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# The Canadian Practitioner and Review.

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## Original Communications.

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### THE FORCEPS.\*

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Professor Japp Sinclair, of Manchester, came to Canada in 1897 and told us the obstetricians were the providers of material for the gynecologists through unskilful use of the midwifery forceps.

Bandelocque, on the other hand, has stated that the midwifery forceps is the most valuable instrument that has ever been invented. We believe the great mass of obstetricians in all civilized countries endorse this statement and conscientiously and intelligently use the forceps to shorten the suffering and diminish the risk of childbirth.

No one will deny that much injury is done in certain cases by the unskilful use of the forceps. According to Sinclair and those who agree with him, the common fault is the premature use of the forceps. Laphorn Smith makes the very serious accusation that the doctors use the instrument early, without any regard to the condition of the parts, simply to save time. This is, of course, not a new charge, and we may admit that some physicians apply the forceps prematurely to save their own time and suit their own convenience. The man, however, who does such a thing is guilty of a criminal act. Premature use of the forceps is always dangerous. Make it a positive rule in practice never to use the forceps through a partially dilated os.

Milne Murray refers to a form of spasmodic rigidity which is especially dangerous for forceps delivery. For instance, a

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\* Read at meeting of the Hamilton Medical Society.

woman has been in labor many hours. After a time an examination during an interval between the pains shows the os soft and flabby, fairly well dilated or at least dilatable. Some chloroform is administered and the forceps are slipped over the head, of course, within the os. During the following pain the os becomes spasmodically contracted round the head and forceps, and not more than half its former apparent size. Dr. Murray considers such a condition an example of uterine inco-ordination, or uterine stammer. Traction under such circumstances will tear the cervix into the vaginal roof with sometimes most disastrous results. Careful examination, which should always be made during a pain as well as during the interval, will prevent you from making such a deplorable blunder.

While we should avoid the premature use of the forceps we should not go to the opposite extreme and fail to use them when necessary. In former times, when the forceps were used less frequently by the majority, and not at all by some, that horrible condition vesico-vaginal fistula was not uncommon. It is now comparatively rare. This is, however, telling a small part of the story. Dr. Murray says much in a few words when he tells us that by means of the forceps "we have saved women hundreds and thousands of weary hours and preserved countless children alive."

*When forceps should be used.* This brings us back to some considerations in connection with the management of the second stage of labor, which we desire to be as short as possible. When all the soft parts from cervix uteri to the vulva, inclusive, are softened and dilated or dilatable, we want quick delivery of the child. To accomplish this we use the forceps in certain cases. When shall we use them? This is not an easy question to answer definitely.

Milne Murray lays down a rule to which he attaches much importance. "A direct indication for the use of the forceps arises whenever, and only whenever we are assured that the danger of interference has become less than that of leaving the patient alone." He claims that this is more than a mere truism, inasmuch as it implies that the use of the forceps is nearly always a matter of individual judgment. He considers that there is no accepted set of rules which can be applied to each emergency.

At the Rotunda a definite time limit for the second stage has been recognized for several years. That limit, when I heard last, was four hours. The same limit was observed in St. Mary's and Queen Charlotte's Hospitals for some time, but in 1897 the maximum duration was altered from four to two hours. Many express the opinion that the time element alone is not a proper basis for such interference. I quite concur and

yet I believe firmly in the time limit, although I do not depend upon that alone. I also doubt whether any one at the Rotunda, St. Mary's or Queen Charlotte's depends on the time element alone.

A few weeks ago I saw a patient in consultation with a very competent and careful young practitioner. The parts, I was informed, had been fully dilated about eight hours. The doctor was trying to reach a conclusion whether or not the time had arrived "when the danger of interference had become less than that of leaving the patient alone." The patient, although tired, was not suffering acute pain. The time limitation, if observed, would have prevented such a serious mistake.

I think the maximum duration of the second stage should be three hours for primiparæ and two hours for multiparæ. This does not mean that in all cases one shall wait for the three or two hours; but it does mean that in no case shall he wait any longer. In a large proportion of cases it is neither necessary nor advisable to defer the application of the forceps for more than one hour after full dilation of the cervix, vagina and vulva. "When the passages are in a fit state and nature fails to advance the head, apply the forceps" (Simpson).

The lithotomy position for the patient is generally used in Canada, the United States and the Continent of Europe. We think it is much better than the left lateral, especially in cases of difficulty. We sympathize with those who object to undue exposure and cover the parts as well as possible.

It is generally advisable to fasten the thighs in the flexed position. I generally use for this purpose Robb's leg holder. One end is fastened to one leg below the knee. The rest of the band is passed over one shoulder, across the back, under the other shoulder and the other end of the band is fastened to the other leg below the knee. The old-fashioned sheet sling is also quite satisfactory.

The object of Tarnier in making his axis-traction forceps was to have it so adjusted that the force in traction should always lie in the true axis of the pelvis at all its planes, and that no part of that force should be either wasted or used in such a way as to cause injury.

We can understand a part of this better by considering the action of the ordinary long forceps when applied at the superior strait. The axis of the superior strait points towards the lower part of the sacrum. The perineum, the coccyx, and a small portion being in front of the axis of the brim prevent the handles from being pushed back sufficiently far to allow direct traction. Consequently part of the force of traction is wasted in dragging the head against the symphysis pubis. This defect in the ordinary long forceps was clearly recognized

more than one hundred years ago, and many devices were tried to overcome the difficulty with a certain amount of success.

Tarnier solved the problem in 1877 by attaching one traction rod to each blade of the forceps, and fastening both rods to a handle or crossbar. His original instrument was rather clumsy, and he made many improvements in it before his death. Various slight modifications have been made in different parts of the world. As a rule all that are constructed on the Tarnier axis traction principle are good. But no such modification as the attachment of tapes by loops passed through the fenestræ in the blades, or the perineal curve of Galabin, is satisfactory. I fear that even Neville's forceps, so highly lauded by the Rotunda men, is not a true axis tractor.

I used the Milne Murray modification of Tarnier with much satisfaction for about ten years, but when in Paris two years ago I got the latest Tarnier forceps as recommended by Pinard. After using this excellent instrument for a time, and after a trial of Porter Mathews axis traction forceps, I have chosen the latter as the one which seems best suited for my own work.

Without any extended discussion I shall mention briefly some of the advantages of the axis traction forceps, quoting largely from Milne Murray :

The great advantage of its use at the brim is generally understood and admitted. In many cases the axis traction instrument will accomplish what the ordinary long forceps cannot do.

"For once they have proved their efficacy at the brim they have done so ten times in the cavity and twenty times at the outlet."

The blades grasp the head securely without producing dangerous compression.

Extraction is accomplished with comparative ease and without any waste of force.

To be sure of doing this you have only to preserve the proper relationship between the traction rods and the shanks.

By keeping the instrument on the head until delivery there will generally be less injury to the pelvic floor and perineum.

At no stage will the instrument prevent flexion and rotation of the child's head.

#### *Method of application of the Porter Mathew's forceps.*

The traction block and handle are laid aside at first, but the blades are applied with the traction rods in place. The patient is in the dorsal position.

Take the left blade in the left hand, the thumb in the angle of the traction rod, and the fingers encircling the traction rod

and handle, and keeping them close together. Introduce the fingers of the right hand into the vagina and apply the blade along the palms of them as in the ordinary forceps application.

The handle of this blade being kept back out of the way by an assistant, grasp the right blade in the right hand as follows: The traction rod is carried far enough forward to bring it in front of its handle, the fingers encircling the handle, the butterfly nut of the fixation screw is run to the end of its screw, and the screw itself turned out, away from the traction rod, and allowed to project between the first and second fingers; the traction rod is kept in position by gentle pressure with the thumb on the outer side of the angle, the rectangular part of the rod projects backward between the thumb and fingers. Grasping the blade thus it is applied like the second blade of the ordinary forceps; as the lock is closed the traction rod falls easily back into position behind its handle. The fixation screw is then turned into its place and the nut screwed home, not tightly, but just enough to keep the handles as closely together as they can be brought by gentle pressure with the hands. Then take the traction block, open its catch widely and run the butterfly nut out to the end of its screw. Then slip the block on to the rods, taking care that the catch is on the side next to the notches in them. Slip it up the rods, counting with the fingers three notches below it, and close the catch into the fourth notch, which is the position for normal pelves, and screw the nut home. For flat pelves the block is fixed in the fifth, sixth or seventh notch until that notch is found in which we get the best results on traction. For "small round pelvis" the block is fixed similarly at third or second. The handle is then hooked over the bar provided for that purpose, not over the catch. Traction is made keeping the traction rods just parallel with the handles, not pushing against them nor widely separated from them. All traction must be made with the handle, neither the traction rods nor the handles of the blades being touched. As the head comes down the handles will be found to turn upwards and forwards. This indicates the direction in which traction is to be made, and each change in position must therefore be closely followed by the traction rods.

In removing the forceps the traction block and handle is first removed. The fixation screw is then undone and turned outwards. The right traction rod is then carried in front of its handle, and the right blade removed in the reverse direction of its application. The left blade is similarly removed except that its traction rod does not need to be carried forward.

Before giving specific directions as to traction I wish to refer to a question of vast importance.

*How shall the blades be applied?*

According to many authorities in Great Britain and Germany our aim should be to so apply the blades that will be parallel to the sides of the mother's pelvis. Many obstetricians in France and America endeavor to apply the blades to the sides of the child's head without regard to the sides of the pelvis. The differences of opinion in certain communities are very decided. Take the University of Edinburgh for instance, where we find the extra-mural differing from the intra-mural teacher. The one tells us that it is largely the teaching and the practice of the British schools to apply the forceps, as far as possible, in relation to the pelvic transverse without reference to the position of the head. He, at the same time, expresses a positive opinion that this is wrong when the head is not properly rotated. The result of this practice is to obtain an oblique grasp of the head which causes difficulties in locking and other damages.

Even though locking be accomplished without injury, the head as it descends rotates, causing the edges of the blades, if there is no removal and readjustment, to do much damage to the outlet. Or the head descends without rotating and engages the outlet in the oblique with results still more disastrous. An author representing the other side of Edinburgh tells us that the long forceps are always applied laterally as to the pelvis, no regard being paid to the grasp of the head.

Dr. Murray prefers the French method and advises us to apply the blades to the bi-parietal diameter of the child's head wherever situated. As the head descends rotation brings the blades into the transverse diameter when the acciput comes to the front. The application of the blades to the sides of the head requires more care, but it is our duty to take what care is necessary for the benefit of the patient.

There is nothing new in these allegations, nor have I any doubt that they are correct. Notwithstanding my admiration for the French method, however, I have for years hesitated about recommending it unreservedly, nor am I prepared to do so now.

Why not adopt the French method in all cases? Because it requires more skill than the average obstetrician can acquire in a lifetime to accomplish it safely in a large proportion of cases. Strenuous efforts to apply the blades to the parietal diameter of the head in difficult cases are dangerous to both mother and child. A large proportion of obstetricians are convinced that theoretically the French method is excellent, but practically it is often dangerous and even impossible. At least such is my experience, and I have been endeavoring to carry it out for fifteen years.

You may, I think, act according to the following rules :

Try to ascertain the exact position of the child's head.

Endeavor to apply the blades to the sides of the head without regard to the sides of the pelvis, *i.e.*, employ the French method.

If you are not able to accomplish this, apply the blades laterally, as to the pelvis, but do not drag the head far before removing and readjusting the blades.

You will find it comparatively easy in certain cases to apply the blades to the sides of the head. If, for instance, the head is in the cavity of the pelvis with the occiput towards the left front you have only to introduce the blades so that the left blade will be slightly behind on the left side and the right blade slightly forward on the right side. Sometimes you can scarcely avoid doing this, to some extent, at least.

*Traction.* Seize the handle which is attached to the traction rods with the hand, and while pulling see that the rods and shanks are kept just touching or almost touching each other. While you are extracting the child you will find that the traction is exerted exactly in the right direction at all times as the head passes through the pelvis and emerges from the vulva.

Flexion will be properly maintained, and when incomplete will frequently be promoted.

Rotation will be allowed.

The head will, so far as possible, be prevented from bearing too heavily on the pelvic floor.

The head will be lifted over the perineum.

As the head is brought through the vulva it will not be extended so as to cause the chin to cut through the perineum.

In using traction do not attempt to extract rapidly. You will remember that during normal labor after the vault of the head reaches the pelvic floor, its expulsion from the vulva should occupy at least from twenty to thirty minutes. Extraction with the forceps should occupy no less time.

