are markedly red; in time the roots of the cilia become affected, as does also the tarsus; the cilia then fall out and the lid margins curl inwards. It occurs at all ages, but more especially in adults, and is most frequently met with during the months of June, July and August. Superficial infiltration of the cornea occurs and sometimes even severe purulent spreading ulcers are found, which bear a marked similarity to the malignant ulcer serpens.

In 1896, Morax and Axenfeld both discovered a diplobacillus, which by a series of exhaustive investigations they found to be the cause of this disease. The bacilli are large 2μ by 1μ , and generally occur in pairs and chains; they are decolorized by Gram's method after staining with gentian violet. The disease is very infectious, and the bacilli retain their virility for a long time.

It has been found that solutions of sulphate of zinc have almost a specific action in the cure of this disease, and this may be freely applied even when ulcerations of the cornea arise. The zinc salt is used in a solution varying in strength from a half of one per cent. up to two per cent., the milder collyria being reserved for those cases exhibiting the greatest irritation. It has also been found that the solutions of the silver salts appear to be inert in the treatment of this condition. I might cite as an example of the action of this drug, even in severe ulcers, one case out of several which have lately come under my observation. The patient had developed an ulcer in the cornea, probably of traumatic origin, for which he had been treated at his home in the country, near Montreal. He thought that his eye had been scratched very slightly with a twig, and did not pay much attention to it until it became very painful. when he sought advice from the family physician, and treatment failing to check the condition, he came into my clinic at the General Hospital.

I found a large purulent ulcer of the serpiginous type. The condition was so typical that I immediately classed it as an ulcer due to pneumococcus infection, and prescribed antisept-

ties and cauterization of the ulcer, thus, you will notice, departing from my rule of having a culture taken before starting treatment. The ulcer continued to spread rapidly, so that in forty-eight hours I felt there must be something lacking, either or both in diagnosis and treatment. Whereupon I had a culture taken, and to my own surprise and that of the pathologist, Dr. McKee, he found the Morax-Axenfeld diplobacillus. The treatment was immediately changed, and the solutions of zinc sulphate substituted for the antiseptic lotions. The change within twenty-four hours was marked, and the progress thereafter towards recovery was very rapid. I have cited this case in full in order to impress both the importance of the bacterial examination of these ocular conditions, and also its value as indicating the proper treatment.

The metallic salts break up in the conjunctival sac and act by precipitating the albuminates, which agglutinate the euzymes and active agents of the inflammation, the freed acid of the salt thereupon exerting its caustic action.

It is interesting to note that this bacillus maintains its virility in cultures up to the seventh generation. The diplobacillus enters the eye either from the air, in a dried or fluid form, or by actual contact; it has been found in the posterior chambers of the nose, whither it may have come from the eye by way of the tear-duct. On the other hand there is a possibility of its spreading in the opposite direction from the nose to the eye. This diplo-bacillus retains its activity and power of reproduction after being dried for fourteen days, but this is likely due to its being surrounded by a sheath of mucous, which prevents it from really being absolutely dried up. The presence of this germ, and its attendant inflammation, have been frequently reported in Europe, and its occurrence has been noted a few times in the United States; but as far as I am aware its first definite appearance in Canada has been noted in my clinic at the General Hospital by Dr. S. H. McKee. The disease is by no means a new one, but the bacterial cause had not been traced until lately.

Under the microscope you will find several specimens, also a culture on blood-serum of Morax-Axenfeld bacillus, forty-eight hours in incubator—forms little pits which later coalesce and liquify.

We have another type of conjunctivitis frequently associated with infiltrations of the cornea, which take on a malignant type and develop the above-mentioned serpiginous ulcer; later on it may be complicated by iritis. The conjunctiva is at first

slightly rose red; this is rapidly followed by great swelling and even by the formation of a cropous membrane on the inner surface of the lid; the secretion is watery, and very frequently there are small hemorrhages; it is especially found among young children and young adults; it occurs in epidemics; it is contagious. The germ is found to be a diplo-bacillus lanceolatus, or pneumococcus, as it is sometimes called; they are lanceolate in shape and tend to form short chains, which with some other points suggest a similarity to the streptococcus family. The treatment of this condition is active antiseptics and the application of the galvano cautery to the ulcer.

Of the purulent types of conjunctivitis that exist, that caused by the gonococcus is the one most frequently met with and most disastrous in its results; it is extremely contagious, but the proportion of individuals suffering from gonorrhoea who develop gonorrhoeal conjunctivitis is comparatively small. This comparative freedom from ocular complications in gonorrhoea is very suggestive to any one having much to do with the disease. It would almost appear as if the gonorrhoea itself confers a certain degree of immunity. In addition, the escape of the eye from this virulent infection must be partly due to the protection of the lids and the washing away of the secretion by the tears. It would appear as if the resisting power of the individual has a good deal to do with the severity of the diseases, since in many cases which have come under my notice I have found that the proportion of gonococci present bears no definite relation to the severity of the disease. Many of the worst cases I have seen showed under the microscope but a few gonococci, whilst in others in which the disease ran what we might call a benign course, great quantities of gonococci were present. It is needless for me to speak about the characteristics of this well-known germ, but there is one point I wish to impress upon you, and that is the fact that the gonococcus is capable of invading the intact corneal epithelium, whenever the pus is allowed to stagnate in the eye; hence the great importance in treatment of a very complete and frequent irrigation of the conjunctival sac.

I have found gonococci in the sac many days after the cessation of the discharge, which points to the necessity of continuing the treatment for some time after the apparent cure.

In this connection I wish to draw your attention to an interesting form of conjunctivitis, of gonorrhoeal origin, but in which the infection is endogenous, and which is frequently

associated with iritis. The inflammation as a rule occurs about the period of the appearance of the joint complication of gonorrhoea. As you know, the gonococci are carried by the blood stream to the joints, and there set up inflammation, and the same type of inflammation may occur in the eyes. It is an irritable form of conjunctivitis; the secretion is watery and has a tendency to chronicity and to relapses. No gonococci are found in the secretions of the eye, although they may be present in the tissues; there is considerable pain and photophobia. The local treatment must be mild, and if there be any urethral trouble present it, of course, must be attended to. The iritis that occurs in these cases possesses also the same tendency to relapses, but I have found that this tendency diminishes greatly with the improvement of the urethral condition. This form of gonorrhoeal eye trouble may be considered a sort of general toxemia, manifesting itself in some weak spots. In cases of gonorrhoeal conjunctivitis we sometimes get a mixed infection, streptococci and pneumococci being present, and it would appear as though the presence of the streptococci favors an increased severity of the infection.

Membranous conjunctivitis is, happily, of rare occurrence, at any rate the true diphtheritic type; in fact, during my career in Montreal I have not come across a true case of this (although I have seen many cases of membranous conjunctivitis); a few I have seen on the continent of Europe. The severe cases of membranous conjunctivitis which I have met with were at first very suggestive of true diphtheria, but on close investigation they proved to be due either to that allied germ, the bacillus-xerosis, or to staphylococci.

As being of interest in this connection, I might cite a case of my own which I saw not very long ago. The patient was an infant about nine months old, and suddenly developed an intense inflammation in the right eye; a gray membrane formed over the palpebral conjunctiva which could not be rubbed off, but left a gray surface beneath it; there was great swelling of the lids; a smear showed a bacillus which was at first considered to be the Klebs-Loeffler diphtheria bacillus. The culture, however, the next day, showed this not to be the true Klebs-Loeffler, but like the allied bacillus-xerosis (of which I will have a word to say to you later on). There were also staphylococci present. The treatment of this case was simple, the use of argyrol, twenty per cent strength, and mild boracic acid lotions. Recovery took place in about three weeks. I will not detain you with any details in regard to the diph-

theria bacillus, but I wish to say a few words in connection with that very puzzling type of germ, the xerosis bacillus, which I found in the above case. This germ is found very frequently in the normal conjunctiva, so that it would appear there must be a predisposition on the part of the patient before it can exert any malign action. Little is known of its true nature and action; it is identical morphologically with the diphtheria bacillus. It is stained by ordinary aniline dyes, and grows on the same culture media forming similar colonies. It is different from the diphtheria bacillus in not producing an acid reaction in neutral peptone bouillon. Frankel regarded it as a non-virulent diphtheria bacillus, which may become virulent when mixed with staphylococci; others regarded it as simply the non-virulent stage of the diphtheria bacillus.

A year ago a case of that comparatively rare disease known as Parinaud's conjunctivitis was treated by me. The characteristics of the disease are the huge granulations which develop on the palpebral conjunctiva; these rapidly increase in size; there is also enlargement of the pre-auricular and infra-maxillary and cervical glands. There is a rising temperature, but the course of the disease, which is not rapid, tends gradually to complete resolution. An elaborate bacteriological examination and report was made by Dr. John McCrae, pathologist at that time to the General Hospital. Pure cultures of a bacillus resembling the Klebs-Loeffer were found during twenty-five days of active treatment of the eye. This bacillus was not found in the other eye, nor in the nose or throat. This bacillus gradually disappeared with the recovery of the eye. It would thus appear that in this case we were dealing with either a virulent form of bacillus-xerosis, or else a less toxic than ordinary bacillus diphtheria.

These are a few of the main points in connection with conjunctivitis which I thought might be of interest and value to you. There is no doubt, in regard to all these germs, that whenever they develop a tendency to form chains, that is, as it were, reverting to the streptococci type, there is a coincident increase of virulence.

In addition to all that I have told you, it is hardly necessary that I should insist upon your not losing sight of one great point, the fact that the eye is part of the whole bodily mechanism, and that in the local treatment of any eye condition one must not lose sight of the general constitutional state. It is an altruism that if the general physical condition is lowered there is a corresponding lowering of resistance to all forms

of infection, and this holds true as much in eye lesions as in general constitutional disturbances. A close attention is demanded to general hygiene, fresh air and cleanliness, both local and general, proper dieting, etc.

The second portion of my address I desire to devote to a consideration of the functional light perception of the eye, and to the diagnostic value of it. This is a symptom which is, as a rule, but scantily described in the text-books, yet it is, nevertheless, one of much importance in the differential diagnosis of certain eye diseases.

What is of much importance, is that the said eye diseases are generally of constitutional origin, or secondary to serious trouble elsewhere. Many a time I have wondered if it were not possible to discover some symptom which would be of value as a hint of intra-ocular eye trouble, in cases in which, from some reason or other an ophthalmoscopic examination cannot be made. To examine the eye thoroughly with the ophthalmoscope demands continued practice, and very few general practitioners are able to do this; hence it is under these conditions that a symptom roughly pointing to fundus trouble of the eye may be of use. As an example of the value of this, I may mention one case out of many which have come under my observation. The patient was referred to me by the family practitioner in order to have the refraction tested, the symptoms calling for this being headache and diminution of the visual acuteness. On proceeding to examine the patient I found that there was marked nephritic retinitis. This ocular condition is, as you know, associated with chronic varieties of nephritis, in which the general symptoms are occasionally not very pronounced; hence, failing an ophthalmoscopic examination of the eye, the mistake might be considered possible. It is just in such cases as this that an examination of the light perception, even roughly made, would serve as an indication to the physician of a retinal change being the cause of the eye symptoms, and would call his attention to the desirability of a thorough physical examination.

In examining the light sense there are two points which call for consideration, the first being the minimum amount of illumination which will give rise to the sensation of light; and, secondly, the smallest difference between two degrees of illumination which it is possible for the patient to perceive. The simplest method of testing the minimum light perception is to diminish the illumination of our card of test types, until it just begins to affect our own visual acuity (taking for

granted that our own eye is normal). We can then observe whether there is a corresponding or a greater diminution in the visual acuity of the patient. In order to test the light difference we use what is known as Bjerrum's or De Wecker's photometric test types, which I here show you, and which consist of Snellens' types, printed white on gray. The contrast between the letter and its background, as you will see, gradually diminishes as we descend the board. There is a fraction marked at the end of each line, which will give you an approximate idea of the value of the light difference in any case. The result, of course, cannot be mathematically accurate, but can be approximately enough correct for practical purposes. The main difficulty in these tests is the variation of perceptive power of the retina, occasioned by the state of so-called adaptation. For instance, an eye which has been in the dark for some time is extremely more sensitive to light than one that has been exposed to strong daylight. We can, however, compare our own light perception with that of the patients, presupposing our own eyes are in an approximately normal condition. The diminution of the light perception is mainly caused by a pathological change in the outer or pigmentary layer of the retina, which layer goes by the name of photochemical apparatus of the eye, whilst a diminished value of the light difference perception is most marked in lesions affecting the optic nerve. In retinal and choroidal lesions the light minimum is greatly reduced, as a rule, and the light difference is but very slightly affected, hence a diminution of the light perception, pointing, as it does, to a lesion of the retina or subjacent choroid (which latter, as you know, is the nutritive supply for the outer layers of the retina), directs the attention to the possible cause of such a lesion. Now, the main causes of the retinal conditions are certain toxic constitutional states, and your attention being drawn to this fact, you would institute a thorough general examination of the patient. The nephritic type of retinitis is the one most frequently met with, and as you know, the prognosis is extremely grave, the patient's life rarely being prolonged eighteen months after the eye lesions are demonstrated.

