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Original Communications.

SYRINGOMYELIA.*

F. ARNOLD CLARKSON, M.B.

Syringomyelia (*συριγγή*—a hollow pipe), or gliosis spinalis, is a peculiar condition of cavity formation in the spinal cord, first described as a pathological entity in 1824. It was not, however, till 1887, after the publishing of monographs by Schultze and Kahler, that we were able to diagnose the disease during life. Since then, although it is a comparatively rare condition, a good many cases have been observed, Schlesinger, in the year 1895, giving references to 526.

The following case is interesting because it presents some features of the disease in its early stages.

Albert L.—, age 23, born in England, the only child of healthy parents, who are both living. In childhood he had tuberculous adenitis on the left side of the neck, and one of the glands can still be felt slightly enlarged and hardened. About the same time, also, he had "trouble with his eyes," for which he was treated by Dr. Nettleship. This was probably a phlyctenule.

Six years ago he was unconscious for some minutes after a fall from a bicycle, his left ear being partly torn from the head.

Three years ago, while working in a deep excavation, a lump of clay fell about 18 feet and struck him between the shoulders. He was off work for three weeks after this accident, not confined at all to bed, and feeling, as he expressed it, "not quite up to the mark," but he noticed afterwards that his right hand,

* Read before the Academy of Medicine, Toronto, November 12th, 1907.

when cold, became numb. Brisk rubbing, however, restored both warmth and sensation.

He recalls now, that twelve months ago he remarked to his mother that the water in the wash-basin was cold only to his left hand.

Present Illness.—Since he first landed in Canada last April, the fingers of his right hand have gradually become stiff and the hand itself has withered. Four months ago, while working at his trade of a bricklayer, he cut his hand with a trowel, but felt no pain and did not know for some time that the skin had been broken and that the wound was bleeding. This injury took a long time to heal and the scar is still present. A few days ago he had a blister on his thumb from using an axe. This was ruptured in the course of his work, and yet he felt no pain. He has noticed that the goose-flesh comes more quickly on his right forearm than on other parts of his body. He perspires, too, more freely on the right hand. Because he is no longer a capable workman he has had to relinquish his employment, and he now presents himself for medical treatment for the atrophy of the hand muscles.

Physical Examination.—The patient has a splendid muscular development, having been for some years a trained gymnast. The optic discs are healthy. The ocular muscles and the pupillary reflexes are normal. Hearing, vision, taste, and smell seem to be unimpaired. The skin of the right hand is purple and cold to the touch, although the patient says it feels perfectly comfortable. The right forearm measures 25 cm.; the left 27 cm. There is no tremor of either hand. The thenar and hypothenar eminences have almost disappeared, and the metacarpal bones are prominent from the atrophy of the lumbrical and interosseous muscles, while the condition of *main en griffe* is quite evident. The patient says that he noticed the wasting first in the small muscles of the thumb. The movements of the fingers are much impaired. He cannot approximate the fingers and thumb, nor can he abduct the fingers. The grasp of the right hand is very weak, and its movements clumsy, so that he has difficulty in buttoning his clothes. The nails on his hand are slightly ridged. The muscles of the arms and forearms are firm and apparently healthy. There is no spinal curvature. The muscles of the right thigh are less firm than those of the left. His station is good and he has no ataxia.

The Reflexes.—Are absent in the right arm and only slightly present in the left. The patellar reflex on the right side is in-

creased, but there is no ankle clonus. Neither the Babinsky nor Mendel reflex can be obtained.

Sensation.—All portions of the body examined showed an acute sense of touch, and a perfect muscular sense. Heat and cold, however, are not felt at all, or very imperfectly over the right hand and forearm to the elbow, and over the anterior and posterior surfaces of left hand and arm half-way to the elbow. In all other parts of the body the thermal sense is very accurate. Over the right hand, back and front, to the wrist, there is a complete absence of pain. The boundaries of these zones of analgesia and thermo-anesthesia vary slightly at different examinations. There is no involvement of the sphincters and the course of the disease so far has been painless.

The Etiology is absolutely unknown. In many cases it is probably due to an anomalous embryonic condition, which, sooner or later, gives rise to cavities in the cord, uninfluenced by external circumstances. Blows upon the back have been noted many times, and this case adds another to the list. Buzzard has seen syringomyelia develop within a short time after an injury to the spine. Cases have been observed following infectious diseases and childbirth. Syphilis, alcohol and heredity, three etiological factors so very prominent in neurology, play no part whatever in this disease. The age of onset is most often between 11 and 30, and males are greatly in the majority.