Pull gently on the handle, as far as possible, during pains, and desist during the intervals between them. If you cannot detect uterine contractions pull intermittently. Endeavor to extract with the smallest amount of force. Use one hand at first. This will generally be sufficient. In exceptional cases it will not; and then you will require more force and may use both hands.

As soon as the head reaches the pelvic floor you have to consider the danger of injury to that structure and the perineum.

You know in connection with normal labor that when the thighs are flexed on the body a tightening of the skin around the vulva may be noticed. You should then direct your



patient to extend the legs and thighs in order to slacken the tension around the vulva. This tightening is still more apt to occur when the thighs are fastened in the flexed position with some form of leg-holder. It is extremely important therefore to observe the following rule :

As soon as the head commences to press on the pelvic floor remove the leg-holder and allow extension of the thighs, *i.e.*, allow the legs and thighs to hang over the edge of the bed or over the end of the operating table towards the floor. In an ordinary bed the patient's feet may rest on the floor while the nurse keeps the thighs separated by holding the knees outwards.

While Milne Murray generally employs traction during the pains, he refers to one group of cases where a different plan should be adopted. It sometimes happens, especially in elderly primipare, that every uterine contraction when the head is low is accompanied by spasmodic action of the muscles of the pelvic floor which narrows or tightens the vulvar orifice and causes rigidity of the pelvic floor and perineum. In such a case deepen the anaesthesia and employ traction only during the intervals between the pains.

As I have before intimated, I think, in the majority of cases in the high and middle operations, your blades will generally grasp the head obliquely.

As soon as the position of the blades shows that rotation of the head has commenced, remove the blades, reintroduce and readjust them. Otherwise do not remove the forceps until after complete delivery of the head.

During the delivery of the head, even while it is passing over the perineum, continue to pull on the crossbar without regard to the application handles.

Many, if not most, obstetrical authorities in the United States only use the traction rods in high and mid operations, some only use them in the high operations.

Some authorities, both in Great Britain and the United States, relax the fixation screw during the interval between making traction.

*Chloroform.* Operative interference adds a new element to labor. You know that chloroform may be administered in two different ways: 1. To the obstetrical degree. 2. To the surgical degree. The obstetrical degree being generally sufficient in normal labor, the surgical degree being generally necessary for operative procedures. We may consider that the latter rule applies to forceps delivery, although not for the same reasons which prevail in the operations.

The application of the blades of the forceps and traction during uterine contractions causes little or no extra pain. We

want profound anesthesia, not especially to prevent pain, but to keep the patient quiet during our manipulation. The violent movements of semi-intoxication may cause serious injuries. You should therefore do one of two things :

1. Administer no anesthetic.
2. Get an assistant to completely anesthetize the patient.

Surgeons generally observe a good rule in making the administration of anesthetic the work of one man who shall assume full responsibility therewith. Obstetricians would do well to adopt the same rule, which is really the only safe one. Many practitioners allow the nurse to give the anesthetic. Although they direct the nurse and watch the patient as carefully as possible, such practice involves a certain amount of risk which occasionally may be considerable.

# REPORT OF A CASE OF INJURY TO THE SPINAL CORD, CAUSED BY A FRACTURE DISLOCATION IN THE CERVICAL REGION.

The Anterior Horn of Grey Matter and the Pyramidal Tracts were Implicated at the Seat of Injury, whilst the Sensory Paths Largely Escaped Damage.

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A complete transverse lesion of the spinal cord, the result of traumatism is of common occurrence, but we do not often encounter cases where the injury has produced conditions which are analogous to hemisection, such as may be experimentally performed on animals. Whilst the usual experiment on animals is that of lateral hemisection, the case which I now place on record exhibits symptoms such as one would predict if one were to cut the cord half way through the substance from the anterior towards the posterior surface.

The lesion in this patient was obviously produced by an injury to the cord, the maximum degree of which was located between the origin of the sixth and seventh cervical nerves from the cells in the anterior horn of grey matter.

The following history of the case was taken on November 23rd, 1903 :

J. N., aged 14, met with an accident on July 19th, 1902, *i.e.*, sixteen months ago. He was standing under a shed when it fell, and the roof of the shed pinned him down, with his neck acutely flexed forward. When he was released, a few minutes after the accident, he was found sitting on the ground, with his head bent forward on his chest, this attitude having been assumed apparently because of the weight of the roof of the shed, which rested upon his head. He was stunned for a few minutes, but soon recovered consciousness. The moment he regained consciousness he found that he had lost the power of the right leg and of both arms; the power of the left leg was impaired also, but he could use it a little, and he was able to stand upon it. He, however, had no sensation in either the arms or the legs, they were absolutely numb. Twenty minutes after the accident he was carried into the house, and by the time he arrived there sensation began to return everywhere, except in the right arm. At first the sensation was like "pins and needles," but it soon became normal. The sensation in the right arm returned about 48 hours after the accident. He made his first attempt to walk two or three days after the accident, and succeeded in doing so, but in a very stiff manner,

taking very short steps and progressing with difficulty. About the same time he first succeeded in moving the arms. After the accident there appeared to be some swelling of the neck, and any attempt to move the neck caused pain. The organic reflexes were not affected, the bladder and rectum being under full voluntary control.

Six days after the accident he was brought home to Toronto from the country where the accident happened. He was kept in bed for two weeks. It was considered that he had a dislocation of the right shoulder, and his arm was kept in a sling. It appeared subsequently, however, that no actual dislocation existed. Five weeks after the accident it was noted that he could walk, though with difficulty; he was able to make his way slowly along the street for 200 yards or more, whilst doing so he always supported his chin on his clenched fist so as to take the weight off his neck. He was able to use the left arm well and the right arm fairly well; thus he could write with the right hand. Shortly after this he began to grow gradually worse, and he slowly lost power of both arms and legs. Operation was advised by his medical attendant. Eight weeks after the accident he was admitted to the hospital, where he remained four weeks, and during that time he got gradually worse until he was not able to stand at all, and his arms became completely paralyzed. Sensation was, however, not affected. After he left the hospital operation was again urged, on the supposition that there was a dislocation in the cervical spine, with pressure on the spinal cord. The operation was carried out on the 16th October, 1902, at the boy's house. Immediately before the operation he was able to get about a little, but he was not able to stand upright. He would slide downstairs and could crawl up again, helping himself mainly, in pulling himself up or down, by using the left arm in which he still retained a good deal of power. The mother stated that the operation was performed to remove a piece of bone in order that the neck should be straightened. It was not stated whether this piece of bone pressed upon the spinal cord or not. The neck was put in plaster of paris to keep it rigid. Immediately after the operation he was unable to move either arms or legs, nor had he any sensation. There was complete motor and sensory paralysis. Sensation returned in twenty-four hours, and after two weeks, when the plaster was removed, a certain amount of motor power returned also. The power of movement, however, gradually disappeared again until, two months after the operation, he was quite unable to move either arms or legs, with the exception of a slight amount of movement of the left arm. The reflex mechanism governing the bladder and rectum was never affected, moreover he was able to empty the bladder and rectum voluntarily, in a

normal fashion. He had an attack of cystitis two months after the operation, from which he soon recovered.

His condition has not changed much for twelve months. If anything there has been a slight improvement for the last two months; a little more power exists in the left hand and he has some power of movement of the right fingers. He has never at any time had any convulsions or vomiting.

*Present condition:* The boy appears to be well-nourished, save that there is marked wasting of the upper extremities



FIG. 1

Showing wasting of the muscles of the upper extremity, flattening of the chest and prominence of the abdomen.

(Fig. 1, 2, 3). The trunk and lower extremities exhibit no wasting, and on palpation the muscles appear to have retained their tone everywhere, save in the upper extremities, where they are very flabby to the feel. The extent of the atrophy of the muscles of the upper extremity is noticeable in the hand, forearm and arm, and includes the muscles about the shoulders.

The amount of paralysis of the upper extremity may be noted as follows: The latissimus dorsi is very much atrophied, and appeared to be wholly inactive. He can raise the shoulders (trapezius and levator anguli scapulae.) He can draw the shoulders forcibly backwards (rhomboids and trapezius), these

muscles have escaped. He can bring the shoulders forwards but very feebly (pectorals and serratus magnus.) He can produce a very feeble contraction of the deltoid; it is with great effort that he can raise the arm at all, and the amount of movement is very limited. Flexion at the elbow is carried out in a feeble manner, and the biceps is mainly brought into action for this purpose; one could not make out any action of the brachialis anticus. The triceps acts very feebly, so feebly that he is barely able to extend the forearm when it is necessary to raise the weight of the forearm and hand in the effort



FIG. 2

Showing wasting of the muscles of the upper extremity, more particularly of the hand and forearm; also the contrast of the upper with the lower limbs; in the latter is no wasting.

to do so. There appears to be complete paralysis of the supinator longus, and of the extensor group of muscles of the forearm. Thus there is complete drop wrist. The flexor group of muscles appears to be involved to the same degree, except the slight amount of movement of the fingers to be described immediately. He can pronate and supinate the forearm. This action is apparently carried out by the contraction of the

supinator biceps and the pronator radii teres. The movements so far described are, as far as one could determine, precisely similar in degree on the two sides of the body. There is some variation, however, in the movements of the digits, which can be carried out as follows: He can flex the 4th and 5th digits of the right hand very slightly. This movement is, in reality, carried out in the most feeble manner. In the same manner he



FIG. 3

Showing wasting of the Latissimus Dorsi muscle.

can flex all the digits of the left hand. The only extensor power that one could definitely observe in the digits is an extension of the left thumb. The flexion power of the digits of the left hand is distinctly greater than that of the right hand, but even here it is very feeble; he is quite unable, for example, to move the indicator of the dynamometer.

The amount of voluntary movement of the lower extremities

is very, very limited, but he appears to have some voluntary control. Thus, he can slightly waggle the 4th and 5th digits of the right foot. He is unable to make any other movements of the digits of either foot. With a great effort he can draw the limbs up as he lies in bed, bringing about flexion of the thighs on the abdomen to an angle of about 100 degrees of flexion; flexion of the knees occurs at the same time, probably brought about by the weight of the legs when the thighs are flexed. With still greater difficulty he is able to extend the limbs again, but this he is able to accomplish, provided there is not too much resistance offered, for example, by a fold of the bedding. No other movement of the lower extremities of a voluntary type could be observed.

The marked atrophy of the muscles of the upper extremity, as compared with the lower, is remarkable. The bony prominences about the shoulder stand out very markedly. The coracoid processes appear almost on the point of penetrating the skin. The muscles of the arm and forearm are similarly wasted, and in the hand the thenar and hypothenar eminences have mostly disappeared. The digits tend to assume the attitude of the "main en griffe", due to the flexor action with interossei paralysed (Fig. 2).

The intercostals are paralysed; he can expand the chest somewhat, but this is apparently accomplished by bringing into play the sterno-mastoids and the scalene muscles. The breathing is diaphragmatic in type, and in quiet respiration the anterior wall of the chest recedes slightly as the diaphragm descends in inspiration. One could not discover any activity of the muscles of the abdominal wall.

*Sensation.*—There is little or no impairment of sensation observed anywhere. The sensations of touch are everywhere appreciated. Testing him with the aesthesiometer it was found that he had lost, to some extent, the possibility of making the finer distinctions which may be considered normal, but possibly this condition is due to disuse. For example, he cannot distinguish two points touching the palm of either hand until they are separated  $2\frac{1}{2}$  cm. The same distance is necessary on the flexor aspect of the index finger and the back of the hand. On the anterior aspect of the chest 3 cm., anterior aspect of abdomen 6 cm., front of leg 4 cm. He can appreciate the distinction between heat and cold.

*Reflexes.*—One is unable to elicit reflexes in the upper extremity. In the lower extremity the knee jerks and ankle clonus are greatly exaggerated. The superficial reflex usually elicited by tickling the sole is not present. The cremasteric reflexes were absent. Babinski's reflex is present. The organic reflexes (bladder and rectum) are normal and are under voluntary control. The bladder at the time of examination



was empty, the percussion note being resonant above the pubes. Priapism is almost constantly present. The pupils are equal and normal in their reaction.

*Electrical Reactions:* The wasted muscles of the upper extremity either wholly failed to respond to the Faradic current or responded feebly and irregularly, whilst to the same current the muscles of the abdominal wall and of the lower limbs were thrown into contraction.

An X-ray photograph, taken from before backwards, showed a slight curvature of the cervical spine with convexity towards the left. There was an irregular prominence of the lateral portion of the lower cervical vertebrae, such as would have been caused by a lateral displacement of bone in this locality.