Next to this we have a diabetic type of retinitis, in which we have the same failure of the light perception, but in which the prognosis is not nearly so grave; further, there are the syphilitic types, some of them associated with circumscribed exudations in the choroid and retina, which are characterized also by the distortion of objects looked at, due to the exudate forc-

ing the cones of the retina apart or by its contraction crowding them together. Another point in the diagnosis of these cases is that the perception of colors is changed, the appreciation of blue being first lost, and this is in marked contradistinction to the failure of vision due to true nerve lesions, in which green is the first color to disappear. I may mention here, as an interesting contrast to these conditions that in cases of hysterical amblyopia you will frequently find the vision is improved under diminished illumination. As to the diminution of the power of appreciation between various degrees of illumination, this condition is most marked in cases of optic atrophy, and would be of value thus to you in the differential diagnosis between lesions purely affecting the retina and those of the optic nerve. I will not dilate here upon the visual field and its indications, but I think I have said enough to draw your attention to a simple differential diagnostic symptom which cannot but be of use to you.

2. We must not be in a hurry to consider all cases of headache and diminished vision as due to a refractive error.

3. In neurasthenic individuals there is a marked susceptibility to any peripheral irritation, so that a very slight error of refraction may give rise to marked symptoms, such as pain and headaches, etc., while in the case of calm, phlegmatic individuals a comparatively high error may cause little or no trouble. The same holds true, of course, in the well-known category of ocular muscular insufficiencies, for given a slight error in any case there is a more determined and continuous effort to overcome it, with the production of a corresponding fatigue, whilst in high degrees of the same trouble there being an utter inability to overcome it, the patient makes no attempt to do so, and accordingly escapes the trials of asthenopia. I feel obliged in this connection to speak rather strongly against the custom of allowing opticians to correct refractive errors. If there be any astigmatism present, which is likely in the majority of cases, the proper correction of it is virtually impossible without the use of mydratics. Again, especially in cases of myopia of high degree, there are not infrequently marked retinal changes, which, unless properly looked after, tend to become worse and end in partial blindness. Many cases occur in which an apparent error of refraction is simply an indication of severe fundal and constitutional trouble, and one I may mention, which, having seen but the other day, is comparatively fresh in my memory and is of interest for two reasons. This lady had been wearing lenses prescribed for

her by an optician, and which had been changed from time to time during the past year, until latterly marked myopia began to develop. On examining her eyes I found the light perception greatly diminished; there were some fine opacities in the lens; there were also some fine retinal changes which had evidently been in existence for some time. Further examination of the urine revealed the presence of marked diabetes. This case is also interesting as an example of the value of the light sense test.

In the words of Hilton Fagge, diabetes, being a derangement of the chemical labor of nutrition, you can readily understand how the eye must suffer. The retinal affection in its earliest stages evidencing itself by the alteration of the light sense, and the myopia being as a rule due to the opacities of the lens altering its refractive power.

Astigmatism in its many forms is without doubt the cause of both local and systemic disturbances. Bearing this in mind, and recognizing the fact that only accurate correction is of any value, it must be self-evident to you that no optician is competent to perform this work. In the words of Maitland Ramsey, you have to remember that the eye is not only in the body, but of the body.

REMOVAL OF THE UTERUS.*

By T. SHAW WEBSTER, M.B., M.D.C.M.,
Gynecologist Toronto Western Hospital.

"As a general proposition the removal of the uterus is indicated whenever both tubes and ovaries are to be sacrificed. It is easier to remove the uterus completely with its adnexa than to dig these out and propedly treat their stumps," and "I divide my difficulties by splitting the uterus."

Those who agree with the late W. R. Pryor in making the above statements do not wish to be classed as opponents of conservative surgery. To conserve a functionally-useless organ potent only for future mischief is open to question.

An infected appendix should be extirpated. An unhealthy gall-bladder to-day is taken out. Should not a diseased uterus, whose reproductive function is gone, be treated in the same way, especially if its removal involves less danger to the patient and less difficulty to the operator. Those who have a preference for the vaginal route undoubtedly find that hemisection of the uterus and panhysterectomy is easier than the removal of the tubes and ovaries without the womb.

When a patient has both sets of adnexa involved in sup-puration, the whole uterus is found in a pathological condition. There are granulations on the mucous membrane, hyper-plasia of the muscular stroma and induration of the glands therein.

Purulent discharge and pelvic pain will continue after the removal of the tubes and ovaries in spite of the repeated use of the curette or any other method of treatment. Such an organ gives what may be termed "the miserable life" to woman. Its removal gives relief. The convalescence is short and attended by no embarrassing circumstances.

The operation is a combination of several distinct surgical procedures, details of which may be found in text-books, and therefore I shall only mention them and take liberty to emphasize a few points that ensure success and the pitfalls that have made this comparatively easy work difficult and unpopular with those who have not mastered the simple technique thereof.

1. The *position* should be the exaggerated lithotomy. Be sure to have the buttocks project six inches or more over the end of the table. Less than that places the operator at a dis-

* Read at meeting of Ontario Medical Association.

advantage. The lower limbs should be extremely flexed upon the body.

2. *Dilatation and curettage*, to ensure cleanliness in the field of operation. Swab the uterus with gauze folded over the curette. Do not use the intrauterine douche. I have frequently found the douche fluid had passed through the tubes. When the recto-vaginal pouch was opened it ran out. One of my colleagues put more than a pint of bichloride solution in the abdomen in that way, although the os was fully dilated. The opening of the cul-de-sac saved the patient from peritonitis, but it is safer not to use the intrauterine douche.

3. *Posterior vaginal section* is not difficult and never dangerous. Bland Sutton says, "This is an extremely simple proceeding." Grasp the cervix at the sides with two pairs of bullet forceps (these are not removed until the hemisection is finished), and make traction towards the pubes. Cut the mucous membrane half-an-inch behind its reflection from the cervix with scissors; a scalpel should never be used to do this. Dilate by introducing the scissors closed and open them until two fingers can be pushed in easily. Put down the peritoneum with the fingers. Seize it with forceps and open it with scissors. Then introduce a large pair of curved forceps through this serous button-hole and dilate until four fingers can be inserted. Many operators fail in vaginal section work by trying to operate through a cul-de-sac opening that is too small. It may be widely dilated without the least danger. The wide opening provides also for better drainage, and is, therefore, an advantage after the operation. This opening is for exploration, and again permit me to quote from Bland Sutton, who says, "The surgeon is then able to ascertain the condition of the uterus and the ovaries and tubes." Now it can be determined whether both sides are disabled beyond repair, whether conservatism or radical removal is indicated. The latter is before our notice at present.

4. *Anterior vaginal section* is next done. The operator introduces the intrauterine traction forceps and pulls the uterus downwards and backward. The vaginal mucous membrane in front is opened in the median line, and the slit extended both ways to complete the circuit of the cervix by reaching the posterior opening at the sides.

Pryor was careful to leave a narrow strip of mucous membrane at each side between the anterior and posterior openings, his chief reason being greater safety to the uterine arteries. The anterior opening is easy to accomplish through

vaginal mucous membrane, difficult in the dense cervical tissue. Do not make it too near the cervix. Keep at least half-an-inch back. The operator now separates the bladder from the uterus by rubbing it off with the palmar surface of the fingers, pressing hard down upon the uterus, which is held firm and made evident by the intrauterine forceps. Do not forget that the bladder extends laterally upon the broad ligaments. Widen the separation until the uterine arteries can be felt pulsating plainly.

During the separation of the bladder from the uterus a sound in the bladder is no advantage. The uterus is the landmark. Be careful to keep close to it until the utero-vesical pouch is opened.

5. *Bisecting* the uterus is now begun. The intrauterine forceps are withdrawn and traction is now made with the vulsellæ which were inserted into the sides of the cervix at the beginning of the operation. The anterior wall is divided with the scissors from the cervix to the fundus. A special curved director is inserted behind the cervix and passed upward until it appears in front of the pubes. Then from above downward the posterior uterine wall is divided with a probe-pointed bistoury. The director precludes any possibility of injury to the intestines during the hemisection of the posterior wall.

One-half of the uterus is now pushed into the pelvis and the other swings out like a pair of double doors on their hinges. The whole hand can now be passed into the pelvis, and its recesses further explored. With the use of retractors adhesions can be seen and separated, as in laparotomies. The tubes and ovaries can be lifted out of their nests. Rupture of pus sacs may occur, but the abdominal peritoneum is in no danger of being sailed, and post-operative peritonitis cannot occur.

6. When the tube and ovary on one side is free, clamps are applied to the broad ligament, one from above and one from below, and the parts beyond the clamps cut away. The other side is then treated in the same way. The upper clamps may include the ovary or not, as seems wise. Bland Sutton has shown the benefit of leaving an ovary or part of one behind if it is not diseased, in averting the nerve storms of a premature menopause.

During the whole operation no hæmostatic forceps are used, and no vessels are ligated. Only a slight oozing occurs when the uterus is divided in the median line.

The loss of blood is inconsiderable, not enough to saturate a pocket handkerchief. The clamps compress the vessels, preventing hemorrhage and thrombosis. They crush the nerves, reducing the after pain to the minimum. They close the lymphatics and obviate sepsis.

7. The dressing is done after the manner of Mikulicz, but first a piece of gauze is inserted between the clamp handles and the lateral vaginal wall to prevent pressure necrosis. The clamps are drawn downward and outward, and held by long special retractors. The bladder is lifted up with a Pryor-Rean trowel. The perineum is held down with a weighted speculum and the space between is filled with long rolls of gauze, which reach from the vulva to above the points of the clamps. The clamps are removed in forty-eight hours. The handles are unlocked and the blades detached by a gentle, twisting movement, and the gauze is taken out in seven or eight days. By this time firm, plastic union is established between the bladder and the rectum, and the clamp sloughs are practically in the vagina, walled off from the abdomen. Two douches each day should be given until the mucous membrane is closed, a period of three or four weeks, but the patients may be allowed out of bed in ten to fourteen days.

If iodoform gauze is used, the percentage of iodoform should be low, as I have seen two cases of iodoform poisoning of slight degree, but very annoying. About two per cent. of all patients are susceptible to it. Hernia never follows vaginal operations, and intestinal adhesions never result from them. The narcosis need not be complete. Absolute relaxation of the abdominal muscles is not essential. Rapidity is an attractive feature of this method, twenty to thirty minutes will suffice. Panhysterectomy is indicated also in complete prolapse in older women and in uncontrollable metrorrhagia, but should the uterus be cancerous it had better be removed *en masse*, so as to avoid soiling normal tissue with cancerous elements and favoring a recurrence.

In conclusion, Mr. President, permit me to quote the following interesting statement from Bland Sutton as an additional argument:

"Experience acquired in the performance of vaginal hysterectomy has taught surgeons that the intraperitoneal relations of the uterus and its appendages may be explored with reasonable safety through an incision in the vaginal cul-de-sac."

ADDRESS TO THE GRADUATING CLASS IN THE
FACULTY OF MEDICINE OF MCGILL
UNIVERSITY, MONTREAL.*

BY PROF. J. M. ELDER.