Pathology.—This disease is characterized by the formation of cavities within the spinal cord, sometimes involving the central canal, but more frequently embracing the posterior commissure, and extending laterally in an irregular way to the posterior horns and posterior columns. The anterior cornua may be involved, but the lateral tracts almost always escape. The form and size of the individual cavities are as irregular as the mode of extension. Very often a portion of the interior of the cavity is lined with cylindrical epithelium, the remains of the central canal, and a zone of thick neuroglial tissue forms a wall, which is usually ruptured at the autopsy, allowing the turbid fluid contents to escape.

The lower cervical and upper dorsal regions are always first involved, extension taking place later either upwards or downwards. Microscopically, we find an increase of neuroglia around the cavity, the cells nearest the lumen often being vacuolated, and showing other signs of breaking down. Few capillaries are found in the wall itself, but in the surrounding tissue the vessels are abundant, more tortuous and of greater

calibre than normal. Small hemorrhages have occasionally been noted.

The theories to account for this remarkable condition are as numerous as they are unsatisfactory. It is supposed by some that syringomyelia always develops in a congenital defect of the cord; that the central canal is unduly distended with fluid at birth, and that around this the epiblastic elements proliferate, and afterwards extend into the normal tissue. This would account for the cylindrical epithelium lining the cavity. Other observers consider that during the closure of the central canal in the embryo, a second canal is formed, about which occurs neuroglial hyperplasia, and subsequent degeneration. There are not wanting, too, those who would attribute the gliosis to toxic or to bacterial causes, some color being given to the latter theory by a consideration of that peculiar form of syringomyelia called Morvan's disease, occurring with comparative frequency in some of the French fishing villages. In a number of instances, cavities have been found subsequent to disease of the spinal arteries. This would, perhaps, explain those cases following injuries of the back. But it is well to bear in mind, in considering these theories, the fact which Weigert has emphasized,—that the neuroglia is merely a substance which nature uses to fill up a space, and that its proliferation is only a sign that nerve tissue has been destroyed. His studies of neuroglia lead him to the conclusion that the wall of the cavity is not a true glioma, that, in other words, the gliosis is not the essential feature, but only a secondary result. Lastly, it must be mentioned that sarcomata and other tumors of the cord may degenerate and give rise to cavity formation. (Bertholet.)

From a consideration of the paralysis, and the areas of analgesia and thermic anesthesia in this patient, the lesion must be located in the 6th, 7th and 8th cervical and 1st dorsal segments.

Symptoms.—Although the clinical features are complex, there are three characteristic symptoms which are usually present together. These are (1) A loss of thermic and painful sensations in some part of the body, but the muscular and tactile senses are retained. This has been named by Charcot, "dissociated anesthesia." (2) Paralysis of the amyotrophic type. (3) Trophic disturbances of the muscles, bones and skin. Starr makes the statement that one of these symptoms alone should excite suspicion, but the presence of any two of them make the diagnosis probable. Besides this triad, we often find a spastic paraplegia, the initial stage of which is shown in our

patient by the increased knee jerk. The distribution of the symptoms will, of course, depend upon the location of the spinal lesion, and if the whole segment of the cord is involved, the general features of transverse myelitis will be present. The thermic anesthesia which was the first clinical sign of the disease in this case, showed itself about one year ago, but did not attract any attention. The sense of pain has probably been absent for some months, for he has injured his hand frequently without causing himself any inconvenience. The distribution of the dissociated anesthesia is always irregular, and only rarely symmetrical on the two sides. In the early stages there may be only a blunting of the thermic sense, and the analgesia may be patchy; but when the disease is well developed, the patient cannot distinguish between iced water and boiling water, and a surgical operation might be performed without pain. Progressive muscular atrophy, usually invading the hands, and giving rise to paralysis of the ulnar type, is present in more than one-half the cases of syringomyelia. The condition you see in the patient's right hand, has developed in about eight months. The muscles of the forearm are already involved, to some extent, and I fear the process is also beginning in the left hand. Although the Aran-Duchenne paralysis is the most common, occasionally the shoulder muscles may suffer first. Later, the muscles of the spine are invaded, producing a scoliosis—a frequent complication of the disease. But the legs, for the most part, escape damage. The degenerating muscles exhibit fibrillary contractions, but the electrical reaction is retained for a long time. Of the trophic disturbances, those affecting the skin are most common. In this case, we have a hyperemia of the skin of the arm and abnormal sweating. The abrasions, too, have been long in healing. The nails may be hypertrophied and brittle; the bones and the joints are often involved, chiefly those of the upper extremity. Charcot's joint is found in this disease almost as frequently as in tabes. The spinal reflexes are, as a rule, disturbed, diminished or entirely lost in the affected arm, while the knee jerk is increased. Only in rare cases are the sphincters involved.