*Diagnosis:*—There has evidently been implication of the grey matter of the spinal cord in the region of the brachial enlargement. At the same level the motor conducting paths of the spinal cord have been damaged. The sensory conducting paths and the posterior horns of grey matter have escaped injury. The evidence pointing to implication of the cells of the anterior horn of grey matter exists, 1st, in the extreme atrophy of the muscles of the upper extremity; 2nd, in the absence of reflexes in the upper extremity.

The evidence pointing to implication of the motor conducting paths of the cords at this level exists, in the paralysis of the muscles which exists below this level in the trunk and lower extremity; whilst the absence of atrophy of the muscles of the trunk and lower extremities, indicates that the anterior horn of grey matter below the level of the injury is not damaged; these deductions are further warranted by the fact that he has greatly exaggerated deep reflexes in the lower extremities (knee jerk and ankle clonus.)

The evidence indicating the escape of the sensory fibres from injury is obvious from the fact that sensation is unimpaired in all parts of the body.

In studying the individual groups of muscles, wholly or partially paralysed in the upper extremity, one is able to locate the level of the injury to the cervical portion of the spinal cord, between the points of origin of the 6th and 7th cervical nerves from the anterior horn of grey matter. For example, the rhomboids and levator anguli scapulæ (5th C.) have escaped. Other muscles, whose nerves arise partly above and partly below the level of injury indicated, are only partially paralysed (*e.g.*, the pectoralis major). Some muscles arising wholly below that level are completely paralysed (*e.g.* the digital extensors).

It is probable that whilst the maximum amount of injury is located at the level of the 6th and 7th cervical nerves, there may be some damage done to the grey matter of the brachial enlargement in its lower portion.

## FORCIBLE DILATATION OF THE OS UTERI.\*

By KENNEDY C. McILWRAITH, M.B., TOR., F.O.S., EDIN.,  
Associate in Obstetrics, University of Toronto.

*Mr. President, Ladies and Gentlemen.*—It is always a difficult matter to know when one ought to interfere in an obstetrical case, and I venture to hope that the discussion of this question for a short time this evening may prove profitable. The circumstances which call for interference of this particular kind are various, and the methods numerous; so that we have two main points to consider, viz.: When and how to dilate.

For the purpose of methodical description I shall refer to three classes of labor in which dilatation may be practised with advantage.

1. In those labors which do not differ greatly from the normal except in the matter of time limit, or where an abnormal presentation is associated with slow dilatation; or where the waters escape before dilatation is accomplished, or where the liquor amnii is scanty from the start, giving rise to "dry labor."

In all these conditions the patient's constitution and uterus may be perfectly normal.

2. When dilatation is not so much a matter of choice as of necessity.

In these cases the patient or her uterus, or both, are generally in a distinctly pathological condition, and the consequences of either action or inaction are much more momentous.

3. In cases of abortion, or premature labor.

As an instance of the first class let me cite the history of a labor which I attended last Saturday. I was called at 3 p.m. to attend a young woman of 23 in her first confinement. I was not able to get to her until 7 p.m., when I found her having strong labor pains. The os was far back and admitted only the tip of one finger. The liquor amnii was present in normal quantity. Membranes intact. I returned again at 10 p.m. and found the condition unaltered. By 2 a.m. the condition of affairs was very little changed—this after nine hours of fairly hard labor. The position was L.O.A. I anæsthetized her and with my fingers dilated the os to the size of a silver dollar. By 4 a.m. she had made no further progress, in spite of strong labor. I then gave her a hypodermic injection of half a grain of morphia. She had a good sleep of three or four hours, from which she awoke much refreshed, and the pains began again. By 10 o'clock the os had become softer, though dilatation had not advanced. She had now been nineteen hours in labor. I called in another physician who anæsthetized her completely, and

\*Read before the Toronto Medical Society.

under the anæsthetic I dilated the os to the full extent, and delivered with the forceps without much difficulty. She made an uninterrupted recovery. This woman would probably have delivered herself in time, but she was certainly saved a good deal of pain, and probably had a more satisfactory puerperium than she would have had if the case had been left to nature. This condition is very different from "dry labor," for the child is not subjected to pressure, nor does retraction of the uterus take place.

The frequency with which abnormal presentations are associated with slow dilatation or with early escape of the waters is a matter of common observation. Posterior positions of the occiput, face and breech presentations, are all cases in point, and in all of them artificial dilatation is of the greatest service.

For this purpose various forms of hydrostatic dilators have been proposed—Barnes' bags, Champetier de Ribes' bag and Voorhees' bags being the ones most in use. With regard to these I may say that all rubber appliances are hard to keep, and are therefore very apt to be out of order when needed; they are difficult to sterilize; they displace the presenting part; they sometimes cause excruciating pain; and if traction be made upon them they are apt to lacerate the cervix. Gradual dilatation with the fingers in the manner advocated by Harris is much to be preferred.

In my second division, in cases in which dilatation is, so to speak, forced upon us, the question is much more serious. In eclamptic women for example, whose nervous systems are already upset by the toxin, we must be prepared to occasionally see grave results follow the operation. Profound shock and occasionally mania have developed in some of my cases. How far these symptoms are due to the disease, and how far to the operation, it is difficult to say, but I think forcible dilatation helps to bring these conditions about.

In cases of accidental hæmorrhage, whether concealed or not, extreme caution must be used. We have here to deal with a diseased uterus, in which severe laceration of the cervix or rupture of the uterus is liable to occur, even with the most careful manipulation.

For these cases branched metal dilators have been advocated, especially where rapid delivery is decided upon in cases of eclampsia, the most recent one being Bossi's. Many reports, both favorable and adverse, have appeared recently about this instrument. There is no doubt that it is a powerful instrument; but in my opinion it is a dangerous one, and of very limited application. Deep cervical incisions are recommended by some, particularly by Dührssen, but this does not seem a method suitable for general use. In nearly all instances dilata-

tion can be accomplished with the fingers, by Harris's method. Commencing laceration can always be appreciated by the skilled fingers, and the operation stopped before damage is done.

Lastly, in cases of premature labor, say from the fourth to the eighth month, dilatation is often slow. In labor at term the condition known as polarity of the uterus exists; that is, that as the detrusor fibres contract the sphincter fibres relax, and dilatation progresses. In these premature labors, however, the sphincter does not seem to relax in the same way. This difficulty may frequently be overcome by the local application of cocaine to the os. A small flat wad of sterilized absorbent cotton, soaked in a sterilized five per cent. solution of cocaine, is introduced soaked within the os. I have seen a rigid os, which had resisted the uterine efforts for nearly twenty-four hours, dilate in half an hour after this application. Manual dilatation under chloroform is also suitable for these cases.

In cases of inevitable or incomplete abortion which are afebrile, dilatation is often promoted, and at the same time hæmorrhage checked, by packing the cervical canal and vagina with iodoform gauze. In carrying out this measure the vulva and vagina are washed with green soap and hot water, and then douched with a solution of lysol (one per cent.). The cervix is then drawn down with tenaculum forceps, a posterior speculum inserted, and the cervix gently packed with iodoform gauze. The anterior fornix, the posterior fornix, and the two lateral fornices, and finally the upper part of the vagina, are then packed with the same material. The outer part of the vagina may then be packed with balls of absorbent cotton, wrung out of lysol.

If sepsis have set in, it is better to dilate at once, and empty the uterus. This may often be done with the fingers, but sometimes requires metal dilators. Of these, the graduated cones of Hegar or Kelly are better than the branched dilators, such as Goodell's; they are less likely to cause laceration. The cones should be grooved, in order that they may not act like piston rods and force fluid through the fallopian tubes.

In conclusion, I wish to lay especial emphasis on the importance of early interference in cases of "dry labor." In them the local damage to the maternal tissues, and the subsequent constitutional disturbance, is apt to be very severe, while the pressure on the child but too often causes its death. When the waters escape prematurely, and strong uterine contractions continue, aid should be given if dilatation is not complete in three or four hours.

# Abstract of Notable Lecture.

## CANCER AND ITS ORIGIN.

Abstract of the Bradshaw lecture, delivered by Henry Morris, M.A., F.R.C.S. Eng. at the Royal College of Surgeons, England, on December 9th, 1903. 'Sarcoma' is included under the heading as well as Carcinoma,

By F. W. MARLOW, F.R.C.S. Eng., TORONTO.

The theories of the causation of malignant tumor formation embrace two varieties of causes, namely, the entogenous and the ectogenous. Under the head of entogenous causes, Thierch advanced his "lost balance" theory, whereby it was supposed that a loss of balance between the epithelial and the connective tissues occurred, thus allowing of an overgrowth of one or the other of these tissues. This theory gained but little support, for it seemed that carcinomatosis or sarcomatosis ought always to be general instead of being localized at first, as is usually the case. On the other hand, the "tumor germ" theory, advanced by Cohnheim and Durante, has received much support, and up till the present time has occupied the foremost position amongst all theories, and still continues to do so.

Amongst ectogenous causes are injury, chronic irritation and chronic inflammation, all of which are admitted to have an influence in the development of malignant disease, but which undoubtedly cannot act alone. Micro-organisms are also included under this heading, and the parasitic theory of the causation of malignant disease has received a great deal of attention of late; but, in spite of the fact that it is still supported by many careful observers, it seems to be on the wane. Many varieties of the schizomycetes have been discovered in this connection, but such bacteria must play a very subordinate rôle, if any, and are generally regarded as factitious products of faulty technique. Different protozoa or psorosperms have been found in the form of coccidia-like bodies, but it is claimed that, instead of being psorosperms, they are products of cell degeneration or cell inclusions of leucocytes or red blood corpuscles, or the result of irregular forms of indirect division of epithelial cells. Likewise many observers have discovered organisms of the blastomycetic or fungus variety, but it is claimed by others that these are either forms of cell degeneration or changes in the nuclei of leucocytes, or in red blood corpuscles, or in the endothelial cells of lymphatics, or products of degeneration of protoplasm, or atypical mitosis and phagocytosis, or of contamination by yeasts or torulae in the air of the laboratory. The conclusion, as regards the "micro-

organismal" theory, is put forth as follows: "In short, neither fission fungus, yeast fungus, nor psorosperm—neither bacterium, blastomycete, nor protozoon—has, up to the present moment, been satisfactorily shown, in spite of years of patient study by many skilled workers, to be in any sort of causal relationship to these diseases."

In advancing the "tumor germ" theory, Cohnheim attributed the occurrence of tumor formation to the proliferation of embryonic cells and not of mature ones. A matrix of such embryonic cells is supposed to be cut off during foetal life from its proper connections, and to remain undeveloped as an "embryonic inclusion" or a so-called "tumor germ," surrounded by developing and ultimately fully developed tissues. Such "tumor germs" may remain quiescent throughout life, or may be excited into activity by one or other of several causes, at an indefinite period after birth. While accepting Cohnheim's theory, Durante claimed that such "tumor germs" might have a post-natal origin as well, by arising in tissues which have again acquired embryonic anatomical characters through weakening of their chemical or physiological activity. Senn says "a tumor is a localized increase of tissue, the product of tissue proliferation of embryonic cells of congenital or post-natal origin, produced independently of microbic cause." The existence of congenital matrices of embryonic cells is evidenced by the many vestigial structures and foetal rests found in various places throughout the body, as the tongue, gums, face, scalp, neck, brain, eye, testicle, ovary, broad ligament and along the line of coalescence of the trunk. Likewise, evidence is not wanting to show that post-natal matrices of embryonic cells may be developed; for in the cicatrization of wounds or ulcers while the process of epidermization is going on, epithelial buds may become shut off from their normal anatomical relations and be deprived of their normal function. This sequestration of unused cells may occur after burns, chronic ulcers, lupoid and syphilitic sores, fissures, sinuses, fistulae, compound fractures, cracked lips, excoriations from soot, tar or paraffin, laceration and ulceration of the cervix uteri, and the alternate breaking down and healing, in such diseases as ichthyosis of the tongue, cheek, vulva and vagina, or ulcers caused by carious teeth, as well as after wounds whether operative or produced otherwise. In a similar manner in parts which have been the seat of chronic inflammation or in scars, unspecialized connective tissue cells may be sequestered and form a sarcomatous "tumor germ."