Mr. Chancellor, Members of Convocation, Members of the Graduating Class, Ladies and Gentlemen,—It has been a time-honored custom in connection with the graduation exercises of this Faculty that two addresses should be given, one on behalf of the graduating class, to which we have just listened with so much pleasure, and perhaps profit, and the other a valedictory to the graduating class on behalf of the teaching staff. This year the honor of saying farewell and of wishing God-speed to this class on behalf of the Faculty, has devolved upon me, and I feel more particularly fortunate in that I will not be called upon to address you at any length. For my task, in so far as it should be advisory, has been largely anticipated by the valedictory that our most distinguished graduate (Dr. Osler) delivered here a short time ago, and to which we listened with mingled feelings of regret and pride—a valedictory which, I trust, no one of us will ever forget. Every word of it was particularly applicable to the young man about to start upon his medical career, as well as to every student of medicine, be he undergraduate or practitioner.

But, gentlemen of the graduating class, one must never forget that this Convocation Day is specially your day, and that you are standing to-day at the portal of your lifework, full of hope and eager expectation. For four years you have been faithfully training for the race which you to-day start upon, and how you will finish it must henceforth depend upon yourselves. The diplomas you have just received and the degree just conferred upon you mean, that in the opinion of your teachers, at least, you have a good working knowledge of disease, and are competent to meet and battle with the various phases of the “ills which flesh is heir to.” To continue the simile, we think you are properly trained for the race. But running it is a different matter, and we want to see you win as you should do.

You have still to learn that it is much easier to deal with your patients' diseases than to deal with the patients themselves, to say nothing of their friends and relatives. This

* Delivered at the Convocation for Conferring Degrees in Medicine, held June 21, 1905.

knowledge each one of you must acquire at first hand for himself; no post-graduate hospital course will give it to you, valuable as such a course is, and much to be desired. You will find even after a hospital course that you have still the larger part of your profession to learn, namely, how to deal properly with your patients and with the social relations that exist between you and your patients. And what a lot this is! What patience, tact and discretion you need! You will appreciate, before you have gone very far, the meaning of these three Latin adverbs which you have just repeated: *caste, caute et probe*. If you merely treat the actual illness of your patients you only fulfil half your mission as a medical man. There are many medical men whose sympathy and advice in trouble is valued by their patients far more than their therapeutic or their surgical skill. Their worth as a friend and adviser to the family is much more than their value as a physician, and they are the very best of practitioners. As the trusted family physician you will know infinitely more of the family secrets than will the clergyman or any other professional man, and never forget what a sacred trust that is, and never thoughtlessly betray it. You are young men, but you will need old heads on those young shoulders if you are to be as successful in practice as we all hope and trust you may be. Success in your chosen profession, I doubt not, is what you are all aiming at, what you all hope to attain and what every one of us wishes you may attain. Let us consider, then, for a few moments the factors that make for success in your future calling.

You enter that profession presumably for two reasons: First, you liked it. If that reason is not first, if that reason is not as strong to-day—nay, stronger—than the day you entered the study of medicine, I beseech you, even now, to abandon the profession. I tell you this in all honesty and sincerity, and after twenty years' constant practice in the profession; for I can imagine no greater drudgery than a man practicing medicine who is not in love with his profession. Secondly, you entered the profession because you hoped—and reasonably so—that you might make in it a fair livelihood, in addition to the honorable position which you might attain. If it is ever true that “the laborer is worthy of his hire,” it is most true in the medical profession; and yet the medical man notoriously goes most often without it. In fact, he often labors knowing full well that there is no chance of his being paid for his labor. Nevertheless, if he has the true spirit of

a sworn follower of Æsculapius, he will render those services willingly and cheerfully; better not make the visit at all than to make it grudgingly. All you hope for is gratitude and the sense of a kindness rendered, and you will miss even these if you render an unwilling service.

Now, to make a success of this profession of yours means that you must concentrate all your energies upon your work. Not only must you be in love with your profession, but it must be your only love. You will have to stand by and see those of other professions or business, with possibly with less ability than you have, and with certainly less time and money spent upon their education, apparently passing you in the race of prosperity; but your compensation is that you are doing more good in the world than they are, and where they merely make money you are making life-long friends.

It is a law of the human mind that constant concentration upon one subject will finally produce a mental atrophy. The more constantly you focus your gaze upon a certain thing, the less will you see all sides of it. Herein lies the danger of that very concentration we spoke of just now as necessary to success. You must see to it that your views do not become too narrow. Cultivate some hobby to which in your leisure moments you may always turn. If possible, let the hobby be a medical one; but if not, still have a hobby. I am ashamed to say what mine is—it is not medical.

In thinking over what special message I might deliver to you to-day, it occurred to me, gentlemen of the graduating class, that I might with fitness devote at least a part of my remarks, possibly the major part, to a subject upon which I do feel myself qualified by experience to speak. As many of you know, I spent the first five years of my professional life in country practice, and a glance at our list of graduates shows that at least three-quarters of them become rural practitioners. I therefore think that it might be profitable to you that I should drop a few hints specially applicable to the conditions which pertain in rural practice. Those first five years of country practice taught me much, and I have often said that should any son of mine elect to follow our profession, I would send him, if I could, at the outset into country practice. Nowhere else does the medical man gain such self-reliance. If it is true that "necessity is the mother of invention," then it is doubly true that the necessities and vicissitudes of a country practice develop all the latent resources of the medical student and make him a stronger and a better

man in less time than he ever could be in a large city, where help is so readily and so easily obtained. He must work out his own case in the country; in the city he would not be allowed to do so, a consultant would undoubtedly be called in.

In the first place, I want to state that you will likely acquire a large practice easily and quickly in a country place; and this very thing has been the undoing of many a young medical man. He at once assumes that he is a heaven-born physician or surgeon, else surely he would not, in a few months, have acquired a practice which his poor city brother would spend more years and not obtain. What follows? He decides, without more ado, that he is too good for the place, that he is wasting his talents, moves into a larger sphere, meets competition, and soon finds his true level. He is no heaven-born practitioner after all, but a fair, average man, and the stupid people in the city do not flock to him. He has thrown away the substance for the shadow, and there is a great danger that he will become soured in his profession and will end in failure, where he might have attained the very greatest success had he just had a little more ballast. That this is no fancy picture many cases which have come to my own personal knowledge testify.

Again, everybody in the country makes it his or her business to know as much as possible about everybody else, especially if the doctor has been called, and as medical men you will have to learn to meet adroitly the cross-examinations to which you will be subjected with regard to the condition of the patients you are attending. And, mark you, any word or hint you may drop will not decrease as it is passed on. In small towns and villages life is not a constant whirl of excitement, it is mostly dull and grey; and there is, therefore, great temptation to go outside your own office to look for some entertainment. You cannot make a practice if you do so. If you are not at home, and a call comes, patients are not going to hunt the whole village or town for you; they will get some one else, as possibly very much time has been lost in driving a long distance to get a doctor. Unless absent at the call of duty, be in your own office. Nothing is so detrimental to the professional standing of the young medical man as the habit of loafing around the town or village, or being seen in the company of loafers.

The code of ethics in country practice differs materially from that which prevails in the town or city, and necessarily so. It is unavoidable that at times you should see the patients

of your fellow-practitioner, and that he should see yours; but it is always avoidable that you should give offence or take offence when this occurs. The medical code is never prejudicial to the interests of the patient; it is always possible to render proper attention to the sick person and proper courtesy to your fellow-practitioner. You must see and treat the patient to whom you have been called casually while on a round miles away from your home; but if that patient has been attended by a fellow-practitioner, be careful to give no opinion of the case, while giving the most careful treatment; and see to it that a sealed note is left to be given to your fellow-practitioner upon his next visit, or, better still, to be delivered to him in the meantime. Thus you will avoid professional complications and make valued friends of the old doctor who may possibly have viewed your advent with mingled feelings. And a word here as to the usual etiquette of country practice. You are supposed to call upon the medical men already in practice when you settle in the town or village. It is a small matter, but it must not be neglected.

Do not spend time trying to dissuade these kindly country folk that they know nothing of medicine and that you know it all; many of their opinions you will find are based upon sound principles, and it will be infinitely better that, where possible, you fall in with the grandmother's views than that you should make yourself unpopular by combatting them. I shall never forget a dear old lady whose grandchildren I was called upon to attend for some painful affection, I forget just what. I was preparing some opiate to be given to these children (for you must do your own dispensing), and the old lady watched me closely and asked what I was going to give. I answered, "A little opium to ease the pain." "Opium!" she said. "You will give no opium to a grandchild of mine; what we always got when we were young and had pain was poppy-head tea." I adopted her suggestion, and she was a very great ally of mine as long as she lived.

As a medical man in a country practice you are of necessity a public man, and you must be prepared to take your part in the municipal government of the town or village in which you reside. In all municipalities the question of public health is a live one, and, thank God, it is becoming daily more so. You medical graduates of to-day, thanks to the generosity of our benefactors, have the opportunity of being well grounded in the knowledge of preventive medicine and of hygiene and public health, and that knowledge should be at the disposal

of the community in which you live. Be always ready to do your part as an intelligent medical man, to the end that the town or village in which you reside should be a more healthy place to live in than it was before. If you are asked to be medical health officer, assume the duties of the position even though the remuneration be pitifully small; as a medical man you owe that much to society. If an epidemic breaks out, place your expert knowledge of how best to combat it at the disposal of the local authorities. Thus you will earn for yourself, often in a few weeks, the gratitude of an entire community, who, though they may say little, appreciate perhaps all the more, and your name will become a benediction in the neighborhood in which you live. What higher aim could any man have in any profession.

But, apart from your public duty as a medical man, it may well be that your sphere of duty may have to be enlarged. You may be of the very greatest service to your neighbors as an intelligent public man, apart from your profession; and I am not one of those who hold that a doctor should not take part in politics, be they local or general; although I do hold most strongly that a man's profession should always claim the best that is in him. Let politics be your hobby, if you will, but not the main aim of your life, so long as you practice your profession.

Never forget what Osler told you about the absolute necessity of the "quinquennial brain dusting." I should rather make it "triennial," and there is no reason, in these days of rapid railway communication, why every country practitioner should not have a rather prolonged holiday at least once in three years, which he might spend in some hospital centre with pleasure to himself and profit to his patients. Country practice is hard work, and no tired, jaded man is capable of doing his best. Work hard while you are at it, but don't be afraid to take a well-earned holiday.

Will you allow me to say one word of warning before I leave this subject? The social life of a country doctor I know is often a lonesome one; if he be a busy man, he is largely debarred from the society of his fellow-practitioners, or of others socially congenial; and I suppose that this is the reason why so often he seeks solace in the waters of Lethe. It is difficult to understand why a man who sees so much of the evil effects of narcotics and alcohol as a physician does, should himself so often fall a victim to these very things. And yet how many most promising medical careers have we seen cut

short by these very agents! It is a painful subject, and one I simply want to mention and not to dwell upon. No one could look unmoved upon the eager, intelligent and hopeful faces I see before me to-day, if he fancied, for one moment, that any one of them might within five years bear a far different stamp. Yet such has been the record in the past. I trust such a fate may befall none of you.

And now, gentlemen, I have done with advice. On behalf of your teachers, I congratulate you as a class. You have worked hard; you have worked faithfully and earnestly to attain the proud position you to-day occupy as graduates in medicine of McGill University. Your alma mater is proud of you, and I am sure that no one of you would ever do anything which would cause her to blush for you; but rather as the years roll on, and honors come to you, each in your own sphere, that she will feel that in honoring you to-day, she was but laying up a plentiful store of honors for herself in the future. Universities, like parents, are glorified or disgraced by their children. We, your teachers here during the past four years, wish you all God-speed in your chosen profession, and if at any time you should consider that our advice, help, or sympathy will be of any assistance to you in solving any of the knotty problems of your profession, I am sure I speak for the whole Faculty when I say that we shall be honored and pleased to give it to you.

Gentlemen—graduates of the class of 1905—on behalf of the Faculty of Medicine, I bid you farewell.

Special Article.

THE DIAGNOSTIC VALUE OF HEMORRHAGIC PLEURISIES.

BY DR. NICOLA MORANO.

Having made the diagnosis of exudative pleurisy, we must then find out the nature of the exudate, because on this depend the true diagnosis, the prognosis and the therapy. The direct means for learning this is by puncture, which, besides enabling us to establish the diagnosis, will sometimes start absorption of the exudate. In this paper we shall deal only with *hemorrhagic pleurisy*.