Course.—The course of syringomyelia is essentially chronic. Sometimes the condition will proceed a certain distance and then remain stationary for years. Unless the medulla is involved, the patient usually dies of intercurrent disease.

Diagnosis.—At first the disease is often mistaken for *amyotrophic lateral sclerosis*, which, however, has neither sensory nor trophic symptoms. Anesthetic *leprosy* has also to be

taken into account, and may be distinguished by the thickening of the nerves, the finding of the bacillus, and the absence of sensory dissociation. *Progressive muscular atrophy* is usually symmetrical and is attended by no disturbance of sensation. There is an absence, too, of spasticity of the legs. But rare cases of *tumor* of the gray matter of the cord may give rise to symptoms identical with those of syringomyelia, and must be taken into account in this case.

Treatment.—No drugs can have the slightest influence, but some months ago two German physicians reported an apparent cure from the use of the X-rays, applied to the part of the spine immediately over the cavity. This treatment is now being carried out on this patient by Dr. R. A. Thomas, in the electro-therapeutic department of Grace Hospital, and I hope to be able to report success at some future meeting of the Academy.

THE ETHICS AND DEPARTMENT OF THE OPERATING ROOM.*

JOHN HUNTER, M.B.

How great would be the amazement of a barber-surgeon of the mediæval ages, when his operating-room was any place wherein the patient might happen to be—the living-room in the hovel of squalid misery, or in the richly-draped palatial chamber of the rich,—if he were to step into a modern operating-room, with its polished or mosaic floors, enamelled furniture, marble seats, brass railings, glazed walls and glass domes. With the barber-surgeon the buccaneering germs were free to gratify their insatiable appetites, whilst the modern surgeon forbids even their presence, and if, peradventure, they are found about the wound they are speedily exterminated by antiseptics.

The modern operating-room is an evolution of scientific surgery. To Lord Lister, Pasteur and a legion of other notable scientists, we of the twentieth century are greatly indebted. The heritage to which we, as members of the medical profession, become the legitimate heirs, brings with it great privileges, but also equally great responsibilities. This fact naturally leads up to the ethics of the operating-room.

ETHICS.

Since ethics can be defined as “a system of rules for regulating the actions and manners of men in society,” and as we are members of a great fraternal circle, the ethics of the operating-room rest on the common basic principles so tersely summed up in the so-called “Golden Rule.” But as every nation has its own language to give expression to its needs, emotions, and aspirations, so every calling has to evolve its own code of ethics from common fundamental principles, *e.g.*, the theft of money in social life finds its counterpart in the unprofessional taking of a patient from another physician. The work of the operating-room is of an exceedingly complicated character, as it involves the relationship of the surgeon to his patient, to his confreres, and to his profession. In no other vocation in life is a man’s honor put to a more severe test than in the operating-room. The subtle temptation comes to unduly urge on an operation that the surgeon’s reputation may be enhanced, a large fee obtained, or some one else prevented from getting

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the case. The ethics of the operating-room imperatively demand that the interests of the patient must alone decide the question of operation. Flagrant violations of ethical laws may, and sometimes do, occur after the operation. Dr. A. is asked by Dr. B. to operate on his patient. Some months after Dr. B. finds that his patient, instead of coming back to him, goes to Dr. A. with his minor ailments. Dr. A. ignores Dr. B.'s claims altogether and treats the patient, and by so doing begins a life-long feud between Dr. B. and himself. Dr. A.'s conduct only becomes ethical when he has arranged with Dr. B. as to who the attendant should be.