That such matrices, whether of congenital or post-natal origin, may continue for a time in a dormant state and then suddenly start into active growth under the influence of some

stimulus, is in accordance with what occurs in the growth and development of the teeth, the bones, the skin and its appendages, the larynx, the mamma, and the organs of generation, the cells of which remain for years in a state of incomplete differentiation, and then normally, under the physiological stimulus, occurring at puberty, take on rapid proliferation. Pathologically, the same suddenly aroused activity is seen in certain epithelial tumors which are rarely observed before puberty, such as dermoids, branchial cysts and mammary adenomata. For a matrix of embryonic cells to be transformed into a tumor, it must be aroused into activity by some stimulus, either general or local, congenital or acquired, and the chief amongst the alleged common causes of such stimuli are heredity, age, traumatism and chronic irritation and inflammation.

The part taken by heredity is the production of an aptitude or predisposition to the development of malignant disease, by bringing about a diminution of the physiological resistance of the tissues which permits of their being invaded and destroyed by the proliferating cells of the tumor matrix. During childhood and early adult life, when sarcoma is of more frequent occurrence than carcinoma, it would appear that exciting stimuli are more likely to start into activity a connective tissue "tumor germ," whilst in mature life and advanced age, when epithelial activity is greater than that of connective tissue, epithelial "tumor germs" are more likely to give rise to tumor formation. More than one variety of "tumor germ" may exist in the same individual, and if middle life has been reached, without the incidence of a matrix arousing stimulus, and such occurs subsequently, if the stimulus is of general origin, it is probable that the epithelial "tumor germ" will respond and not the connective tissue one, thus giving rise to a carcinoma, but if the stimulus is of local origin, the nature of the tumor will depend on whether the "tumor germ" acted upon is epithelial, giving rise to a carcinoma, or of the nature of a connective tissue "tumor germ," in which case a sarcoma will be the result. As age advances and senility ensues, there is a diminution of physiological resistance owing to impaired vitality of tissue and lessened power to withstand the effects of injury.

Traumatism cannot alone give rise to malignant disease. The presence of a matrix of embryonic tissue, either of congenital or post-natal origin, is essential, and when such is present, traumatism or irritation of any kind, whether mechanical, chemical, thermal or possibly microbic, may excite such tumor formation by arousing the matrix into activity and by diminishing the physiological resistance of the tissue. Chronic irritation and inflammation act similarly, and in addition, may provide

a post-natal matrix and so originate the essential factor in the production of malignant disease.

The "tumor germ" theory seems to accord with most of the facts already known with regard to tumor formation, whether of a benign or malignant character.

A large variety of benign tumors undoubtedly arise from congenital matrices, and that they may also arise from post-natal matrices, is evidenced by the occurrence of implantation dermoids and other varieties of cysts, as the outcome of some surface epithelium, hair follicles, or portion of skin being forced into the deeper tissues by punctured and other wounds. In the case of malignant tumor formation it is well known that such is very frequent along the lines of junction of skin and mucous membrane, as in the case of the lip and anus, and in zones of transitional epithelium, as in the case of the cervix uteri, and of the rectum at the junction of the proctodeum with the hind gut, and likewise in situations where active cell proliferation is occurring as in the region of the ends of long bones. In such regions, as well as in many others which might be mentioned in the same category, the anatomical structure varies most, and the likelihood of the existence of congenital "tumor germs" is obvious, and on account of the great liability to pathological changes in these regions, it is not unlikely that post-natal "tumor germs" may be developed as well.

It is a well-established fact that many benign tumors may take on malignancy. In accordance with the "tumor germ" theory this may be due to the inclusion and sequestration of a matrix of tissue derived from the organ or part affected, or in the process of growth of the benign tumor, some of the daughter cells may fail to attain the degree of differentiation of the parent cells, and may subsequently develop, on their own account, into a malignant neoplasm. With regard to the recurrence of malignant disease, after operation for its removal, it would appear that the necessary "tumor germ" is supplied by a cell or cells which have migrated to a lymphatic vessel or gland before the removal of the tumor, or by the infection, by such a cell or cells, of the wound during the operation. Such "tumor germs" resemble the original embryonic matrix of the primary tumor, in being subject to the same kind of restraint and in responding to the same kind of stimuli.

Thus, the "tumor germ" theory of Cohnheim and Durante is regarded by Mr. Morris as being the only theory which has ever been advanced which will accord with the known facts relative to malignant disease. In concluding, he applies to this theory the following borrowed quotation: "It has searchlight luminosity. Like radium it keeps burning brilliantly without consuming itself."



# Progress of Medical Science.

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## MEDICINE.

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

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### The Present-Day Treatment of Typhoid Fever.

In time of spring, with its usual outbreak of enteric or typhoid fever, there occurs in *The Practitioner*, of England, a series of papers, by eminent writers, on the different aspects of this disease. The three of these articles devoted to the care of the malady represent the ideas from prominent centres in England, Ireland and America, and, excepting the fact that their authors pay no tribute to the "eliminative treatment," contain a wealth of information on the modern treatment of the disease.

The general management of a case of typhoid fever (called more frequently enteric fever since the late war, during which this name was officially adopted), all three writers agree that the essentials are simplicity, with constant watchfulness—"armed expectancy." Great emphasis is given to the amount of daily attention necessary on the part of both physicians and nurses. The former must watch the expression of the patient; the position he takes in bed; the presence of tremors or twitching of limbs, tongue, or lips; the motion of his face and hands; the state of his pulse, respirations, temperature, and the appearance of his tongue. Moreover, Sir William Broadbent, who writes the introductory paper of the series, maintains that the attending physician *should see every passage*. The nurses have the care of the mouth, food and cleanliness; the protection of the skin; the giving of enemata; the bathing; the recording of temperature, pulse and sleep; and ample work is usually afforded for two good nurses. Thus the care of a case of this kind is a task of much labor. For this reason typhoid fever should be, wherever possible, a hospital-treated disease.

Otherwise the surroundings of the patient must receive every consideration, both for his own sake and for the sake of the community. The Irish contributor, Sir John W. Moore, urges strongly the dangers of leaving a patient in a situation where there is the suspicion of leaky drains, or of the water supply having been the original cause, and cites an illustration, showing clearly the improvement arising from the removal of a case from such a tainted atmosphere, where daily further doses of the poison were being taken in. It is pointed out that the con-

tagion is possible *by contact* to a much greater extent than was maintained heretofore. Disinfection of motions should be carried out by means of leaving them in contact with the fourth of their volume of carbolic acid for some hours. Bichloride of mercury is held by one writer to be ineffectual. The frequent presence of large numbers of typhoid bacilli in the urine has of late been noted, and the administration in such cases of urotropine three times a week is advised as a routine.

The care of the mouth must be constant. A very good routine is to use a mouth wash containing carbolic acid, glycerine, listerine, and boracic acid after each feeding.

In the use of drugs for general treatment Sir John W. Moore is the most active. He is a believer in *turpentine* as being an all round remedy. He claims that it is an excellent diffusible stimulant, a valuable antiseptic, that it relieves chest complications, controls diarrhea, checks meteorism, and stays hemorrhage. He gives it in capsules in small doses. He cautions against giving it in the presence of kidney complications.

In regard to the use of intestinal-antiseptics none of the writers have faith in their power to affect "the sheltered typhoid bacillus."

For checking the swarms of other bacilli normally found in the intestinal canal, however, there is more favor shown them. Here, again, the Irish physician is the most active. He has a strong appreciability for *salicylate of quinine*, given throughout the disease (5 grains per dose). He maintains that it prevents constipation, fetor, and tympanites. The English authorities, Dr. Herbert P. Hawkins, physician for St. Thomas' Hospital, and Sir Wm. Broadbent believe that there may be much use in them when there is present secondary fermentation, the former using carbolic acid (3 min.), and holding as dangerous anything which increases peristalsis, such as the perchloride, or calomel. Sir William prefers one or other of these two latter. The Johns Hopkins' Hospital uses none of them.

In regard to alcohol, its use as a matter of routine is condemned by all. It may be used to the amount of 2 oz. or 3 oz. daily at the height of the disease, and in greater quantities with failing heart, but many patients go through the attack without it.

*Diet.*—On this most important part of the routine Dr. Hawkins sets forth as the two essentials to be considered, the impairment of carbohydrate and proteid digestion, the possibility of one or more of the ulcers having a floor of little more than peritoneum. Three forms of nourishment find favor, *milk*, *wey* and *albumen water*. Milk is given the first place. It is to be diluted by the use of one-fourth to one-half its bulk of soda-water, barley-water or lime-water; it may be flavored

with coffee or tea, or made into a jelly by adding an ounce of isinglass to the pint with one-half pint of cream and some lemon flavoring. It may be made into a soup flavored with vegetable. It may be peptonized. By the tactful use of these means and by having recourse to the two other nourishments, no trouble may be experienced in the matter of the patient revolting. Indications calling for the cutting down or withholding of the milk are the presence of curds, diarrhoea, or much distention. Whey comes next in order and indeed is held to be so efficient as a sole means of sustenance, that many physicians are abandoning milk entirely in its favor. Albumen water, made by mixing the whites of two eggs with a pint of water, adding a pinch of salt, some lemon juice, and if desired some brandy, is the third staple.

Stress is laid on the small amount necessary. Too little is held to be much safer than too much. If milk is to be used two pints is considered sufficient. The feeding should be small and frequent. The routine in the Johns Hopkins Hospital corresponds with the ideas of Dr. Hawkins, and is as follows: Four ounces of milk with two ounces of lime water every four hours; four ounces of albumen water half way between milk feedings; whey, if necessary, to replace milk. A free supply of drink apart from the nourishment is strongly urged, and in Baltimore the patient is urged to consume at least three litres of water a day. Constant care is given to the enforcement of this detail. Dr. MacCrae mentions two rules as being worthy mottoes for the walls of a typhoid ward: "More water," "Too little food, rather than too much."

*Pyrexia.*—In this department of therapy the same amount of unanimity as in matters of diet is not found on the part of the authorities. Sir John Moore leans to the idea that a certain amount of fever indicates a beneficial reaction of the organism which is necessary to bring about a cure. The limits of this benefit are reached when tissue consumption is causing exhaustion, or when the heart muscle is beginning to fatigue. He quotes a classical authority to the effect that "The diseases which drugs do not cure, fever cures." Dr. Hawkins says rigidly that two, three or four weeks at a temperature of 103 degrees is "a definite tendency to death, which can be greatly diminished." He thinks that a lower average daily temperature is of great assistance in helping tissue resistance to bacterial activity. Both agree on the dangers of using antipyretic drugs for any continued length of time, and place full confidence in hydrotherapy. As to the methods of putting this into practice Sir John Moore rather favors tepid sponging, but finds that a reduction in the body temperature (taken in the mouth) of 1.5 to 2 degrees may be obtained. Dr. Hawkins

places on a par the cold sponge and the bath. He points out that sponging is often more grateful to the patient, can be more readily performed, especially outside of an hospital, and can be done in spite of complications which contra-indicate the bath. The bath, however, has some possible advantage in the effect of the sudden immersion on the cutaneous, and secondarily on the cardiac and respiratory systems.

The method of sponging consists in having the patient lie on a blanket covered by another blanket. Commencing at the face the whole body is gone over with water at tap temperature for ten minutes, each part being returned at once to cover. The prominent bony parts are thoroughly dried and powdered and the patient is wrapped in the under blanket. If a drop of 3 or 4 degrees is not produced a second sponging with ice water is instituted for another ten minutes. By this interval the effect of too much result may be prevented, a point of importance in the case of children.

In the Johns Hopkins Hospital the bath treatment holds absolute sway. It is begun early and continued throughout the attack. The results are a diminution in nervous symptoms due to toxemia, such as delirium, tremors, stupor: the very rare development of "the typhoid state;" a distinct improvement after each treatment in the pulse which becomes smaller and harder; the benefit from three or four deep full breaths which lessen the chance of passive congestion; a lessened liability to bed sores; a reduction in temperature, and finally the saving of about seven patients per 100. The baths are given every three hours, when the temperature is 102.5 degrees or over, for fifteen minutes. The temperature of the water is from 70 to 85 degrees. *No ice is used.* While in the bath the patient is rubbed continually. Blueness or cyanosis during or immediately after the bath, with some shivering, are not found to be unfavorable signs. The contra-indications to baths are severe abdominal pain, hemorrhage, phlebitis and prostration. Late arrivals in grave condition are not bathed. It should be mentioned that while at the Johns Hopkins Hospital patients are lowered into the bath in a sheet. On the continent, if they have been admitted at the first of the attack, they are allowed to step into the bath.