What are the causes of this condition? First of all, we must mention tuberculosis, then malignant tumors, hemorrhagic diathesis, interstitial nephritis, hepatic cirrhosis, acute articular rheumatism, etc. When we have patients affected by scurvy, hemophilia, interstitial nephritis, etc., there is no difficulty in clearing up the cause of the hemorrhagic pleurisy, this symptom being secondary to those of the chief disease. These diseases being excluded, by their special symptoms, we must then diagnose between tuberculosis and malignant tumors of the lungs and pleura—two conditions that often present not only the same clinical, but also the same anatomical and pathological picture.

There is one other condition, sometimes giving rise to hemorrhagic pleurisy, which we cannot now describe in full, namely, certain heart lesions, chiefly aortic in nature, occurring in aged people. In these the pleurisy is limited to the right side, starts without inflammation, is accompanied by grave hypostole, ceases rapidly as soon as the liquid is aspirated, recurs quickly after temporary improvement, and proves fatal.

Having briefly considered this interesting type, so fully described by Professor Cardarelli, we shall now return to *Tubercular Hemorrhagic Pleurisy*.

This may be due to pulmonary tuberculosis or to primary tuberculosis of the pleura. Dieulafoy has reported cases of hemorrhagic pleurisy occurring both at the onset and during the course of chronic tuberculosis. He makes three groups:

1. Hemorrhagic pleurisy due to acute general tuberculosis.
2. Hemorrhagic pleurisy arising in the course of chronic tuberculosis.

3. Hemorrhagic pleurisy due to a primary tuberculosis of pleura.

Miliary tuberculosis invades generally the whole organism, but there are cases in which the pleurisy is the only symptom which attracts our attention. Its beginning is generally insidious; at other times the pleuritic symptoms are evident. Pleurisy from miliary tuberculosis is not always exudative, it may be dry; but when there is liquid, it is for the most part hemorrhagic.

In chronic tuberculosis, the bacilli are carried through the lymphatic vessels from the apex, where the disease generally begins, to the whole organ; they reach the visceral layer of the pleura, and thence, by *direct contact*, the parietal layer. The bacillus of Koch, having reached the pleura, may have a fibrin-forming influence and set up an adhesive pleurisy; or it may have an irritative influence and cause a fibrino-plastic pleurisy, either dry or sero-fibrinous; or it may produce a vitreous degeneration of the vessels, leading to their rupture and to hemorrhagic pleurisy; or the pleura may be covered with tubercular false membranes, which are continually destroyed in the superficial strata and regenerated in the deeper ones, and as a result we have a purulent pleurisy (Charcot).

Thus the pleurisy arising during chronic tuberculosis is of different kinds, but authorities assert that hemorrhagic pleurisy in these cases is less frequent than in acute miliary tuberculosis.

Finally, it is possible that the hemorrhagic exudate be due to a primary tuberculosis limited to the pleura. Here the anatomical conditions are similar to those of tubercular pleurisy occurring during chronic pulmonary tuberculosis. In these cases there exists no pulmonary tuberculosis, acute or chronic, and the hemorrhagic pleurisy begins as an ordinary acute pleurisy. This pleurisy, after the cavity has been emptied several times, is perfectly cured, but after some months or some years the patient is struck down by pulmonary tuberculosis. Cases of this nature abound in literature. (Hanot.)

Now, in order to decide to which of the three forms the tubercular pleurisy belongs, we must remember the following rules:

In acute tuberculosis, together with the general symptoms of the disease, there is the fact that the exudate is somewhat abundant, and that after thoracentesis it is quickly repro-

duced. Charcot says that pleurisy in this case constitutes only an "epi-phenomenon" of the acute tuberculosis, which follows its rapid and fatal course.

In chronic tuberculosis the pleuritic symptoms appear gradually or abruptly. The exudate reaches two litres or more, and after thoracentesis is soon reproduced, but continues to lose its hemorrhagic tint until it becomes sero-fibrinous. Finally it ceases to be reproduced and the layers of the pleura adhere, while the pulmonary tuberculosis continues its course.

In hemorrhagic pleurisy, due to primary tuberculosis of the pleura, the diagnosis is more difficult. Here the clinical symptoms are only those of the sero-fibrinous pleurisy, so that, in order to decide the nature of the exudate, we must have recourse to injections of tuberculin or to injections of the pleuritic liquid into test animals.

The microscopic examination of the pleuritic liquid is not altogether reliable, because it is nearly always negative.

There is another bacterioscopic method, recently proposed by André Joussett, which seems destined to facilitate the search for micro-organisms, and especially Koch's bacillus, in pathological serums. This new method, successfully applied by Cardarelli, is called Inoscopy, and consists in searching directly (by Gabbet's method) for tubercular bacilli in the suspected exudate, after having digested this exudate, at 38 degrees for about two hours, in a kind of artificial gastric juice, composed of pepsin, pure glycerine, hydrochloric acid, fluoride of sodium and distilled water. In these cases of positive search for bacilli in the exudate, the diagnosis of hemorrhagic exudate from primary tuberculosis of the pleura, is one of the easiest to make and one of the most precise.

Now we shall consider *Hemorrhagic Pleurisy due to Primary Tumors of the Lungs and Pleura*.

In the lungs, besides benign tumors, as lipoma, fibroma, enchondroma and dermoid cysts, which may remain unobserved, one may have malignant tumors, as carcinoma and sarcoma, which are still more frequent than the benign. Usually they are secondary to tumors of other organs, but primary malign tumors of the lungs and of the pleura are not rare, as we used to think. Cardarelli, too, is of the opinion that often sarcoma of the pleura is primary, if not always anatomically, certainly clinically. Literature records to-day numerous cases in support of this thesis, and we owe to the important publications of the Neapolitan school (especially those of Cardarelli and Zagari) the precise data upon which we make a diagnosis of these conditions.

The most frequent site of these tumors is the upper part of the right lung. Like every other pulmonary affection, carcinoma may act as an excitant to the pleura, which may react with an exudate *sanguinolent from the beginning*, owing to the intensity of the inflammation; or with a serous exudate, later becoming fibrinous. Deposits of fibrin are formed on the pleura, and these subsequently become organized and transformed into a very vascular tissue, the vessels of which are easily ruptured, and thus a *hemorrhagic exudate* is produced. (Ehmann.)

When a patient has had malignant tumors in other organs, any symptom in the respiratory system naturally makes one think of a possible reproduction. But much more difficult is the clinical diagnosis of a tumor, arising primarily in the lungs or pleura. Even when the pathologist finds in these cases, besides the pleuro-pulmonary tumor, some other organ having malignant nodules of remote date, which may not have given any objective or subjective indication during life, the case is still for the clinician a primary endothoracic tumor.

In some cases, malignant tumors of the lungs and pleura progress without subjective symptoms, but generally the disease begins with a sudden sharp pain, such as is met in pleurisy. On making an examination we find that the exudate is hemorrhagic. On inspection we note that the side of the thorax affected is distended in the upper portion; we find also relative respiratory immobility, with obliteration of the intercostal spaces. Percussion gives a dulness which increases with the amount of liquid, and over the tumor an extreme resistance and lack of elasticity of the thoracic walls. Auscultation reveals a bronchial blowing sound and a loud bronchophony. Both of these arise from the same cause, namely, a pulmonary thickening, by which the parenchyma is reduced to a solid body, more or less compact, which transmits sounds more perfectly.

The sharp, lancinating pains found in these conditions radiate in many directions, to the neck, the shoulder, the arm. There is a remarkable lessening of strength, more marked than in any other affection of pleura or lungs. The cough is peculiar in that it does not relieve the patient; it is strong, violent, and leads to little or no expectoration. Another important sign is hemoptysis, with different features from that in pulmonary tuberculosis. In the latter the hemorrhage is extensive, because it is due to the rupture of large vessels. In cancer, it is much less marked, arising from

small, newly-formed vessels which nourish the tumor. In tuberculosis the blood is red and frothy; in cancer it is black and non-aerated.

Cyanosis is found, being due to the *venous stasis*, arising from compression of superior vena cava or one of its branches. There is also edema, limited to the arm or neck or the upper half of the body. The *cachexia*, when it exists, is a sign which leads us directly to the diagnosis. However, the cachexia is later and less intense than that which is developed in cancer of the stomach or intestines. Even Laennec, in 1818, observed that the general condition of the patient with pleuro-pulmonary cancer is well preserved for a long time. The cachexia is, indeed, very marked towards the end, and particularly when the hemorrhage is great and large quantities of blood are gathered in the pleural cavity.

The pathognomonic objective sign which, in most cases, is sufficient to indicate the presence of a neoplasm, is *glandular enlargement*. The sub-clavicular and axillary glands are the most frequently affected, afterwards the cervical and then the inguinal. This symptom may sometimes precede the manifestation of the pleuro-pulmonary affection, because the tumor may run its course without causing the patient any trouble. They appear only on the side affected. Also there exists no *fever* in these cases. When there is elevation of temperature, it is due to processes outside of the lungs, for example, bronchitis, etc. There is sometimes *frequency of pulse*, due to weakness or to compression of the pneumogastric. This compression may be so great as to cause paralysis or arrest of the heart's action. The tone of the voice may also be changed, becoming hoarse or even aphonic, due to pressure of the tumor on the *recurrent*. To decide that the hemorrhagic pleurisy is due to a neoplasm, we make a physical, chemical and microscopical examination of the pleuritic liquid. The specific gravity is increased (1018 to 1020); it contains a large quantity of albumen (50 per cent.). There is a great residue of solids and an abundance of fibrin. The microscopic examination reveals many red corpuscles, some swollen white ones, enlarged endothelial cells and *elements peculiar to the neoplasm*. Ehrlich, Sorgo and others have found these elements, which, they assert, resemble closely the endothelial cells, but are larger, and, like them, have one or two nuclei.

Conclusions.—Whenever, by an exploratory puncture, we are assured that the pleuritic exudate is hemorrhagic, we must proceed to exclude all those diseases in which it may occur,

the diagnosis of which is easy owing to their special features, such as the hemorrhagic diathesis, hepatic cirrhosis, etc. That settled, we have only to decide whether the hemorrhagic pleurisy is due to a cardiac condition (most frequently aortic), to *tuberculosis*, or to a *primary neoplasm of the pleura*. Ebstein, in 1890, declared that it was not possible during life to diagnose a malignant tumor of the lungs or pleura. Fränkel, in 1891, at the Berlin Society of Medicine, confirmed this statement, and in 1892 he diagnosed a case as tubercular hemorrhagic pleurisy, which, on a histological examination of a cervical gland, proved to be hemorrhagic pleurisy from cancer of the pleura. But this is not all. As Pace has shown, sometimes it is not only during life that it is difficult to distinguish these two forms, but the difficulty extends to the autopsy, and it is for the most accurate histological research to say the last word. The following are the chief differences between tubercular hemorrhagic pleurisy and that from a neoplasm:

Hemorrhagic Pleurisy from Neoplasm.

1. The pain in the thorax is sharp, lancinating, persistent, always increasing, radiating to shoulder, neck and arm.

2. The dyspnoea is intense, paroxysmal and lessens after thoracentesis.

3. Fever is absent.

4. Loss of strength is rapid and progressive.

5. Cough, if present, is characteristic.

6. Owing to pressure on the cava or its branches, there is marked cyanosis of the face or arm. The veins of the neck are turgid.

7. The cervical, axillary and subclavicular glands are enlarged.

8. The percussion of thorax gives a dull, wooden sound, especially in the upper anterior portion.

9. Auscultation gives bronchial breathing, persisting after thoracentesis either extensively or in a limited zone.

10. Pleuritic liquid after thoracentesis is rapidly reproduced, and remains hemorrhagic until death of patient.

11. Possible presence of neoplastic elements in the pleuritic exudate.

Tubercular Hemorrhagic Pleurisy.

1. The pain is mild, sometimes sharp, but not radiating.

2. Dyspnoea is less intense, and may even be absent throughout.

3. Fever is hectic with night-sweats.

4. Loss of strength is less rapid.

5. Cough is short and dry.

6. The face may be slightly cyanotic from lessened hæmatosis. Turgidity of the veins, if present, is not great.

7. No glandular enlargement.

8. Percussion gives a dull sound, especially in the lower posterior portion.

9. Auscultation gives bronchial breathing, which disappears after thoracentesis.

10. Pleuritic liquid is reproduced less rapidly, and after being drawn off several times is transformed into fibrinous serum, and may be entirely absorbed.