The question of fees is often a much-mooted point. When the patient's means are limited and when there has been need for lengthened attendance before the operation, if the surgeon charges a high fee, the attending physician is deprived of a large share of his just reward. In all such cases ethics demand that in regard to remuneration the interests of both physician and surgeon be duly respected. Fees again come up as a factor in the relationship of the surgeon to the anesthetist. Is an inexperienced man ever chosen to save to the surgeon the fees that would otherwise go to an expert anesthetist? Ethical laws would hold that the safety of the patient is never to be jeopardized by the mercenary interests of the surgeon.

The importance of surgical work, as compared with the medical care and treatment of a case, involves an ethical question. The surgeon may not say so in words, but he may be quite willing to have the patient imagine that his work is of considerably more importance than that of the physician. In fact, it is not at all uncommon for the physician to find that his status is never quite the same with the patient or family as it was before the operation. In these cases the surgeon's ethical sin is one of omission in that he has failed to correct an erroneous impression that militates against his medical confrere.

The list of ethical problems that project themselves into the operating-room might be very much extended, but time will only permit of the discussion of one more, and it probably the most debatable one that confronts the surgeon in his work,—viz., who should do the operation? In isolated districts the one man must be both physician and surgeon, but the erection of hospitals in towns and cities has caused some division of labor, one section of the profession becoming better known as surgeons and the other as physicians. This division enables men to obtain a larger experience, and other things being equal,

great skill. The crucial question comes up as to whether the family physician should operate on his own cases or pass them over to the man who is doing a much larger amount of surgery. There is probably little or no conflict of opinion in regard to cases in minor surgery, or in extra hazardous ones. In regard to the cases between these extremes, *e.g.*, the removal of the appendix, is the family physician ever justified in exposing his patient to greater risk in doing the operation himself than would be involved in having the services of a more expert operator? On ethical grounds, the safety of the patient outweighs every other consideration, and, therefore, neither reputation or pecuniary interest should be allowed to govern his decision. This, no doubt, is often looked upon as altogether too great a sacrifice for the family physician to make, knowing full well that in so doing he is not only impairing his own reputation, but also enhancing the reputation of another at his own expense. However, ethics make a strong appeal to the physician. They ask him to place the interests and safety of his patient above all personal considerations. Again, the honor of the profession has its claims. Any one who has visited numerous hospitals must have seen many operations that reflected no credit on modern surgery. It is scarcely possible for the general practitioner who has to depend almost entirely on his own practice for whatever cases in surgery he may have, to acquire the skill, dexterity and resourcefulness of the surgeon, to whom a great many cases are sent by his confreres. Can any one dispute the statement that the interests and safety of the patient and the honor of surgery will not be much better conserved by the latter than by the former? If this be true, the ethics of the operating-room demand a large measure of self-sacrifice on the part of the general practitioner. It holds as true in the surgical as it does in the spiritual world, *viz.*, "that he who would save his life must lose it." Personal and pecuniary losses may be fully compensated in the moral gains that come from self-sacrifice.

DEPARTMENT.

It can be truly said that we learn by doing things. If the thoughts and emotions that sway the patient as he lies on the operating table awaiting the anesthetist, can only be known through an experience that few of us have had and fewer still will ever crave to have; we must rely upon our imagination to "picture the scene." Of one thing all can feel assured that the

few moments preceding the operation are the most strenuous in regard to the number and variety of the thoughts and emotions that crowd into it, of any period in the patient's life. If it be a first experience and if the operation be a critical one, to the purely mental perturbations, there may loom up before the soul not only the spectre of a past life, but a dim outline of the shore of "that undiscovered country from whose bourne no traveller returns."