*Bowels.*—Two of the writers, the English and American, prefer a condition of constipation, "Lock up the bowels, and keep them so." The Irishman, however, thinks constipation decidedly undesirable and finds it more difficult than diarrhea to manage. He administers calomel (1 to 3 grains) followed by an enemata, at any time up to the eighth day, after which he depends upon castor oil, as being less exciting of peristalsis. This is given in repeated small doses daily till the bowels act

regularly. Dr. Hawkins points out that while purgatives clear the small intestine, which enemata do not, yet it is not certain whether this is really desirable, for if natural purgation, in the shape of diarrhea occurs, every effort is made through the teachings of experience to check it. Hence, alike with Dr. MacCrae, he is satisfied with a simple enema every second or third day, and no purgative is given throughout the whole attack.

*Diarrhea* is regarded by all as undesirable. It hurries food along the intestines, causing danger of premature separation of the sloughs. It is, therefore, made the subject of treatment. The diet is cut down, and if necessary milk is stopped. The Johns Hopkins Hospital treatment is to avoid opium and rely on bismuth. If necessary, however, a lead and opium pill, with an enemata of laudanum and starch is administered. Sir John Moore uses half ounce doses of chalk mixture with ten minimums of tr. chloro. co., while Dr. Hawkins relies entirely on opium, as Dover's powder with bismuth, or in severe cases in the form of morphine hypodermically.

*Meteorism* is to be treated at once. A glycerine compress to the abdomen, the passage of a long rectal tube which is left in place for half an hour, the administration of turpentine or carbolic acid by the mouth, are the different ways in which this grave symptom is met.

*Sleep*.—This must be secured if necessary by a late sponging, by a Dover's powder, or if a high fever be present by morphine, strychnine and digitalin hypodermic.

*Hemorrhage*.—The appearance of blood in the motions is a signal in the opinion of all three writers for exercise of the greatest immediate care. It is recognized that a few streaks may be significant of nothing more than the separation of sloughs, but no chances should be taken. Though there is every reason for fearing hemorrhage at all times, yet Sir John Moore has found that sometimes a decided improvement follows a single copious bleeding. Repeated smaller ones nearly always end in death. At the danger signal, then *absolute rest* to the bowels and the body, as a whole, should at once be enforced. All food should be withheld for some hours, to be resumed gradually in the form of small quantities of whey or albumen water. The bed-pan should not be used, a pack of tow being arranged for the reception of evacuations. A light ice poultice should be applied to the right abdomen. The great remedy is opium. A hypodermic injection of morphine is the best form for its administration. The object to be obtained is the arresting of peristalsis during the two or three days of danger.

The following prescription was a stand-by of a celebrated physician :—

Ac. tannic.....	gr. 10
Tr. opii .....	m. 10
Spts. terebinth.....	m. 15
Mucil .....	drs. 2
Tr. chlorof.....	m. 20
Aq. menth, pip. ad.....	1

*Calcium Chloride*—Should be adopted in profuse or continuous cases. It is given in 20 gr. doses every few hours. In Baltimore, its use as a prophylactic measure is being tested. The blood coagulation time of the patient is taken on admission and if it be longer than normal, calcium chloride is given thrice daily. The administration of stimulants and saline injections is to be held for occasions on which great blanchings and collapse is present. The dangers of raising blood pressure are too great to allow of their routine use.

*Perforation*.—Immediate perforation following early diagnosis is the one hopeful treatment. Emphasis is laid on the necessity for having any distinct change in the abdomen at once reported, and the advisability of operating under conditions of anxious doubt is encouraged.

Dr. MacCrae says "the important point is not to feel called upon to diagnose the condition exactly, but to be able to recognize an acute abdominal condition which demands exploration. The operation should be done under cocaine anaesthesia, and under this, little injurious effect to the patient need arise. The procedure is that for perforation with peritonitis under any condition. Haste must be the constant thought.

*Convalescence*.—Great conservatism is observed by the writers during this period. It is pointed out that many physicians have had one good lesson to make them inexorable, ever after.

During the week following a drop in temperature, the ever increasing appetite of the patient should be met with such additions to the dietary as jellies, bread and milk, etc. It should be ten days before a little scraped beef be added to the list, and after this a gradual increase daily is the most satisfactory method. Sitting up in bed on the tenth day, getting up in a chair on the fourteenth day, is a fair course in regard to the end of an attack of typhoid fever.

H. S. HUTCHISON.

### Gastric Hyperacidity.

Russel, of Edinburgh (*British Medical Journal*), believes that hydrochloric acid excess is a much more common cause of dyspepsia, and ultimately of gastric dilatation, than is at

present recognized. He would place about 25 per cent. of his cases of dyspepsia in the category of hyperchlorhydria. The history is often so characteristic that a diagnosis can be made from that alone:—Quite well in the morning, and first sign of discomfort sometime in the forenoon; pain passes off in an hour or two, to reappear an hour or longer after dinner, and food relieves the pain. There is usually a superficial epigastric tenderness. In severe cases, besides the flatulent distension, acid eructations and constipation, common to most sufferers, there is a sense of physical and mental exhaustion, with "paroxysmal pyrosis," which is probably a pyloric phenomenon.

The cause of the disease lies in the undue retention of the food in the stomach after proteid digestion. The starch granules and milk fat, both of which Russel has often found in the contents, continue to stimulate the glands, while the pylorus refuses to allow the chyme to pass on to the duodenum.

The treatment is chiefly dietetic. The proteids ought to be reduced to a physiological minimum, easy of digestion, the starches should be as much altered as possible, and the quantity of food should not exceed the physiological requirements.

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## SURGERY.

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

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### Resection of Intestine.

At a meeting of the London Clinical Society Mr. F. C. Wallis described an interesting case of chronic intussusception of the enteric variety which was treated by resection. The length of bowel removed was forty-two inches. As time was a great object he performed the anastomosis by means of a Murphy button. Recovery was uninterrupted until the end of the third week when attacks of colic intervened. The Roentgen rays revealed the presence of the Murphy button near the ileo-caecal valve. It was removed by a second incision, and complete recovery followed.

In this case a Murphy button was employed in order that the operation should be as little prolonged as possible, and one must admit that in such cases the button is an admirable appliance on account of the rapidity with which the anastomosis can be effected by its use, but in all cases where the condition of the patient will warrant a slight prolongation of the operation one would advise that the introduction of such a foreign body as a Murphy button into the continuity of the alimentary canal be avoided and other means of effecting anastomosis be employed.

In resecting small intestine one wishes to preserve its lumen as far as possible, and if a sufficiently large Murphy button be employed it is not unlikely that when the button is set free it will become impacted in the lower part of the small intestine, where a gradual narrowing occurs in the direction of the ileo-coecal valve. Such was the event that necessitated a second incision in the case reported by Mr. Wallis.

Of other mechanical appliances for effecting intestinal anastomosis, Mr. A. W. Mayo Robson's decalcified bone bobbin is quite deserving of attention. By its use the introduction of the sutures is facilitated, and it acts as an internal splint to the united ends and protects the line of union from the passing faeces, whereas, after a few days, it becomes quite softened and pulpy.

But of all the means at one's disposal one is inclined to regard and to advocate the employment of simple suturing as the most effective and reliable, and to reserve the use of such appliances as the Murphy button for the exceptional cases where rapid completion of the operation is essential and necessitates such a choice. If simply suturing is carefully and intelligently carried out it can hardly fail to effect the desired result.

As regards the method of bringing the divided ends together when simple suturing is employed, the method of end-to-end anastomosis is desirable in all cases where the lumen is approximately the same in both ends, but in cases where the lumen varies from that of small intestine to that of colon it will in most cases be found better to close the divided ends and to perform a lateral anastomosis.

It is interesting to note that in Mr. Wallis' case some forty-two inches of small intestine were removed. In this connection one might speak of the mistaken notion of the value of economy entertained by many surgeons when called upon to resect a portion of intestine in such cases, for instance, as a strangulated enterocoele. The tendency has been to remove only the strangulated loop with a few inches, perhaps four to six, above and below the loop. One grants that four to six inches may be enough to remove below the strangulated loop, but in the majority of such cases the prognosis will be improved by the removal of a larger portion above, and such treatment is strongly advocated by no less an authority than Mr. Arthur E. Barker of University College Hospital, London. The rationale of such treatment is obvious, for in any case where strangulation has existed long enough to necessitate resection, the portion of bowel for some distance above the loop may have been so affected by distension and the non-passage of the intestinal contents, and its vitality may be so lowered that if it is allowed to remain it is not unreasonable to anticipate that in that portion of bowel



an enteritis will ensue, which may be of so severe a nature as to give rise to a toxaemia which will bring about a fatal result apart from the interference with union which would be induced. Experiments have shown that a portion of bowel up to one-third of its whole length may be removed without interference with nutrition, and the writer has had the privilege of observing a case of Mr. Barker's in which over six feet of bowel were successfully removed in the treatment of a strangulated enterocele in a woman considerably past middle age.

A point worthy of most careful attention in all cases of resection of intestine is the method of treating the mesentery, and here again one would advocate a departure from a method so frequently adopted, in which a triangular piece of the mesentery is removed, for no matter how carefully this is done the arrangement of the arterial loops in the mesentery is such that the circulation in the divided ends of the bowel may be easily interrupted. It is quite unnecessary to remove any mesentery at all in such cases, even where a large portion of bowel is resected, and the method that appeals to us as being the best and safest is the one in which after selecting the portion of bowel to be removed, a series of interlocking ligatures are placed in the mesentery parallel to the bowel, and only far enough distant from it to allow of the subsequent division of the mesentery between the ligatures and the bowel. When this method is employed there can be no hemorrhage when the mesentery is divided and the division is effected so close to the bowel that there is practically no danger of interrupting the circulation in the divided ends; when these are brought together it will be found that the mesentery will have shrunk to so great an extent that its presence will not materially increase the difficulty of effecting the desired anastomosis. F. W. M.

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## OBSTETRICS AND GYNECOLOGY.

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IN CHARGE OF ADAM H. WRIGHT, K. C. McILWRAITH, FRED. FENTON AND  
HELEN MacGURCHY.

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### Local Edemas.

M. Budin, Dr. Lop, and other members of the Obstetrical Society of Paris, have recently been investigating the subject of edema, occurring locally in patients who are pregnant, or passing through the puerperium. The back of the hand, the palpebral region, and the lobule of the ear, were the localities chiefly affected. A subicteric tint of the skin, dyspnea, albuminuria, indicanuria, and a marked degree of hypozoturia

were among the accompanying symptoms. The treatment consisted of rest, a milk diet, and saline purgatives; and was successful in both the cases reported. The cause is thought to be neurovascular disorder, produced by introduction of the toxins of puerperal infection into the renal circulation.

### Combined Use of Finsen Light and X-Ray in the Treatment of Uterine Carcinoma.

G. G. Hopkins believes that in the combined use of the Finsen light and the x-ray, the principal dependence being the Finsen light, he has devised a very satisfactory method for the cure of uterine carcinoma, especially when that disease originates in the cervix. Great caution must be observed in the use of the x-ray, particularly in recurrent cases in which hysterectomy has been done. He has found that an hour's exposure to the Finsen light, and five to eight minutes exposure to the x-ray, is a good proportion in which to employ the two agents. He describes very carefully an apparatus for carrying the tubes, so constructed that the patient need not be placed in a constrained position during treatment. None of the many substitutes for the Finsen light has given as good results as the original apparatus.—*Brooklyn Medical Journal*.

### Sterility.

The senior obstetric physician of Guy's Hospital, Dr. Peter Horrocks, publishes in *The Lancet* of January 9, 1904, a lecture delivered by him before the Medical Graduates' College.

The lecture is an extremely valuable one, and concludes with a careful outline of treatment, from which we take the following points:—

1. *No treatment* if the woman is healthy and has not been married three years. The chance of pregnancy is still good.
2. *Food and Exercise*.—Spare diet; plenty of work or exercise; change of diet.
3. *Tonics*.—Use these freely to improve the general health.
4. *Change of Environment and Climate*.—Send to a warm climate—e.g., Cornwall, Devon, Malta, Italy, etc. Send back to her old home, etc.
5. *Specifics*.—In case of doubt give mercury or potassium iodide.
6. *Local Treatment*.—Cure any excoriation, pruritus, etc. Remove caruncles, repair lacerations. Cure vaginitis, urethritis, endocervicitis, etc.
7. *Regulation of Coitus*.—Forbid excess.
8. *Natural Habits*.—Stop douching, etc.