11. Possible presence of Koch's bacilli.

We must remember, finally, that for the diagnosis of hemorrhagic pleurisy from a neoplasm, there may be found other important data, as the cachexia, the age, changes in voice due to pressure on the recurrent, and deviation of the larynx; while for tubercular hemorrhagic pleurisy there may be all the other symptoms of a pulmonary tuberculosis.—Translated from *Giornale Internazionale delle Scienze Mediche*, by HARLEY SMITH.

Selected Article.

THE TREATMENT OF BALDNESS.

By HENRY WALDO, M.D., M.R.C.P.,

Senior Physician to the Bristol Royal Infirmary and in charge of the Department for Diseases of the Skin; President of the Dermatological Society of Great Britain and Ireland.

Treatment.—Of course, preventive measures are much the most satisfactory. It is sometimes possible to induce hair to grow when the disease has not been too long present, but it is even then more or less unsatisfactory. Assuming that bacilli are present they are then deep in the hair follicle, and we are met with the same difficulty that occurs in tinea tonsurans, and accounts for the subjects of that condition, if they have not very great faith, going the round of the doctors, until the last one gets the credit for the cure, often after the fungus has expended itself. The scalp in the seborrheic condition may look to an ordinary observer quite healthy, and yet there may be very marked funnel-shaped depressions round the hair follicles which are filled with fat. In some cases the seborrhea, as Crocker says, may be limited to these depressions, the surface being clean, and although this cupping of the hair follicles occurs chiefly in severe cases, it may, he says, be partially or completely recovered from.

Now first, as regards washing and bathing. One hears ridiculous nonsense regarding washing the scalp, and especially from the female sex. There are ladies who are proud to boast that they have not washed their heads with soap and water for several months, perhaps years; they little know what an effective disinfectant is ordinary soap, and if it is superfatted it causes very little dryness of the hair. If there are well-marked signs of seborrhea black soap is better, and if combined with spirits of wine and perhaps a little thymol, is a powerful remedy for good, and it should be repeated every day until all signs of the seborrhea have vanished. If it were not for the concentration of hair-producing power in the scalp of women they would oftener be the victims of premature baldness. I think men and women should make a rule of washing their scalps with soap and water at least once a week, and especially after each visit to the barber, as it is here they are likely to become infected from the clipper, or brushes, or other materials. They

should also occasionally soak their own brushes and combs in a 5 per cent. solution of carbolic acid.

An important preventive precaution is to induce an abundant blood supply to the scalp, which can be well carried out by simply moving the scalp upon the skull in different directions with the rough towel after the morning bath. It is well, too, at the same time to rub the ears, as it not only tends to prevent chilblains, but, what is more important, it is said to ward off senile deafness, and it would be interesting to hear what aural surgeons think of this. Bathing, especially in the open sea, is thought to thin the hair, but I imagine that it never does any lasting harm. Much more important is it to warn people with perforated drum membranes that sea water is an irritant to the middle-ear, and that they run a great risk of speedy death from meningitis.

It is thought by some that hard hats are harmful, and especially if they fit tightly. I think, however, it is more important to see that the linings of the hats are clean, but at the same time a hat should not interfere with the circulation or innervation of the scalp, and it is better to have it perforated for ventilation. We were taught years ago that wounds of the scalp always healed easily, as the parts were so vascular, but I suppose that surgeons of the present day have more fear of infection and greater difficulty in ensuring cleanliness in the scalp than in most other parts of the body, as it is such a nursery for germs. It is reported that a London surgeon on one occasion was able to trace a series of post-operative suppurations to a seborrhoeic house-surgeon, the calamity coming to an end as soon as the seborrhoea was brought under control by appropriate treatment. It is thought, too, that seborrhoeic patients are more prone than others to post-operative suppurations, probably through the agency of microbes retained within the dilated follicles of the skin in spite of the most sedulous cleansing.

When there is any tendency to seborrhoea it should be treated with a microbicide, but I am sorry to say not with much hope of curing it, for the tendency to recurrence dies only with the patient. Yet the more immediate complications of seborrhoea are readily checked by these remedies. As a palliative then—those who prefer to use some more or less greasy application, I would suggest half an ounce of precipitated sulphur made up with a pint of liquid paraffin, and applied to the scalp every morning: those who prefer a non-greasy microbicide, the same amount of sulphur to a pint of spirits of wine. I should not

prescribe paraffin for females, as the danger of fire has to be thought of, and as a matter of experience ladies dislike putting anything greasy on their heads. People constantly ask for something that will make the hair grow. Well, the view we take is that the old stimulating remedies, even beef-marrow preparations, are unnecessary; for, as a rule, if the microbe and its immediate consequences are removed the hair is nearly always ready enough to grow. A daily lotion of acetic acid and resorcin, made up with eau de Cologne, if you like, and rubbed well into the scalp with a piece of flannel, is as likely as anything else to soak down into the hair follicles without doing any harm. Nascent sulphur lotions are preferred by some; and then hyposulphite of soda and tartaric acid are used separately. Salicylic acid preparations often act well, and so does vasogen iodine. Where there is hyperemia, other remedies of a more soothing character would be first used.

In conclusion it appears to me that it may become fashionable to advise patients threatened with baldness to try the effect of X-ray treatment, for at the present time it is being used with good results in tinea tonsurans. A considerable discussion took place on this subject at the last meeting of the Dermatological Society of London, and the general opinion seemed to be that the method was now firmly established as the speediest cure for ringworm of the head. Many members had used it in numerous instances, and no member reported any untoward result, though all agreed that the greatest care must be used.—*Bristol Med.-Chir. Jour.*

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. ATKINS, H. J. HAMILTON, C. J. COPP
AND F. A. CLARKSON.

The Potency Period of Diphtheric Antitoxin.

One of the empirical beliefs concerning curative serums was that the "life" or "keeping" quality of the antitoxin of diphtheria was of short duration. A demand for "fresh" serum has arisen in consequence, and the misconception has gone so far that many physicians have refused to use an old serum, or one on which the arbitrarily-set time limit of the manufacturers has expired. This practice is erroneous, and the theoretical ground on which it is based is fallacious. Incontrovertible proof of this is afforded by the results of careful and prolonged investigations, and the testimony of numerous competent authorities is adducible.

As far back as 1898, Abba, Director of the Municipal Hygienic Institute of Turin, reported experiments to show that antidiphtheric serum retained its potency unimpaired at least eighteen months after preparation. In 1900, McFarland recorded an essentially similar opinion, extending the period of undiminished potency to two years. Chiadini, in 1902, published experimental evidence to show that the antitoxin kept well for at least eighteen months and began to deteriorate a little at the end of two years. A censure being attached to a certain sample of diphtheric antitoxin prepared in the Pasteur Institute because of its alleged deterioration, Roux announced (1902) that preference was given in the Institute to old serums. At this time, also, Libbertz had occasion to reply to a criticism directed against a ten-months'-old serum, and stated that while serums do diminish in antitoxic value, this loss occurs in the first two or three months, and beyond this they can be kept for years without further impairment.

Recently this vitally important problem has been attacked anew with the opportunity afforded by longer intervals since the serums have been procured, and with more uniform testing and retesting. Testimony in favor of the remarkable stability of diphtheric antitoxin is elicited to sustain the views of the earlier investigators. Thus Marx, of the Royal Institute of Experimental Therapy in Frankfort, in which the governmental examination for the German Empire is conducted, after an exhaustive study of 1,138 lots of antitoxin, publishes

his observations in the *Festschrift* in honor of Robert Koch's sixtieth birthday. He shows conclusively that the majority of serums suffer no antitoxic depreciation even after a lapse of from two to five years. The maximum loss of the occasional serum is $33\frac{1}{3}$ per cent., and this diminution usually occurs soon after the serum is obtained from the horse. Marx makes this significant statement in concluding his report, "*Any mistrust of old serum is unfounded.*" American serums have been studied by Miller, who tested many samples returned from the market. His results coincide very essentially with those obtained by Marx, and he concludes that "*The demand for fresh serum is not justified,*" and urges that no physician should postpone the treatment of a case of diphtheria awaiting fresh serum, simply because the time limit on that in hand has expired.

With this array of competent scientific authority before us we would be inclined to think the conscientious physician quite justified in discarding old beliefs in this connection without jeopardy to himself or his patients.

These facts, as ascertained by exact scientific research, should disprove obsolete traditions and serve to correct erroneous practices.

PEDIATRICS.

IN CHARGE OF ALLEN BAINES AND W. J. GREIG.

Acid Intoxication of Urine.—MORSE, *Archives of Pediatrics*, August, 1905.

By acid intoxication the writer means the presence in the urine of acetone and diacetic acid or the B-oxybutyric acid. The object is to trace a relationship between the presence of these bodies and cyclic vomiting. He summarizes his conclusions as follows: "The acetone bodies are not found in the urine of healthy children by the ordinary clinical tests. They appear in their urine under the same conditions as in adults. Certain disturbances of digestion, associated with the presence of the acetone bodies in early life, have peculiar symptomatology. It is probable that the peculiar symptoms are due to the acid intoxication. It is also probable that this acid intoxication is secondary. The connection of the symptom-complex seen in many cases of recurrent vomiting with acid intoxication is probably closer than in the digestive disturbances just mentioned. In these cases, also, the acid intoxication is

secondary to some other abnormal condition which may be or may not be digestive in origin. In any event the etiology is obscure. In spite of the fact that the amount of the acetone bodies found in these conditions is smaller than those found in diabetes the demonstration of their presence in connection with symptoms of gastro-intestinal disturbance and the symptom-complex of recurrent vomiting, and probably also with other conditions, is of importance, both in diagnosis and treatment.

Cyclic Vomiting Due to Eye-Strain.—*Archives*, May, 1905.
WITT H. SHERMAN, Buffalo.

A lad, five years old, healthy in every respect excepting periodic attacks of vomiting, followed by great prostration. By a process of exclusion, the eyes were considered as a possible cause, and although no symptoms were present they were examined by an oculist, who found that he had a hypermetropic astigmatism in both eyes. Spectacles were ordered and worn for two months. One day his mother noticed dark rings under his eyes, which her experience indicated to be the precursor of an attack. She put him to bed and kept him without food for a day. At the end of that time he was no better, but was depressed, nauseated and ready to vomit. Examination of the glasses showed them to be awry. The glasses were straightened without any other treatment, and in two hours' time he brightened up, his nausea left, and he wanted to eat.

During the past two years there have been several threatened attacks. On each occasion the oculist found that the glasses needed adjustment. When this was done the child was all right.

Two other cases of cyclic vomiting were treated by the author. In one, partial improvement followed the adjustment of glasses; in the other no good result followed.

Congenital Tuberculosis.—*Archives of Pediatrics*, May, 1905.
MARTHA WOLLSTEIN.

A woman died in the Lying-in-Hospital of advanced tuberculosis six days after the birth of a male child, in the eighth month of pregnancy. A careful examination was made of the placenta, membranes and uterine cavity. Numerous cheesy areas were found in the placenta, in the chorion and amnion and in the endometrium. Smears from these cheesy areas showed numerous tubercle bacilli. In the autopsy, tubercle were found in the lungs, liver, spleen, kidneys and peritoneum.

Anatomical diagnosis—acute miliary tuberculosis; microscopical examination showed tubercle in the lung, liver, kidney.

Animal inoculation was done from a section of liver. For forty-eight hours after injection the animal seemed ill, but then recovered and seemed lively. A nodule soon appeared at the point of injection and the animal lost weight. This nodule when examined had a softened cheesy centre, smears from which showed large numbers of tubercle bacilli.

Case of Cough and Loss of Weight Due to Worms.—*The Lancet*, January 28th, 1905. By ST. LEGER LISTON.

Boy, thirteen years of age and weighing thirty-six pounds. For many months he suffered from an intense earache, cough, expectoration, night sweats, and great emaciation. Expectoration frequently blood-stained. Temperature 104 deg. F. He also had a distended and painful abdomen, diarrhea, lack of appetite and insomnia. Family history showed that two sisters had died from some vague stomach trouble. Examination of throat showed the head of a round worm wedged into the eustachian tube, and there was great difficulty in pulling it out. After its removal the boy experienced immediate relief. Santonin, calomel and scammony were given for a fortnight, and by the end of that time he had voided per rectum 603 round worms. The cough disappeared, and the patient gained fourteen pounds in weight.