**Phlegmasia alba dolens during Pregnancy.**

Mrs. R., aged 23, primipara, in the 33rd week of her pregnancy, slipped and fell on the ice, and was quite severely shocked. Shortly after she began to have severe pains in the abdomen. About one and one-half hours after the accident I found that well marked uterine contractions had begun. They continued for several days, in spite of several doses of morphia, but finally quieted down, and we began to hope that the danger of an interruption of pregnancy had passed, when, 10 days after the accident, the left thigh and leg began to swell, and a typical phlegmasia developed. There was fever for several days, considerable edema, and great pain. The limb was elevated, enveloped in moist dressings, and morphia given, until after three weeks the patient was able to get along with a bandage and cotton dressing. During this time there were many and painful uterine contractions. For a week or more before labor the patient was able to get around on a wheel chair. Confinement occurred at term, 283 days from the beginning of the last menstruation, 270 days from conception, and 151 days from the first appearance of the fetal movements. Labor was quite normal, lasting about 16 hours. For a few hours after the delivery of the child the temperature was 100.3, and the pulse between 85 and 94. On the fifth day temperature was 100.5 for a few hours, and the pulse 100. With these exceptions, there was no fever or other kind of sepsis in the puerperium. The patient began to sit up in her wheel chair on the 18th day. The leg had been only slightly swollen and tender during the whole time. Five weeks after confinement she began to walk a little, and the limb became more painful and swollen. By the use of bandages it was kept in fair condition. Seven examinations of urine were made during pregnancy, and a slight amount of albumin was found once about the middle of the pregnancy, which disappeared the following week. Nothing abnormal was found in the urine after the appearance of the phlegmasia. The patient had never had any trouble with the limb. With the exception of anemia in girlhood she had always been pretty well. The physical examination disclosed no organic heart disease or other disease. A vaginal and rectal examination made after the appearance of the phlegmasia disclosed no intra-pelvic phlegmon. After a hasty glance through the Jahresbericht I was surprised to find so few cases of phlegmasia during pregnancy reported. I have found four. Williams mentions that he has seen one. One case is reported by Brindeau and two by Saint Ange. The latter occurred in the early months of pregnancy, while Brindeau's case was apparently spontaneous, and in the last month of pregnancy. The pathological anatomy and etiology

of phlegmasia is obscure. There is not even agreement as to the question whether the accompanying femoral phlebitis is primary or secondary, although it is generally assumed to be primary or the cause of the cellular edema. Whether the lesion of the vessels is due to infection, mechanical injury, or results from changed condition of the blood is also a question in dispute. My case throws, perhaps, no light upon the subject. The absence of fever and any kind of local infection previous to the appearance of the swelling tends to show that infection was not a factor. On the other hand, we may easily imagine that the long continued uterine contractions following the accident may have dislodged placental masses that formed rudimentary emboli or perhaps altered the blood composition. This seems to me the more probable explanation, and tends to confirm me in the opinion that phlegmasia is not always of septic origin. I had considerable fear that labor would come on while the phlegmasia was in its acute stage. Brindeau's case, as well as my own, seems to show that phlegmasia is not made worse by labor. If the limb were very sore the movements of the patient during labor would probably add to her discomfort. The affection does not seem to complicate the puerperium. No doubt it is wise to delay labor or prevent premature delivery, if possible, but so far as any conclusions can be drawn from two or three cases we may, perhaps, conclude that the danger of labor during phlegmasia is not so great as might be expected.—Bacon, of Chicago, *American Journal of Obstetrics*.

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## OPHTHALMOLOGY AND OTOTOLOGY.

UNDER THE CHARGE OF J. T. DUNCAN, M.D., C.M.

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### The Effect of Potassium Iodide upon the Eyes.

Under this title an interesting article appears in the *Medical Bulletin*, pointing out that this drug may produce photophobia, hyperesthesia of the retina and even retinal hemorrhage.

The writer states that potassium iodide may produce serious eye trouble, and states that Professor Galezowski has expressed himself strongly in opposition to the use of this preparation in ocular syphilis. As iodine causes dilatation of the cerebral blood vessels, with a retardation of the circulation, it is to be inferred that it may prove injurious both to the brain and to the retina, which is so intimately connected with the cerebral cells. This is not merely a matter of inference, but, unfortunately, cases have been witnessed in actual practice.

But the chief interest of the article is in regard to a case of corneal ulceration, occurring in the Clinic of Dr. Valois, of Paris, France. The potassium iodide had been prescribed on account of a disease of the nose and throat, before she went to Dr. Valois' Clinic.

The patient, a woman, had not had syphilis. She first came to the Clinic on July 19, 1899. There was a slight degree of hypermetropia, and proper glasses were ordered. About a year later she returned with a stricture of the lacrymal duct of each side. The canal was catheterized and injected for some time. Another year passed. In 1902 she came to Paris for further treatment, and there, according to her statement, she suffered from corneal ulcer of the right eye, with, later, total necrosis of the cornea and prolapse of the iris.

In September, 1902, she entered the hospital. There was then upon the left cornea a large ulcer, which was very carefully treated by means of douches, atropine, yellow pomade, silver nitrate, and copious injections into the lacrymal passages. Nevertheless, the ulceration extended; the cornea became white and completely infiltrated. The patient could with difficulty perceive light. Fearing the influence of the atrophied right eye an enucleation was performed, but this operation was equally without benefit. The left eye grew worse every day, notwithstanding all the efforts which were made.

It was at this time, upon the occasion of a morning visit, that the patient asked if she should still continue to take the iodide. Only then was it learned that she had, for more than three months, been taking every day a drachm of potassium iodide, which had been prescribed by a physician whom she had consulted on account of an affection of the nose.

The iodide was stopped, and from that moment ensued a rapid improvement. The ulcer cicatrized in a short time. The infiltration of the cornea disappeared and sight returned. At the date of the report there remained a rather large leucoma, which, however, did not prevent vision. The patient was perfectly able to distinguish objects. In this patient the already existing infection of the lacrymal passages had communicated itself to the lacrymal glands; the least gate of entry was then sufficient to produce an abscess of the cornea, against which the physicians were disarmed, for the corneal ulcer was in constant contact with the infected conjunctival secretion. It is not necessary, therefore, to be too exclusive and to impute to the iodide all the disasters which occurred to the eyes. The patient, however, undoubtedly belonged to a class in which the administration of iodide demands a constant watchfulness, viz.: those afflicted with disease of the lacrymal ducts. He compares them to those in whom the

absorption of mercury provokes serious stomatitis: the condition of their mouth and teeth predisposes them to this sort of accident. In the same manner the state of the nasal and ocular mucous membranes, of such people as this patient, renders them peculiarly susceptible to corneal complications developing under the influence of the potassium iodide.

### Dr. Javal's Book

(Reviewed in *The Ophthalmoscope*) is a very remarkable one in view of all the circumstances of its publication. Dr. Javal, a leading French ophthalmologist, became totally blind from glaucoma when he was over sixty years of age. In this condition he set himself to find a book containing directions helpful to those who had lost their sight in adult life. Not finding one, he, blind though he was, produced this book, "Advice to Those who have just Lost Their Sight," *Entre Aveugles*." It is a book indispensable for every blind person of mature years. It treats of almost every possible aspect of life and is full of hints that cannot fail to render existence as happy and independent as possible under the circumstances. Domestic and professional occupations, hygiene, health, food, watches and clocks, walking, tandem tricycles, travelling, reading, writing, correspondence, music, amusements, tobacco, marriage and the sixth sense (the so-called "sense of obstacles") all have chapters to themselves. An appendix deals with the various means of facilitating reading, and gives a list of addresses useful to those who require the various things used by the blind, such as special watches and clocks, wax tablets, styles, paper, cards, tricycles, games, and so forth. The publishers are Masson & Co., Paris, and it is to be hoped that an English translation may soon appear.

### The Life Study of Patients.

In *American Medicine* is a most suggestive article by Dr. G. M. Gould on "The Life Study of Patients." The article is based upon the discoveries made by the author in regard to the effects of eye strain—discoveries made while studying the lives of certain great men.

If one glances through the biographies of any twenty-five great literary workers he will find a strange and striking difference between the personal lives of perhaps half of the number and the others. Twelve or fifteen will be found to be comparatively healthy, while the others are constantly afflicted with much suffering. In some cases their physical diseases will result in the profoundest tragedies. Thus Gladstone, Goethe, Taine, Kant, Mommsen, Gibbon, Zola, Verdi, Agassiz, Fiske,

Longfellow, Lowell, Hawthorne, etc., leading sedentary and scholarly lives, possess good health, while we find that other men of the same callings and application to literature or science, endure lives of intense suffering. Of this class are George Eliot, Huxley, De Quincey, the Carlyles, Parkman, Browning, Wagner, Spencer, Whittier, Margaret Fuller, Lewes, Darwin, Nietzsche, etc. Take the fourteen last mentioned: If one physician could have treated all of them during their entire lives he would undoubtedly have seen that there was some single underlying unity and cause for all their afflictions. But as the single complaint was treated at one time by one, or even several physicians, and as a hundred were consulted during their lives, all the cases remained discrete, mysterious and utterly inexplicable.

The fact of the extreme diversity of the symptoms of the fourteen patients, of itself prevented their physicians from recognizing the single cause to which they were due. The nearest they came to it was a half-glimpsed, vague and passing adumbration of the truth. It was in part a sort of flattery of the patient, usually by himself originally, that begot the theory that brain working caused suffering. The hundreds of columns of twaddle about "brain-fag" in the London and American newspapers in October, November and December, of 1903, show the existence of the same superstition. A thousand brain workers have "brain-fag," but another thousand do not. It is plain that the explanation is badly in need of explanation. Intellectual work does not produce disease or suffering any more than muscle work.

"Migraine" and "brain-fag" are caused by astigmatism, but eyestrain causes many other morbid symptoms than those grouped under the non-signifying and misleading terms. In no text-book on diseases of the stomach or of the digestive organs will one ever find a word as to eyestrain, and yet eyestrain possibly causes more of the diseases of digestion than all other cases combined. The study of the patient's single disease, or the disease of itself, would never have revealed this truth. Only the life-histories of the suffering patients make the fact apparent.

After enumerating several other pathological conditions resulting from eyestrain, the article concludes: The continuance of all migrainous or eyestrain diseases indeed emphasizes the great need I have previously urged of a systematic and periodic re-examination by scientific specialists, of the bodily organs and functions throughout life. Apart from the objective scientific value of such tests, they would often reveal, and thus prevent further *ingravescence of pathologic conditions and trends*, of profound value to individuals and families.

### Tobacco Nerve Deafness.

"Tobacco Nerve Deafness" is the subject of an article by Wyatt Wengrave in the *Annals of Otology, Rhin. and Laryngology*. Deafness due to tobacco smoking may be classified in three groups, (1.) Mechanical, (2.) Irritative, (3.) Toxic, or Nerve Deafness.

Toxic or Nerve Deafness.—This is due to the gradual accumulation of certain toxins of tobacco in the system. Whatever the actual poison may be, whether picrotoxin, nicotine, or any other, it is, as a rule, found in largest amount in the darkest, strongest and cheapest tobaccos, *e.g.*, cut plug, cut cavendish, shag, etc., also in cigars of the Maduro strength, Oriental as well as Occidental. This poison is undoubtedly cumulative, since complete abstinence is essential in effecting any permanent improvement; mere reduction in the quantity consumed, or of its strength, generally proves unsatisfactory.

The effect of tobacco toxin upon the cardio-vascular system is familiar to all of us, also its influence upon the gastro-intestinal tract, which may be responsible for the production of further toxins.

But its most striking effect is upon the nervous system, as exemplified in "tobacco amblyopia," a disease characterized by degeneration of certain bundles of the optic nerve, known as the papillo-macular fibres, constituting scotoma, a condition associated with the loss of appreciation of the visual red waves.

Does the auditory nerve present a similar degeneration? Although at present we have no definite histological evidence, the fact that there was a marked deficiency in the appreciation of low tones in fifty per cent. of the cases recorded is presumptive evidence in favor of their being some selective degeneration at work in the auditory as in the optic nerve.

After giving particulars of seventeen cases of deafness, the author concludes:—

1. That they were all well marked cases of nerve deafness (unattributable to other causes), occurring in heavy smokers.
2. That the loss of low tones in fifty per cent. suggest an auditory equivalent for a recognized ocular lesion.
3. That the disease was symmetrical.
4. That there was impairment of color sense in eight of them, and definite scotoma in four cases.
5. That eighty per cent. showed marked improvement on abstinence from tobacco, supplemented by drug treatment: three were cured. But the habit was so strong and the will so weak in the rest of them that the forecast and the results were not encouraging.



## Editorials.

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### CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

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We desire again to call the attention of our readers to this association. It is said by some of its members, who have studied the matter carefully, that if a comparatively large sum were raised through greatly increased membership that it is likely the annual assessment (which even now is only \$2.50) would be materially reduced. The profession should not forget that the simple existence of such an association with sufficient money at its disposal would prevent the majority of unjust and vexatious suits for mal-practice, especially those of the black mail type, from passing beyond the initial stage. It is, of course, admitted that the public should be protected, as far as possible, from negligence and carelessness on the part of medical practitioners, and, on that account, the association will not defend suits where such faults exist. We are glad to announce that there has been a substantial increase of the Toronto membership, largely through the efforts of Dr. George A. Peters, who, though a personal canvasser, has brought in thirty-four new members up to the present time. Dr. Peters will be glad to receive the names of other physicians in or out of Toronto who desire to join. We should like to repeat the suggestion already made that the various local medical societies throughout the Dominion take the matter up and assist in increasing the membership.

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### DOCTOR JAMESON.

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Dr. Jameson, of South Africa, is chiefly known to the world on account of his famous raid which proved in all respects a disastrous failure. His small band was surrounded by an overwhelming body of Boers and captured. The leaders were sentenced to death, but later were surrendered to the British Government. After a trial, Jameson was sentenced to fifteen months' imprisonment. After serving about half this time in Holloway Jail he was released on account of ill health,

and soon returned to South Africa where he served through the war. After the surrender of the Boers he was elected a member of the Legislature of Cape Colony of South Africa. He was soon a leading spirit of that body and became the leader of the "Progressive" or Anglo-Saxon party, or "Utlanders" in opposition to the old "Boer" or "Dutch" party. Sir Gordon Sprigg, the leader of the Government, has been defeated and Dr. Jameson is now Premier.

In considering the extraordinary career of this remarkable man we are apt to forget the fact that for many years he had a large practice as a physician and surgeon. Dr. Starr Jameson was born in Edinburgh 51 years ago. He studied medicine in the University of Edinburgh with distinguished success, winning scholarships and a gold medal. After graduating he went out to South Africa and practised in Kimberley, where he soon made an income of about \$25,000 from his professional work. Among his distinguished patients were President Kruger, of the Transvaal; President Brand, of Orange Free State; Lobengula, the famous Metabele Chief; and last, but not least, his friend Cecil Rhodes.

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### ONTARIO MEDICAL ASSOCIATION.

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In our last issue we gave a list of the various committees which have been appointed for the next meeting of this association. The meeting will be held in Toronto, June 14th 15th and 16th, under the Presidency of Dr. F. W. Ross, of Toronto. We are told by the Secretary that the committees have already done a considerable amount of work and we shall soon be able to speak more definitely as to the progress made. The Committee on Papers and Business, under the chairmanship of Dr. Albert Macdonald, are getting the programme well under way. The chairman makes the pleasing announcement that there is great enthusiasm in different parts of the Province, and that extra efforts are being put forth to make the meeting of 1904 a memorable one. The corresponding members of the various parts of Ontario have done much excellent work and promise a sufficiency of papers. We all want as many papers as possible from members outside Toronto; but we have

noticed in the past that many outsiders, especially recent graduates, wish the profession of Toronto to do a fair share in connection with the reading and discussion of papers.

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### VENEREAL PROPHELYSIS.

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Since the dawn of civilization, legislators have had to wrestle with the question of prostitution, and seemingly the solution is not yet. Maria Theresa in Vienna, and some of the Popes in Rome, learned by experience that stern regulations did not accomplish what they intended, in fact, till the law was changed, venereal diseases steadily increased. Lately the city of Bonn, by legislation somewhat similar to the Contagious Diseases Act in India, has conclusively proved that compulsory medical examination does nothing towards lessening prostitution. Paris, too, with a century of experience, finds that controlled prostitutes and brothels are slowly diminishing, while clandestine harlots are rapidly increasing.

Although anything like official recognition of prostitution is most abhorrent to the Anglo-Saxon races, as a whole, the city of Cincinnati has during the past three years been under a *régime* of prostitution-control by the Board of Health. Dr. M. L. Heidingsfeld (*Journal Amer. Med. Asso.*) has taken the statistics of his own practice to prove that since these regulations have been enforced, syphilis and gonorrhœa have increased very much, and concludes that the control at present exerted in that city is not able to prevent a material increase in the number of venereal cases.

The reasons for this failure are not hard to find. The sense of false security which is given by a medical bill of health lures many a man, whose better judgment would otherwise cause him to abstain. In Cincinnati this diploma must, by law, be "exhibited conspicuously in the room occupied by the person to whom it is issued." Apart altogether from the farce of issuing a certificate, which can seldom be accurate—for who will say from one examination that a woman has *not* gonorrhœa?—a great many of these testimonials are bogus. Heidingsfeld found too, that a number of his patients contracted disease from masseuses, manicure artists, etc., who were regularly inspected

and licensed to practice prostitution, which they advertised in the daily papers under the cloak of deception.

The regulations are enforced by police officers who are often tyrannical, and it is needless to say that the chances for blackmail are greatly increased, only, in this case, it is the man who has the advantage. Retention in a ward of a hospital is irksome to girls of this class, indeed to the *demi-monde* most odious, so that the women seek to deceive the examining physicians, where formerly they were anxious to explain their ailments, that their cure would be the more speedy.

Another undesirable result of this system has been the scattering of the prostitutes to all parts of the city, where once they occupied only certain districts. As one writer said of New York, when similar regulations were tried: "Once prostitutes lived only in the Tenderloin; now they are our neighbors."

The inevitable conclusion of these experiments, is that the suppression of prostitution is at present impossible, and its control impracticable by medical supervision.

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## NOTES.

### **The Mayor of Chicago Arrested.**

At the instance of the Coroner's Jury, empanelled to enquire into the cause of death of the victims at the Iroquois theatre fire, Carter H. Harrison and seven other persons, including the Fire Marshal, the Building Commissioner and the Building Inspector, as well as the theatre authorities, were arrested. The verdict ran, "We hold Carter H. Harrison, Mayor of the city of Chicago, responsible, for he has shown a lamentable lack of force in his efforts to escape responsibility."

### **Cigarette Smoking.**

The opinion is gaining ground that the inhalation of cigarette smoke, containing carbon monoxid and other poisonous gases, is the real source of the evil effects of cigarette smoking. In the British Parliament recently cigarette smoking was mentioned as one cause of the deterioration of physique in British soldiers. Public opinion requires to be roused in Canada regarding this evil of cigarette smoking.

### The Johns Hopkins Hospital.

Letters from Baltimore inform us that indirect losses in the great fire of Baltimore are likely to reduce the income of the Johns Hopkins Hospital. We hope this fear is unfounded. The income of the Johns Hopkins Hospital was all too small for its great work. The energy and courage of the citizens of Baltimore, displayed in the face of such a calamity, are beyond all praise.

### Births and Deaths in 1902.

The report of the Registrar-General for Ontario for the year 1902 has just reached us. It is gratifying to note that the birth rate for 1902 is higher than in 1901 or 1900, but still our birth rate is lower than that of France, which now stands at 22.2. The figures for Ontario are, per 1000: Birth rate for Ontario in 1900, 19.8; 1901, 21.1; 1902, 21.7. The annual death rate for 1902 is 12.6 per 1000. In 1901 it was 13.6 per 1000.

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## Obituary.

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### ELIAS VERNON, M.D.

Dr. Vernon, of Hamilton, died February 7th, aged 76. He was born in Newmarket and received his degree of M.D. from Jefferson College, Philadelphia, in 1851. He practised in Hamilton forty-four years. He was for many years a member of the Ontario Medical Council.

### DUNCAN FRAZER, M.D., M.R.C.S., Eng.

Dr. Frazer, of Lakefield, Ont., died January 21st, aged 57. He received his medical education in Trinity Medical College, Toronto, and passed his final examinations in Trinity and Toronto Universities in 1874. After a post-graduate course in London, England, he went to Lakefield, where he practised for many years. He was in poor health for some time from chronic Bright's disease.

## Personals.

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Dr. Helen MacMurchy has been elected 1st Vice-President of the club organized by the women graduates of Toronto.

Dr. W. T. Hamilton (Tor. '01), of Strathroy, has received the double qualification M.R.C.S. and L.R.C.P. London, England.

Dr. Vrooman, M.P. for South Victoria, after recovering from an appendicectomy in the General Hospital left for home February, 10th.

Dr. Jas. F. W. Ross is returning from Egypt and is now going from Italy to England. He will sail from Liverpool for New York, April 1st.

Dr. Peter H. Bryce, the newly appointed Inspector of Immigration of the Interior, went to Ottawa immediately after the meeting of the Provincial Board of Health, February 2nd and 3rd.

Drs. George McDonagh and J. Milton Cotton, of Toronto, went to New York, February 14th, and sailed for Nassau, February 22nd. They expect to return to Toronto about March 27th.

We have in our Canadian Senate probably the oldest legislator in the world. Senator David Wark completed the hundredth year of his age, February 19th, and is still able to discharge his duties.

Dr. J. Orlando Orr, Manager of the Toronto Industrial Exhibition, returned from England, February 9th. The celebrated band of the "Black Watch" which he has secured for the next exhibition is the band of the First Battalion of the 42nd Highlanders, now stationed in Edinburgh.

Dr. Claude W. Freeman has been appointed Medical Superintendent of the Hamilton City Hospital. After the resignation of Dr. McLaren, Dr. Freeman acted as House Surgeon in full charge of the hospital, and his management was so satisfactory that the trustees have promoted him to the position of Superintendent with a salary of \$1200 a year, the appointment to date from January 1st.

Dr. Edward E. Kitchen, of St. George, chairman of the Provincial Board of Health, entertained a number of his friends at a banquet in the King Edward Hotel, Toronto, February 3rd. Among those present were the members of the Board, Hon. J. R. Stratton, and certain members of Parliament, the Dean and some members of the Medical Faculty of the University of Toronto. A very pleasant evening was spent, and many kind things were said concerning the outgoing and incoming secretaries of the Board, Drs. Bryce and Hodgetts.

## Correspondence.

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### LODGE PRACTICE AND INSURANCE EXAMINATIONS.

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*To the Editor of the CANADIAN PRACTITIONER AND REVIEW.*

Dear Sir,—From time to time some writer lifts up his hands in horror at the extent of contract-practice in Ontario. There is scarcely a physician in this province who has not been, or is not now, employed by some society to do its “doctoring” at so much per head per year. Even in a village, where there is only one practitioner, this same condition obtains. What the physician can gain in that case is hard to see, for none of the arguments usually advanced in extenuation of this custom are applicable to him. In our larger cities we find men, who are looked upon as leaders of their profession, and who hold chairs in some of the medical schools, attending patients who are members of a lodge, at \$1 per year, including medicine. When this matter is up for discussion, the sin is usually laid at the doors of the young men—those who have recently entered the profession, and who, in their eagerness to keep body and soul together, are willing to take anything that will pass as money. But what can be expected, when the men who have taught them medicine and ethics are deeply dyed themselves.

The fees for medical examination for these societies are so inadequate, that physicians are almost ashamed to say they have charged anything. One society has a form containing 150 questions, which must be answered by the medical examiner, with a urinary analysis thrown in, for which it pays the magnificent sum of \$1.00! Sometimes the examiner goes to the home of the candidate. Talk about bargain days!

And what is the result? The physician examines, in a superficial and perfunctory way, often failing to detect slight traces of albumen, or soft murmurs of the heart, because, hurry as he may, the examination will take nearly an hour. It is a very common thing for a man, rejected by a careful examiner in one company, to go over to another, and be accepted for even \$5000—accepted, too, when he was a bad risk.

Surely, such a state of affairs is most humiliating to the medical profession. Even the dentists can give us a better example than that. The societies offer these picayune fees, because they know that if one doctor refuses ten others will climb over one another to get the appointment. Is it because medical men place money before honor and virtue? It was

never so in the past. No other body of men has such a reputation for unselfish, altruistic devotion to duty. The profession is becoming more crowded, and the income less, but surely we are not forced yet to snarl over such a miserable pittance as these societies are willing to dole out.

These societies are not benevolent societies, in the strict sense of the word. When a man neglects to pay his dues they drop him just as quickly as a regular insurance company. They were formed for the specific purpose of getting life assurance and medical attendance, at the lowest possible figure, and their intention in both cases is to rob the doctor of his proper fee.

How can the medical profession defend itself? Not by Dominion or even Provincial legislation, certainly, if such were possible. In every district there is a medical society, the officers of which could easily reach every member and every doctor practicing in the district, and ask him to sign a declaration that he would not do any lodge work for less than, say, \$5 per year, and would cease to examine candidates for less than, say, \$3, provided every other man in the district would do the same. Only by a united profession can we change our position as beggar to that of prince.