Kidney Decapsulation for Nephritis.—GRAHAM, *Archives*, September, 1905.

After commenting on the fact that most of the cases reported are those of adults, he gives the results of the following cases, collated from the *Journal*: Ten cases reported; four of these died shortly after operation; one not improved; one died in a year from another attack of acute nephritis; one much improved, and three well at present, one a year after operation and two, two years after operation.

Edebohl's claims that the improvement is the result of an increased amount of arterial blood. The author attributes it to the relief of tension. He claims that if suitable cases were selected the records would be more favorable in the future than in the past. Chronic interstitial nephritis with arterial sclerosis are not favorable cases for operation. Cases of recent origin, not improved by medical treatment, and becoming progressively worse, are suitable cases. As nephritis is generally bilateral, an operation on both kidneys is usually performed.

Of the ten cases reported by the author, four are possibly completely cured, and as they all otherwise would have died, he claims that the operation is worth a trial.

Editorials.

THE TORONTO UNIVERSITY COMMISSION.

The following gentlemen have been selected as a Commission to report on the reorganization of the University of Toronto: Sir Wm. Meredith, Professor Goldwin Smith, Mr. J. W. Flavelle, Mr. B. E. Walker, Rev. Canon Cody, Rev. D. Bruce Macdonald and Mr. A. H. Colquhoun.

The *Globe*, in an editorial, expressed the opinion that the composition of the committee will meet with general approval. After a complimentary reference to Mr. Goldwin Smith, the editor says that Canon Cody and the Rev. D. Bruce Macdonald will represent the dominant thought and opinion of Toronto University men.

We cordially support the views of the *Globe*, which happens to be ably edited by a prominent University graduate. There is a general consensus of opinion that the services of two clear-headed business men like Messrs. Walker and Flavelle will assist the Commission very materially. The Chancellor, Sir Wm. Meredith, was selected as the representative from the University, because of his ability, honesty, and knowledge of University matters. Mr. Colquhoun is a graduate of McGill University, a highly cultured and well-informed man, who is, we think, particularly to act as Secretary of the Commission.

The complete instructions to the Commission are as follows:

To consider and report a scheme for the management and government of the University of Toronto, in the room and stead of the one under which the said University is now managed and governed.

To consider and report a scheme for the management and government of University College, including its relations to and connection with the said University of Toronto.

To consider and report upon the advisability of the incorporation of the School of Practical Science with the University of Toronto.

To consider and report such changes as in the opinion of the commissioners should be brought about in the relations

between the said University of Toronto and the several colleges affiliated or federated therewith, having regard to the provisions of the Federation Act.

To make such suggestions and recommendations in connection with or arising out of any of the subjects thus indicated as in the opinion of the said commissioners may be desirable.

The Premier, in making some remarks as to the object the Government had in view in appointing the Commission, said he wished to emphasize the fact that the Commission has no power to deal with what has occurred in University circles in the past, or, in other words, to investigate the University. The past is a closed book so far as the Government is concerned, and the Commissioners will be expected simply to consider the existing scheme of management and government of the University.

MEETING OF ASYLUM SUPERINTENDENTS.

As mentioned in our last issue, a very interesting meeting of the Medical Superintendents of Asylums in the Province of Ontario was held in the Parliament Buildings, Toronto, September 20th. Dr. McCallum, of London, who occupied the chair, said there were imperfections in the management and equipment of asylums. He considered that the Provincial Secretary, the Hon. W. J. Hanna, deserved praise for calling the meeting, which must result beneficially to the provincial asylums and the officials connected with them. He thought that one of the most important questions for discussion should be the desirability of the appointment of a provincial pathologist. He stated that there were 6,000 patients in the asylums of the province. There should be careful investigation as to the cause of their condition. He also advocated rigorous inspection of the immigrants who are daily entering the province by competent experts in mental diseases. The Provincial Secretary, in a short address, explained that when he entered upon the duties of his office he discovered matters with which he was not thoroughly

acquainted, and he had called this meeting for the purpose of obtaining information. He hoped those present would present their ideas freely. The superintendents must do their part in maintaining the standard of the officials in asylums, and should have the power of suspension of them or even of dismissal.

We quite agree with the Provincial Secretary and earnestly hope that in the near future all incompetent officials will be dismissed. If only those who are thoroughly competent are retained, it is hoped that promotions in the service will be much more common. We have grave doubts, however, whether the Government in their recent appointments took much interest in this aspect of the question, and we repeat what we before said, that in making certain purely political appointments a grave injustice was done to many worthy men.

THE MEDICAL FACULTY OF THE UNIVERSITY OF TORONTO.

Dr. Victor C. Vaughan, dean of the medical faculty of the University of Michigan, Ann Arbor, delivered the opening address for the session of 1905-6, medical faculty of the University of Toronto. Dr. Vaughan has the good fortune to be the head of one of the most progressive medical colleges of this continent. Michigan is generous towards her State university, which has an income of about \$900,000 a year, including the revenue derived from the students' fees. Dr. Vaughan has always shown the deepest interest in the welfare of the Toronto medical faculty, and has rendered valuable assistance at three different functions during the last seventeen years. His recent able address, delivered October 3rd, was very highly appreciated by the teachers, students, and many of the friends of the University.

The medical faculty of the University of Toronto has made substantial progress since its re-establishment in 1887. The most important event in its history was the amalgamation of the two medical faculties of Toronto and Trinity

Universities in 1903. As a result of such amalgamation we have now in Toronto a strong and well-equipped school, which is assisting higher medical education in Ontario. The combined faculty has been managed with great judgment, and may now be considered a provincial success. Two men deserve mention in connection with this happy consummation, Dr. R. A. Reeve and Dr. Algernon Temple.

The prospects for this session are good. There are over 160 freshmen, and a total in all the years of about 600. We are glad to learn that more attention is being paid to the fifth-year class now than in former years. According to the new time-table, which has been prepared, it appears that a fairly good course will be given this session. We think, however, that there is still room for improvement in this regard.

The question is often asked, Is a big school with 600 students better or as good as three schools with 200 each? Any discussion of such a question has become practically useless because, although there was much to be said in favor of the small university or the small college twenty-five years ago, it is now generally admitted that the small institution, unless amply endowed, cannot furnish the expensive equipment which is necessary for the modern teaching of science either in arts or medicine. Hence arose the strongest reasons for federation and amalgamation.

Election of Dr. R. A. Reeve.

The preliminary arrangements for the organization of the various committees for the next meeting of the British Medical Association are well under way. We have much pleasure in announcing, as indeed was generally expected, that at the recent meeting of the Ontario Branch, held in Toronto, Dr. R. A. Reeve, dean of the medical faculty of the University of Toronto, was unanimously nominated as President. This decision was not reached without considerable discussion in a private way. It was considered by many that it would be a graceful act to elect Dr. Temple, dean of the late medical faculty of Trinity College. While we were quite in accord

with any such opinion, we are in a position to state that Dr. Temple positively refused to allow his name to go up for nomination. It was thought by others that it might be well to elect an "outsider," that is, some prominent physician not connected with any medical college. Such a selection of course would have been admirable for many reasons. We have, however, no desire to discuss the situation, we simply desire to congratulate Dr. Reeve upon the fact, that while there were many other men well qualified for so high an office, he became finally the unanimous choice of not only the Ontario Branch, but practically the profession of Canada. His election means much, but it means especially that he will get, as perhaps no one else could, the loyal support of the great mass of physicians in Canada, in his efforts to make the meeting of next August, a pronounced success.

THE NEW HOSPITAL FOR TORONTO.

At an informal meeting which recently took place in the office of Mr. Walker, at the Bank of Commerce, between the Trustees and a number of gentlemen interested, several generous subscriptions were offered, amounting altogether to \$255,000. The available fund at present is \$977,000, made up as follows:

Mr. Cawthra Mulock	\$100,000
Provincial Legislature	250,000
University of Toronto	50,000
City of Toronto	200,000
Mr. Timothy Eaton	50,000
Senator Cox	100,000
The Massey Estate	100,000
Mr. J. W. Flavelle	25,000
Mr. E. R. Wood	25,000
Mr. E. B. Osler	25,000
Mr. Byron E. Walker	10,000
Mr. H. D. Warren	10,000
Mr. Peter C. Larkin	10,000
Lieut.-Col. H. M. Pellatt	5,000
Mr. Frederic Nicholls	5,000
Mr. W. R. Johnston	5,000
Mr. Frank Baillie	5,000
Mr. W. B. Hamilton	2,000

New subscriptions are expected shortly, and it is hoped that the sum total will soon amount to \$1,500,000.

TRAINED NURSING.

To the General and Marine Hospital, St. Catharines, Ontario, belongs the distinction of having been the first hospital in Canada to have a training school for nurses established in connection with it.

It was in the year 1873 that plans were laid for the establishing of a training school for nurses in connection with the St. Catharines hospital, which had been founded by Dr. Theophilus Mack in 1865, and which had in the interval risen from a small cottage hospital to be one of the best and most convenient hospitals in the province.

Dr. Mack was untiring in his efforts to promote the usefulness of the hospital, and to his remarkable enterprise is largely due the fact that a training school for nurses was established in St. Catharines long before the larger cities of the Dominion received the innovation, and at a time when nurses' training schools were, indeed, practically unknown on the continent. The large hospitals of Great Britain were known to be training nurses with marked success, and Dr. Mack and those connected with him were eager to introduce into the Canadian hospital the system of hospital training that was proving of such remarkable value in the old land.

Miss Money, an Englishwoman, and the matron of the hospital at this period (1873), was commissioned to go to London, England, for the purpose of bringing out two trained nurses and others willing to be taught to the number of five or six.

It was in the early part of the winter of 1873-4 that Miss Money sailed upon this mission. She returned early in 1874, bringing with her three trained nurses, graduates of Guy's Hospital, London, and by June of the same year the "St. Catharines Training School for Nurses"—afterwards given the name of the Mack Training School, in honor of its founder—was established. It has had an uninterrupted existence ever since, and has, therefore, been training nurses continuously for over thirty years.

During Miss Money's absence in England, Dr. Mack, by the assistance of friends, had been enabled to rent and furnish a house suitable for a nurses' home, and to fund a sufficient sum of money for its maintenance for one year. This house the nurses occupied until a nurses' home was erected on the hospital grounds, which was done in the early years of the training school, so that at no period in its history have the nurses of this institution been required to reside in the hospital building itself.

The London nurses and the early graduates of the St. Catharines school were termed "sisters," which custom, as well as that of the outdoor uniform, was, I believe, adopted in accordance with that of the London hospital, after which the St. Catharines hospital nursing system was modelled. Both these practices were, however, discarded a good many years ago.

The period of training was at first three years; some years later it was changed to two years, but the three-year period was afterwards re-established and is in force at the present time.

Pupils of the Mack Training School have always been required, after a stated period of hospital experience, to each nurse a limited number of private cases outside of the hospital, and the records show that there has been no lack of opportunity afforded them for the exercise of this portion of their training. In the early days when other training schools were unknown in Canada, and, in fact, for many years after training schools had been established in various other places, it was a common, almost daily, occurrence for the St. Catharines school to receive requests for nurses from outside places, not infrequently from distant towns and cities.

Graduates of the hospital have held important institutional positions in this and other countries. Some have labored as army nurses—both in the South African and Spanish-American wars—some have become foreign missionaries, while in nearly all the large cities of Canada and the United States M. T. S. graduates have at some time or other during the last thirty years engaged in private nursing and been welcomed as valued assistants by doctors of the highest standing.

It is not possible to mention individually the work of graduates, but it may be stated in passing that Miss Hibbard, who became lady superintendent of the hospital in St. Catharines, later lady superintendent of Grace Hospital, Detroit, and is now widely known as a war nurse, having been placed in charge of the nursing department of the hospital ship *Maine*, fitted out for service in the South African war, is a Canadian and a graduate of the Mack Training School.

Dr. Theophilus Mack, who founded the General and Marine Hospital and Mack Training School, died in October, 1881.

ANNIE E. HUTCHISON,

(Former Superintendent General and Marine Hospital).

Orillia, September 21st, 1905.

—*Toronto Globe.*

Personals.

Dr. Matt. Wallace is seriously ill from a growth in the abdominal cavity.

Dr. S. E. Fleming, Tor. '95, Sault Ste. Marie, visited Toronto early in October.

Dr. D. A. Clarke, of Uxbridge, has removed to Toronto and settled on College Street.

Dr. Géorge A. Schmidt, formerly of Stratford, is now practicing at Copper Cliff, Ont.

Dr. J. H. Bell has been appointed Medical Health Officer of Kingston in succession to the late Dr. Fee.

Dr. Roswell Park, of Buffalo, attended the International Surgical Congress at Brussels, September 18th.

Dr. John L. Davison and Dr. Harry B. Anderson, Toronto, have formed a partnership.

Dr. E. L. Roberts, formerly of Lynedoch, has removed to Simcoe, and formed a partnership there with Dr. Bowlby.

S. H. McCoy, M.D., M.R.C.S. Eng., of St. Catharines, has been admitted Fellow of the Royal College of Surgeons, Edinburgh.

Dr. O. T. Dinnick, Tor. '03, who has been in New York during the last year, visited his relatives in Toronto, October 6th.

Dr. William Gardiner, of Montreal, has been elected Second Vice-President of the College of Physicians and Surgeons of Quebec.

Dr. W. F. G. Addison, late house surgeon at the T. G. H., has been appointed demonstrator of pathology in the University of Pennsylvania.

Dr. J. Archer Brown and Dr. F. N. Hughes, Toronto graduates of the '04 class, recently returned from London *via* New York, and visited Toronto, October 10th.

Dr. Joseph D. Bryant, of New York, will deliver the annual oration on surgery at the Boston meeting of the American Medical Association next year.

Dr. C. A. Hodgetts, Secretary of the Ontario Board of Health, attended the meeting of the American Public Health Association, recently held in Boston.

Dr. John S. McEachern, formerly of Elmvale, who has recently spent some time at post-graduate work in England, has decided to settle in Calgary, N.W.T.

Dr. E. R. Frankish sailed on October 6th for England, where he will resume his studies in London. Before returning home he will spend a term in the Rotunda, Dublin.

The Western Hospital of Toronto has purchased property on Roseberry Avenue. The grounds of the hospital, which now occupy over four acres, have a frontage of 550 feet on Bathurst Street.

Dr. D. King Smith, 311 Jarvis Street, Toronto, returned from Europe early in October. He announces to the medical profession that he will in future confine his practice exclusively to the diseases of the skin.

Dr. Geo. D. Porter left Toronto for Europe, October 16th. After spending some time at post-graduate work in London and Vienna he will return to Toronto and resume practice, confining himself to dermatology.

James Hyslop has issued a writ for damages for alleged malpractice against Dr. E. Fraser Bowie. He was treated for rheumatism, and alleges that blood poisoning, from which he is now suffering, was caused by malpractice or neglect.

Dr. Bruce L. Riordan, of Toronto, who has been in the G. T. R. medical services for eighteen years, has been promoted to the rank of division surgeon of that railway, and will have jurisdiction over the sections west and north of Toronto.

Mrs. Willson, of Newmarket, recently brought an action against Dr. J. H. Wesley, claiming \$10,000 damages for alleged malpractice. After hearing the expert evidences of Dr. Geo. Bingham and Dr. Herbert Bruce, the judge gave judgment without allowing the evidence to go to the jury. Chancellor Boyd, after summing up the evidence, completely exonerated Dr. Wesley from the charge of malpractice.

The following have been appointed coroners by the Ontario Government: Dr. Alex. C. Mavety, Toronto Junction, for the County of York; Dr. S. H. Quance, Hagersville, for the County of Haldimand; Dr. W. G. Mackechnie, Marmora, for the County of Hastings; Dr. W. S. Harper, Madoc, for the County of Hastings; Dr. H. H. Alger, Stirling, for the County of Hastings; Dr. W. Glaister, Wellesley, for the County of Waterloo; Dr. J. A. C. Evans, Innisfil, for the County of Simcoe; Dr. F. E. Godfrey, Mimico, for the County of York; Dr. Hiram Wigel, Warton, for the County of Bruce; Dr. G. H. Ellis, Chesterville, for the united Counties of Stormont, Dundalk and Glengarry.

Marriages.

Dr. Leonard Vaux was married August 28th to Miss Sparks.

Dr. A. Hamilton Huff, of Wiarton, to Miss Ames, September 20th.

Dr. C. H. Gilmour, son of Dr. J. T. Gilmour, Toronto, to Miss Sayres, October 3rd.

Dr. Thomas M. Allan, of Somerset, Bermuda, was married to Miss Evans, of Toronto, October 5th.

Obituary.

CHARLES EDGAR BONNELL, M.D.

Dr. Bonnell, of Bobcaygeon, a graduate of Victoria in 1866, died August 11th from tetanus caused by an injury to the foot with a rusty nail.

EDWIN W. TEGART, M.D.

Dr. Tegart, of Brantford, a graduate of Victoria in 1859, died September 9th, aged 71.

SALMON FITCH, M.D.

Dr. Fitch, of Halifax, a native of Nova Scotia, who received his medical education in Edinburgh, died September 14th, aged 86.

JOHN A. MACKENZIE, M.D.

Dr. Mackenzie, Assistant Superintendent of the Insane of the Nova Scotia Hospital at Dartmouth, died of appendicitis, October 12th, aged 40.

CHARLES REED CHADWICK, M.D.

Dr. Chadwick, of Boston, one of the most distinguished gynecologists of the United States, was found dead at his summer home, "Chocoma," N.H., September 24th, aged 60 years. It is supposed that becoming ill during the night he walked out on the roof of the verandah, where he fainted, or lost his balance, and fell to the ground.

FRANK BULLER, M.D.

The announcement of the death of Dr. Frank Buller, of Montreal, October 11th, came as a surprise and a shock to his many friends in the various provinces outside of Quebec, most of whom had heard little or nothing of his last illness. He was born in Campbellford, Ont., in 1844, and graduated M.D. from Victoria University in 1869. After spending some time in post-graduate study in England and Germany, and also acting as surgeon in the Franco-Prussian war, he returned to Canada, and commenced practice in Montreal. He possessed great ability and excellent judgment, and was soon recognized as one of the greatest specialists in diseases of the eye and ear in North America. He was also one of the most active and energetic of McGill's professors for something like thirty years. Buller and Osler were very intimate friends, and lived together for many years in the same house. We are told that Dr. Buller's death was caused by pernicious anemia, probably due to cancer of the liver.

STEPHEN LETT, M.D.

After a long illness of about four years, Dr. Stephen Lett, Superintendent of the Homewood Sanitarium, Guelph, died at that institution, of general paresis, aged 58. After completing his medical course in the Toronto School of Medicine he occupied positions in the asylum service in Toronto, Hamilton and London before becoming Superintendent of the Guelph Sanitarium, which position he filled for eighteen years. He was always a faithful and conscientious worker, and took a very deep interest in his specialty. He wrote many valuable articles on mental disorders, alcoholism, and the opium habit.

Apart from his professional career, which was honorable in the highest sense of the word, he was a most estimable man, highly respected and much beloved by all his friends. The sympathy of vast numbers from all parts of Canada is extended to his widow, daughter and son in their bereavement.

THEODORE HOPKINS, M.D.

Theodore Hopkins, M.D., Toronto (Ont.) Medical College, contract surgeon United States Army from 1850 to 1860; during the Civil War surgeon in the army; in active practice for more than forty years, died at his home in Niles, Mich., September 10th, from peritonitis following cholera morbus, after an illness of one week, aged 84.

Correspondence.

“DOC! HELLO, DOC!!” THIS IS FOR YOU.

MY DEAR DOCTOR,—

Has it been your misfortune to be called “Doc.,” and have you heard such applied to your *confreres*? If so, what were your opinions of the person who thus addressed you? Some one has written that when one is so accosted it points to the next town; in other words, it is equivalent either to contempt or want of respect, either to the profession or to the doctor addressed.

Certainly, no one using it has any respect, either for himself; or the gentleman he addresses as “Doc.”; and the doctor who willingly allows himself or his *confreres* to be thus designated is not true to himself or the profession.

You will note that the man who calls you “Doc.” is the man who invariably never pays. He is the same fellow who apparently takes great pleasure while speaking to you, in telling what “Doc.” Brown, the dentist, and “Doc.” Smith, the veterinary, said or did.

Anyway, he apparently considers the doctor, the dentist, and the veterinary on the same level. Such are the views of the ordinary inhabitant of country villages and small towns, who is, as a rule, very unlearned, and the only associates he has are those of the bar-rooms, barber and shoe shops. The one who thus accosts you as “Doc.” is, although coarse, thoughtless, disrespectful, and invariably is boastful, of low-bred cunning; the same fellow who ridicules every church interest and even the minister; in fact, he is generally most at ease in the meanest of company, whose scandal of neighbors and obscene language are noticeable and especially attractive. His aim in life is evidently to discourage all good, and drag down all reputations to such levels in the social scale as he and his fellows—mean by birth and education—so contentedly occupy. That “Doc.” is an importation from the United States is, by many observers, thought to be well proven, for among our neighbors there is not that respect among them for those in authority as legislators and those who are engaged in professional work or in practice as among us, and, too, there are so many cheap institutions—now and then designated universities—whose charters and organizations were easily secured by educated swindlers and very weak legislators. In evidence

of the establishment of such so-called, yet really chartered, diploma mills, with the state's sanction to grant every degree, one who has made any study of such work can easily furnish many examples. Chicago has two, if not more, so-called universities, one of which, through correspondence, has given the doctorate in every faculty to many who knew nothing of college life and interests.

To such men who thus procure degrees so cheaply, and of which facts the people so easily learn, the "Doc." may be applied, even if the holders thereof be among the "reverends," as frequently they are, according to well-endorsed reports. When we reflect that more than 5,000 M.D. degrees are annually granted in the U. S., from 155 colleges considered reputable by the Illinois State Board of Health, and that of these colleges, Chicago is named as the home of fifteen, and Missouri the home of an equal number (not including Still's School of Osteopathy, which grants the D.O.), no wonder exists that the supply is greater than the demand, unless it is true that more than one thousand of these M.D.'s abandon medicine before they have seen five years of practice and either engage in some fake medicine or pharmaceutical business, or engage in some menial occupation where the association is of a very low level, in which the "Doc." element flourishes.

The M.D. degree until very recently in the U. S. has been easily acquired, and so easily that the new or fresh M.D., not meeting with the expectations in practice, does not, or has not, considered the abandonment of practice any great loss if he can run a livery stable, have an interest in a saloon, in fact, engage in any occupation wherein greater financial interests and more promising results may be expected. "Doc." is applied to many such men who have left medicine, and I can name many instances, although I cannot recall the name of a Canadian.

Had our universities prescribed the doctorate for what are termed the learned professions, it is evident that the title would (as in olden times) have had its honorable distinction; but, unfortunately, many universities are not too well endowed, and the result is that for the last ten or more years these institutions, in several cheap faculties, have given the doctor's degree to such persons that the dear people think are far from being educated properly. Hence the growing belief that the doctor's degree has not much honorary significance, and thus the "Doc." originally was applied to such so-called graduates and the lowest men even in our ranks; and having

been allowed to be used, it is even applied to any ordinary and honorable member of our profession by the illiterate and degenerate class, as well as by those who should have more respect for themselves. If you then, my *confrere*, can in broad daylight be saluted as "Doc.," and then tamely smile in the face of your personal and professional defamer, it is evident you have degenerated, and it requires but very little study to tell you that, with "Doc." stamped to your name, your best work is ended in Swamptown or Rouges Hollow.

As Jack-the-Ripper, Slippery Bill, or Two-faced Pete, you had better be called than "Doc.," as regards your professional standing, for when "Doc." gets common, you and the hostler, and Sam Jones, the bar-tender, as regards respectability, are a trinity. A post-graduate course will not reinstate you. For the sake of the profession it is advisable to move out of Swamptown, for starvation will rap on your door when you are in.

If lightning strike your home, or you meet with a hold-up in the Big Swamp, your wife's relations visit you too often, and any other ordinary affliction comes, you will survive. Do not worry. But when "Hello, Doc.," "That's all right, Doc.," "Say, Doc.," in fact, any kind of "Doc.," becomes thin, or too thick, it is best to move—even at once, for a tornado, such as they have out West, has struck, or will strike, you amidships, and soon you will be a derelict craft, and no one but yourself need mourn.