If the Dominion Medical Association first, and afterwards the provincial and local associations, would place on record a motion to the effect, that lodge practice, at such beggarly rates, was most unprofessional, it would be only a few years before the whole question would be in a fair way towards settlement.

MEDICO.



## Book Reviews.

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**The International Text-Book of Surgery.** In two volumes. By American and British Authors. Edited by J. COLLINS WARREN, M.D., LL.D., F.R.C.S. (Hon.), Professor of Surgery, Harvard Medical School; and A. PEARCE GOULD, M.S., F.R.C.S., of London, England. Second Edition, thoroughly revised and enlarged. Vol. I. General and Operative Science. Royal octavo of 965 pages, with 461 illustrations, and 9 full-paged colored lithographic plates. Vol. II. Special or Regional Surgery. Royal octavo of 1122 pages, with 499 illustrations, and 8 full-paged colored lithographic plates. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$5.00, net; sheep or half morocco, \$6.00, net.

In planning this work the editors and co-workers have kept constantly in mind the needs of both student and practitioner. The result—a masterly exposition of the art and science of surgery, untrammelled by antiquated traditions. In its realization they have given to medical literature an invaluable text book, embodying a clear but succinct statement of our present knowledge of surgical pathology, symptomatology, and diagnosis, and such a detailed account of treatment as to form a reliable guide to modern practice. In this new edition the entire book has been carefully revised, and special effort has been made to bring the work down to the present day. The chapters on Military and Naval Surgery have been very scrupulously revised and extensively re-written in the light of the knowledge gained during the recent wars. The articles on the effect upon the human body of the various kinds of bullets, and the results of surgery in the field, are based on the latest reports of the surgeons in the field.

The chapter on Diseases of the Lymphatic System has been completely re-written and brought up-to-date; and of special interest is the chapter on the Spleen.

The already numerous and beautiful illustrations have been greatly increased, constituting a valuable feature, especially so the seventeen colored lithographic plates. The work is excellent; we know of none to surpass it. It is clear, concise, and up-to-date.

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**Diseases of the Pancreas and Their Surgical Treatment.** By A. W. MAYO ROBSON, F.R.C.S., Senior Surgeon, Leeds General Infirmary; Emeritus Professor of Surgery, Yorkshire College, Victoria University, England; and B. G. A. MOYNIHAN, M.S. (Lond.), F.R.C.S., Assistant Surgeon, Leeds General Infirmary; Consulting Surgeon to the Skipton and to the Mirfield Memorial Hospitals, England. Handsome octavo volume of 293 pages, illustrated. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.00, net.

The authors have not only given us the benefit of their own work, but have consolidated the recorded observations of others and presented this interesting subject in a pleasing manner.

The chapter dealing with "Experimental work on the

Pancreas," adduces most convincing evidence in support of the contentions of von Mering and Minkowski, that diabetes is the result of changes in cells of the "Islands of Langerhans."

The chapters on Acute and Chronic Pancreatitis are very full, nearly half the work being devoted to these diseases.

Injuries, Calculus. Cysts and New Growths all receive due consideration. The work is one we most heartily welcome as a valuable addition to our knowledge, not only of the Pancreas, but of Internal Medicine in general.

F. F.

**Clinical Surgery for the Instruction of Practitioners and Students of Surgery.**

By A. J. OCHSNER, B.S., F.R.M.S., M.D., Chicago; Surgeon-in-Chief, Augustana Hospital and St. Mary's Hospital; Professor of Clinical Surgery, Medical Department University of Illinois. In one large royal octavo volume of over six hundred pages with nearly one hundred full-page half-tone reproductions of immediate drawings of actual clinical cases. In cloth binding, \$6.00; in half morocco, \$7.00. Chicago: The Cleveland Press, Publishers. Toronto: Chandler & Massey, Limited.

This volume on Clinical Surgery is the outcome of a quest made by a large number of visiting surgeons at the clinic of the author. The author is not advising any new operation, nor advocating the use of any instrument of his invention, but is presenting a Clinical surgery pure and simple. The text of the book is exceedingly clear and lucid, it does not embrace the whole gauge of surgery, but deals with the subject from a purely clinical standpoint. That is what the profession requires. It is freely and beautifully illustrated. The illustrations depict the operations step by step, and if anything one may feel that the number of illustrations are somewhat in excess of the immediate requirements, but this fault, if it may be called a fault, is rather to the advantage of the reader than otherwise.

The subjects of which it treats are clearly and graphically described. The first thirty pages are devoted to the care of the patient and his preparation, aseptics, antiseptics and anesthesia, and the operating room. It is here that we would like to see a little more clearness expressed on the subject of cocaine. We think that with the admirable text that precedes, the subject of local anesthesia is altogether too briefly dismissed. We hardly think it embraces the views that surgeons hold to-day. There is plenty of space on the page left vacant that could have been utilized in completing the description of cocaine as a local anesthetic.

We look forward to a large sale of this work, and hope that other authors will in future present their work more from the clinical aspect of disease. The publishers have spared no expense in producing the volume in the best form, the typography and illustrations are as carefully prepared as it is possible.

**The Treatment of Tabetic Ataxia, by means of Systematic Exercise.** An Exposition of the Principles and Practice of Compensatory Movement Treatment. By Dr. H. S. FRENKEL, Medical Superintendent of the Sanatorium "Freihof," in Heiden, Switzerland. Only authorized English Edition. Translated and Edited by L. FREYBERGER, M.D., (Vienna) Hon. Physician to the St. Pancras and Northern Dispensary, etc. 132 illustrations. London: Rebman, Limited, 129 Shaftsbury Avenue, Cambridge Circus, W.C., 1902. Solo Canadian Representative, Chas. E. Wingate, 186 Adelaide St. W., Toronto.

When Dr. Frenkel first introduced his method of exercise for locomotor ataxia in 1889, he laid no claim to influencing the tabetic process, but only the most prominent symptom, the ataxia. In this disease, the motor tracts are perfectly healthy, as far as we can judge by our present microscopical technic, and the great pathological question has been to explain the ataxia. Frenkel combats both the "centre" theory and the "sensory" theory, and regards the locomotion of the tabetic and the exaggerated excursions of the limbs as dependent not only upon the ataxia but upon the hypotonic condition of the muscles and joints.

The key-stone of Frenkel's system is practice. The apparatus required is very small and the treatment can be given at home.

To anyone having patients suffering from this disease, this book is a great help and may mean a new lease of life and usefulness to the sufferer.

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**Mechanism of the Paroxysmal Neuroses.** By FRANCIS HARE, M.D., Consulting Physician, Brisbane General Hospital; Inspector-General of Hospitals, Queensland, Sydney: W. E. Smith, Bridge St., 1903. 33 pages.

This small pamphlet deals with the subject very fully and is worth careful perusal. We are glad to note that Dr. Hare has quoted extensively from one of our co-workers, Dr. H. McMurchy.

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**High-Frequency Currents in the Treatment of Some Diseases.** By CHISHOLM WILLIAMS, F.R.C.S., Edin. Member of the Royal College of Surgeons, Eng.; Licentiate Royal College of Physicians, Lond.; Licentiate Society of Apothecaries, Lond.; Electro-Therapist West London Hospital, W.; Surgeon Out-Patients City Orthopaedic Hospital, E.C.; Honorary Secretary British Electro-Therapeutic Society, etc. London: Rebman, Limited, 129 Shaftsbury Avenue, Cambridge Circus, W.C., 1903. Canadian Representative, Charles E. Wingate, 186 Adelaide St. W., Toronto.

We have before us the first work to appear, in the English language, on the Electric High Frequency Currents. These are the currents described by the French investigator T'Arsonval, and bear his name. The English have been rather slow in adopting this line of treatment, but, having begun, it will be thoroughly investigated. The advent of the present volume no doubt will aid in its being more freely taken advantage of. Workers in the X-Ray field can very readily equip themselves with the necessary additional apparatus, and greatly augment their field of usefulness. This volume is describing a new

electrical field, and it is proper that a very full and complete description should be given of the appliances. These descriptive chapters are short, clear and concise, yet not too brief. Then the Physical and Physiological characteristics of the current are described, and, finally, the therapeutical applications. In all new methods of treatment, and this is a new method in England and America, although in France and Germany many years old, the tendency is to look upon them as a panacea for every ill. Dr. Williams is altogether too careful an investigator to let one run off with this idea. He has written the book based on the experience of himself and others, and he warns us against falling into any such error as that of expecting too much, yet encourages the investigator, and only recommends where he has proven the value of the treatment.

We can recommend the little volume to all readers, not only those who are interested in electricity as a means of treatment, but those who should be in a position to advise their patients where to look for proper treatment, if they do not possess the necessary appliances themselves.

The typography, illustrations, paper and binding are in the usual fine style of the Rebman Company.

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**Aids to Surgery.** By JOSEPH CUNNING, M.B., B.S., F.R.C.S., Eng.; Senior Resident Medical Officer Royal Free Hospital. London: Baillière, Tindell & Cox, 1904. Price, \$1.25. Canadian Agents, J. A. Carveth & Co., Toronto.

This is a condensation of large text books in Surgery, but especially of those of Rose and Carless, Cheyne and Burghard, and Bland Sutton, and is intended chiefly as a help for students preparing for examinations. Whether such a book be considered good or bad it has certainly become popular with the student body. This little book is certainly one of the best of its kind.

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**How to Succeed in the Practice of Medicine.** By JOS. McDOWELL MATHEWS, M.D., LL.D. President of American Medical Association, 1898; Author of "Diseases of the Rectum;" late Professor of Surgery, Kentucky School of Medicine. Louisville: John P. Morton & Company, 1902.

The author, with an experience of thirty-five years in the practice of medicine, speaks especially to the young man just entering the profession and has much sound common sense to offer. With only a public school education himself, as is shown by some predicate-less sentences, a lack of proper paragraphing and a few mistakes in English, the doctor is keenly alive to the need of a high standard of matriculation. The principles which he seeks to teach have evidently been part of his life, and have brought him success in many ways other than financially.

Every practitioner requires some reading; apart from medicine, and it would be hard to find a book which will give more pleasure in spare half hours than this. Although Dr. Matthews

avers that he is getting into the "lean and slippered pantaloons," he has still lots of Kentucky fire in him, and can enjoy a good joke as well as ever.

F. A. C.

**A Text-Book of Operative Surgery.** Covering the Surgical Anatomy and Operative Technic Involved in the Operations of General Surgery. Written for Students and Practitioners. By WARREN STONE BICKHAM, Ph.D., M.D., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York; late Visiting Surgeon to Charity Hospital, New Orleans, etc. Handsome octavo of 984 pages, with 559 illustrations, entirely original. Philadelphia, New York, London: W. B. Saunders & Company, 1903. Cloth, \$6.00, net; sheep or half morocco, \$7.00, net.

This work completely covers the surgical anatomy and operative technic involved in the operations of general surgery. It is constructed on thoroughly new lines, the discussion of the subject being remarkably systematized and arranged in a manner entirely original. A feature of the work to which we would call especial attention is the wealth of magnificent illustrations. There are 559 of them, all entirely original. They depict the progressive steps, in the various operations detailed; with unusual clearness, and at the same time represent the highest artistic excellence. The text is fully abreast of the latest advances in surgery, all the recent improvements along the line of technic being adequately discussed. Another feature distinguishing it from other works on operative surgery, is the treatment of the anatomic side of the subject in connection with the operative technic. The illustration will be found of particular assistance in this connection, the muscles, bones, etc., being clearly indicated, together with the lines of incision.

*The American Journal of Nursing*, published by the J. B. Lippincott Co. for the Nurses' Associated Alumnae of the United States, now in its fourth volume, is a magazine of great interest and importance. The Editor-in-chief, Miss Sophia Palmer, late Superintendent of the City Hospital, Rochester, N.Y., is to be congratulated on her able staff of contributors and on the value of the contents of every number. The issue for January, 1904, contains, among other excellent papers, two prize essays on "The Shortcomings of Teachings and Methods of Present Training Schools," and articles on "The Nursing of a Typhoid, Small-pox and Vaccination, etc."

No. 27 of the Magazine of the London School of Medicine for Women, contains a paper by Prof. Phear on "The White Blood Corpuscles in Health and Disease." Other excellent papers are from graduates of the School who are abroad. "A Tent Holiday in Mongolia," "A Sunday with the Lapps" etc. One of the most interesting features of the magazine is an account of the presentations to Mrs. Garrett Anderson, M.D., by past and present students on the occasion of her retirement from the office of Dean.