VERITAS.

S—, August 17th. 1905.

Book Reviews.

Progressive Medicine, September 1st., 1905. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by HOBART A. HARE, M.D., and H. R. M. LANDIS, M.D. Philadelphia and New York: Lea Brothers & Co. \$6.00 per annum.

The last number of this excellent publication is especially rich in good articles. It is only necessary to name the contributors to this volume—Drs. Wm. Ewart, Gottheil, Norris and Spiller—to make certain that the work has been well done. The subjects treated are: diseases of the thorax, dermatology and syphilis, nervous system, and obstetrics.

Manual of the Diseases of the Eye. For students and general practitioners. By CHARLES H. MAY, M.D., Chief of Clinic in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York, 1890-1903; Ophthalmic Surgeon to the City Hospitals, Randall's Island, New York; Consulting Ophthalmologist to the French Hospital and to the Red Cross Hospital, New York; etc. Fourth edition revised. With 310 original illustrations, including twenty-one plates with sixty colored figures. New York: William Wood & Company. 1905.

We have pleasure in acknowledging a copy of the fourth edition of Dr. May's popular text on the diseases of the eye. It is a work we can recommend heartily to those who are possibly unacquainted with it; and to those who know it well, we would say that the book has been thoroughly overhauled, new and excellent colored plates added, illustrating some of the more important external diseases of the eye and changes in the fundus. It is what the author designs it to be, a book upon which a solid foundation may be built.

Practical Massage in Twenty Lessons. By HILVERIC NISSEN, Instructor and Lecturer in Massage and Gymnastics at Harvard University Summer School; Director of Physical Training, Brookline Public Schools; Former Acting Director of Physical Training, Boston Public Schools; Former Instructor of Physical Training at Johns Hopkins University and Wellesley College; Former Director of the Swedish Health Institute, Washington, D.C., etc., etc. Author of "Swedish Movement and Massage Treatment," "A. B. C of Swedish Educational Gymnastics," "Rational Home Gymnastics." With forty-six original illustrations. 168 pages. 12mo. Price, extra cloth, \$1.00, net. E. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

While it is impossible to learn the art of properly administering the massage treatment from any volume, it is quite possible to receive instructions in that art, and by following the principle laid down; become proficient by practice. This volume is written by an expert, who has the happy faculty of being able to impart his knowledge to others. We can recommend the volume to the profession, and feel satisfied that its perusal will be to their advantage, as well as giving the greatest amount of benefit to their patients.

Pathology and Morbid Anatomy Green. Tenth American, revised from the tenth English edition. Revised and enlarged by W. Cecil Bosanquet, M.A., M.D. (Oxon.), F.R.C.P. (Lond.) With a colored plate and 348 illustrations in the text. Philadelphia and New York: Lea Brothers & Co.

Since pathology began to be ranked as one of the exact sciences, Green's text-book has been a standard among students. Although, during the last ten years, many other volumes have been published on the subject, perhaps none are to-day so concise and so helpful to the young man beginning the study of disease. The tenth edition has been brought up-to-date in every particular, and will continue in the lead.

A Manual of Midwifery for Students and Practitioners. By HENRY JELLETT, D.A., M.D. (Dublin University), ex-Assistant Master of the Rotunda Hospital, with the assistance in special subjects of W. R. Dawson, M.D., F.R.C.P.I., H. C. Drury, M.D., F.R.C.P.I., T. G. Moorhead, M.D., and R. J. Rowlette, M.D., with 9 plates and 467 illustrations in the text. University series. London: Baillière, Tindall & Cox. Canada: Carveth & Co., and Chandler & Massey. Price. \$6.50.

Eight years ago Dr. Jellett published his "Short Practice of Midwifery," embodying therein the system of treatment in vogue at the Rotunda Hospital. This little work formed the basis for a second and enlarged edition four years ago, and is still the best part of the present more ambitious work.

The chapter on anatomy is contributed by Dr. Moorhead, Demonstrator of Anatomy in Trinity College, Dublin. We think it a mistake to intrust this important subject to an anatomist. It is an old saying that anatomists do not make good surgeons. We find in this chapter complete anatomical detail; but the information is not presented to the obstetric surgeon in the manner best calculated to aid him in his work.

The description, diagnosis and differential diagnosis of labor are excellent. We disagree with the author in attaching supreme importance to the screw-like action of the pelvic walls on the fetal head in the mechanism of labor; also we think that in describing vertex presentations it would be better to describe the four cardinal positions of Nægelé than to describe two positions and explain the Nægelé equivalent afterwards, as has been done.

In speaking of occipito-posterior deliveries the author says that, "Even if the occiput does rotate posteriorly, eventually, in most cases, labor will end naturally. If it is delayed, extraction with the forceps is not difficult." The writer of this review was guided by this teaching, received at the Rotunda, for some time. Further experience has led him to entirely disagree with the statements quoted, and to strongly advocate

rotation by means of the hand passed through the vagina to the shoulder of the fetus, in all cases which do not progress rapidly.

We are surprised to find that Dr. Jellett advocates the administration of a purgative "in all cases as soon as the first symptoms of labor appear." Our experience of this practice has been that it causes the contents of the bowel and of the uterus to be delivered at the same time, which is extremely unpleasant as well as dangerous. It is much better to administer an enema in all cases at the onset of labor.

We are pleased to note that the practice of twisting the placenta round in order to favor detachment of aftercoming membranes has been abandoned, as experience has led us also to give it up.

We are pleased to find that the intercurrent diseases of pregnancy have been much more fully dealt with than in most works on obstetrics. We think that the author over-estimates the dangers of heart disease in pregnancy. MacDonald's statistics of twenty-eight cases, showing a death-rate of 60.7 per cent., quoted in the text, are certainly misleading. This subject has been much more rationally dealt with in recent years by Wright and others.

In eclampsia we have long since abandoned the milk diet and hot packs advocated by the author, with benefit, we think, to our patients. When forcible delivery is determined upon in concealed accidental hemorrhage, the author prefers Bossi's dilator to Dührssen's incisions, and in all such cases he plugs the utero-vaginal canal after delivery of the placenta. In accidental hemorrhage, which is not concealed, the well-known Rotunda treatment of plugging is adhered to, justly, we think. The author states that in no case has he found an external changed to an internal hemorrhage thereby.

Primary uterine inertia has not proved so dangerous a condition in our experience as in the author's. The etiology and pathology of the surgical fevers of the puerperium is written by Dr. Rowlette, Pathologist of the Rotunda Hospital, and a good account of the germs which cause trouble is given. We think, however, that the clinical aspect of this subject is more important than the bacteriological, and that more might have been done to aid the obstetrician in his work. No description is given of the premonitory symptoms, and very little aid given in the diagnosis of the different causes which give rise to fever in the puerperium. Repeated vaginal and intra-uterine douching is resorted to before the introduction of the

finger into the uterus. Why not do this at once and remove the cause of the trouble? It is much more effective, and saves valuable time. In streptococcal infection, in which the inside of the uterus is smooth, the author suggests the injection of from two to four drachms of a 20 to 40 per cent. formalin into the uterus. As he does not say that this treatment has stood the clinical test, we think it would have been better to omit it from a formal text-book. The antiseptic advised for the hands, after washing in sterile water or 1 per cent. lysol, is bichloride of mercury, 1:500. The present writer believes this to be an efficient antiseptic, and used it, in common with all the other men, at the Rotunda some years ago. It produced, however, in many of those using it such a leathery condition of skin and dark brown finger nails that he has abandoned it in favor of lysol alone (1 per cent. solution), more recently lysoform, 1:40.

The author still recommends Neville's axis-traction forceps. We used them for some time, but abandoned them because we do not believe them to be true axis-traction instruments; also we think the instrument too large and heavy and the pelvic curve too flat.

Obstetricians owe a debt of gratitude to the Rotunda school for the system of midwifery they have elaborated, and to Dr. Jellett for the clear and careful presentation of it in his "Short Practice of Midwifery." We do not find this last volume an improvement on the first, however. In fact, we think that the increase in size has been at the expense of that clearness which we so much admired in the original book.

The British edition of the present volume is admirable in paper, text and binding, but weak in illustrations, many of which are crude in the extreme. When will Old Country authors and publishers learn the value of accurate and artistic illustrations?

K. C. M.

Selections.

Ammonia Burns of the Eye.

Edward Stieren, ophthalmologist and otologist to the Passavant Hospital, Pittsburg, directs attention to the dearth of information concerning the action of ammonia on the tissues of the eye. There are points of similarity in the action of carbolic acid and of ammonia on the tissues of the eye for the first few days following their introduction; but the author says that ultimately the prognosis regarding the vision of an eye so endangered is quite gloomy when ammonia has done the damage, but much better when the agent has been carbolic acid.

The author recites four cases of injury to the eye by ammonia, in only one of which was treatment effective, and the marked improvement that took place in this case was due no doubt, the author says, to the use of dionin, a new and valuable agent in ocular therapeutics, which has marked properties as a lymphagogue on the tissues of the eye.

Dr. Stieren, on being requested by members of the Medical Society of the State of Pennsylvania to relate his experience with dionin, spoke as follows: "My attention was first attracted to this agent in the summer of 1893, while visiting Fuch's clinic in Vienna, where they used it in cases of corneal opacities, uveitis, infected globes, and painful iridocyclitis. When first instilled, it causes a severe smarting, lasting about a minute, followed by a general edema of the ocular conjunctiva. Usually the pain of an iritis or episcleritis is abolished in a few minutes after its use. I prescribe it in 10 per cent. and 20 per cent. solutions, dusting the pure drug into the eye in the office.

"In regard to lime burns, I cannot recall any at present where the cornea was rendered completely opaque. Usually there is more or less formation of symblepharon with marginal opacity of the cornea. Logically, dionin would be a very useful remedy in lime burns of the eye, as it is an analgesic and has marked properties in promoting the flow of lymph in the anterior portion of the eye."—*Penn. Med. Jour.*, May, 1905.

The Physiologic Action of Dionin.

W. H. Snyder, of Toledo, Ohio, after explaining the pharmacology and the physiologic action of dionin at the recent meeting of the American Medical Association, described a number of experiments bearing upon its action on tissue and

cells. The albino rabbit, medium size, was used; dionin in powder placed in each eye in larger quantities than would be necessary if the eye were abnormal; rabbits killed; globe and tissue enucleated, placed in formalin 4 per cent. for forty-eight hours, and later sections made from cornea. Control specimens were also made from normal rabbits' eyes. Pictures of the findings were projected upon the screen, showing the usual signs of general edema, vacuolation of the cells in the epithelial layer, the sections appearing water-logged and hazy. The lymph spaces were changed in shape and dilated. No absorption of cells as in edema of long standing. The surface uneven and the general picture that of edema of the cornea. He concludes that the action of the drug is purely local—greatest where the drug has actually rested; that its most marked action is in eyeballs where the tension is increased; that it has some dissociating action on the intracellular cement substance, allowing a transudation of serum from a globe under pressure; that its analgesic action is explained by its lessening of tension and the well-known action of the derivatives of opium. In iritis with adhesions, plus tension, the use of dionin lessened tension and permitted absorption of the mydriatic with prompt relief of pain and dilation of the pupil. In corneal ulcers the repair process begins as soon as the ulcer is cleared. The more recent the inflammation and higher the tension the better the results. In beginning pannus he had cleared up the cornea and resisted permanent opacity more satisfactorily than with any previous treatment, the lid, of course, being treated for the cause. In glaucoma he preferred it to eserine, relief from pain being very marked, due, he thought, to relief from pressure. In old vitreous opacities he had had poor success.

E. V. L. Brown, of Chicago, called attention to the fact that a recent German investigator had found that dionin did not affect all animals. Experiments had been made with dogs, rabbits, and cats. The cats were not affected at all.

In closing, Dr. Snyder said that the effect was very slight in rabbits, requiring a great deal more of the drug than the human eye.—*Amer. Med.*, Aug. 5th, 1905.

The foundation of the Nurses' New Residence for the Hospital for Sick Children, Toronto, which is now being erected by Mr. J. Ross Robertson in memory of his first wife, was laid October 7th, by Mr. John Sinclair, eldest son of Mr. Robertson. It is expected that the building will be ready for occupation about September 1st, 1906.