However great the triumphs of surgery have been,—and they are only equalled in magnitude by the inestimable boon it has been to suffering humanity,—yet the fact remains that the patient's life is in jeopardy from the anesthetic, shock or unexpected complications. Although probably no other place can lay claim to so many triumphs as the operating-room, yet the awful suddenness of some of its tragedies is simply appalling. Whilst the story of its triumphs is a splendid inspiration to the patient as well as to the surgeon and all associated with him, yet the possibility of a tragedy hangs over the table like "the sword suspended by a brittle thread." This ubiquitous spectre in the operating-room makes it veritably "holy ground," and as such, what constitutes proper deportment in it? Perhaps this question can be answered best by stating what ought not to be "much in evidence" there. The decorum of the funeral service has no place in the operating-room, although the possibility of the need subsequently of such a service cannot always be eliminated. Hope should create such a buoyant spirit that it would manifest itself in all present. It is absolutely no place for either the amusing or boorish joke, social gossip, medical or political disputations. Nothing should be said or done that would disturb the patient, since it is a well-established fact that all the senses become hypersensitive during the early stage of anesthesia. For this reason everything should be in readiness for the operation before the patient is brought in. If the surgeon has forgotten any of his instruments, or if special ones are not available, the fact should not be discussed, for although it may be a trivial matter in itself, yet it may cause mistrust and anxiety to the patient. The anesthetist must remember that his part generally involves the most danger to the patient, and, therefore, should command his sole attention. I have no hesitancy in saying that when an inquest is held in case of sudden death during anesthesia, the anesthetist should be subjected to a rigid examination by an expert, and if any negligence be proven, punishment should follow it, as for any other criminal act. It is a mooted question as to what ex-

tent conversation is permissible in the operating-room. It can be laid down as a safe rule that the less said during an operation the better. The conversation itself may be distracting to those engaged in the operation and the forced expiratory efforts required in speaking may carry infected air to the wound. When the surgeon or assistant has to speak the face should, if possible, be turned away from the field of operation. All pompous airs are alien to, and very unbecoming in the operating-room, as the human body is the most complex and wonderful of all the Creator's work in the physical world, and as many factors pertaining to disease yet remain the most profound of all mysteries.

The deportment of assistants and nurses should be characterized by strict and courteous attention, and by alertness and dexterity in the discharge of all the duties assigned them.

The deportment of spectators, when present, should be in line with that observed in church service. Joking or disputing, or what is not infrequently seen, brushing dusty spots off their coats,—all these are boorish and entirely out of place in the operating-room.

In conclusion, can it not be truthfully stated that in no other place can scientific attainments, ethical refinement and moral goodness be better exemplified than in the discharge of the duties pertaining to the operating-room?

PHANTOM URETERAL CALCULI.

F. J. McNULTY, M.D., PETERBORO.

The introduction of the X-rays as a diagnostic aid in cases of renal calculi, led surgeons to believe that by its use a positive opinion could be given in cases where a shadow was definitely outlined. Accumulated experience, however, has shown the fallacy of this conception. For some years it has been known that one may fail to obtain a shadow even in the presence of stone, but it is only in more recent times that reports of cases have appeared in which the shadow has led the surgeon astray—cases in which the Roentgenogram plainly and clearly outlined a shadow, indicating the presence of stone, but in which operation revealed no trace or evidence of such. A case of this nature came under my observations about one year ago, the history of which is as follows:

P. D., aged 25, a farmer, for about two years suffered from paroxysmal attacks of pain extending from the costal margin down into the pelvis on the left side. The attacks were always brought on by exertion, and varied in severity, in some cases being merely a dull, aching pain, relieved by recumbency and rest; in others, a severe, agonizing attack, the pain shooting down along the course of the ureter and into the genital organs, inducing collapse with profuse perspiration and vomiting. In his first two attacks medical aid was summoned ten miles in the country and morphia given hypodermically; in subsequent attacks, which recurred every three or four weeks, morphia pills were taken by mouth. Tenderness over the kidney and in the region of the loin was always present after these attacks, but no blood was ever discovered in the urine. Thus two of the three cardinal symptoms of stone were present—the severe attacks of pain and local tenderness; the third—blood in the urine—being absent. No mobility of the kidney could be made out, and, the left side being affected, this was not strongly suspected. The patient was a robust, strong young man, with a good family history, and, excepting for the present trouble, had always enjoyed the best of health. No enlargement of the organ could be made out, no chills or elevation of temperature, daily and normal evacuation of the bowels, and in the intervals between the attacks he looked and felt well. A not very marked vesical irritation was complained of for a day or so after the attacks, necessitating urination every two or three hours, three or four ounces being voided each time. The urine was normal in appearance and quantity; no sediment, specific gravity 1022; ex-

cretions normal; microscopically a few epithelial cells and uric acid crystals were seen, but no pus or blood cells. A provisional diagnosis of stone was made, and for confirmation an X-ray examination was suggested. For this purpose the patient went to Toronto, where an eminent physician was first consulted, who partly confirmed the diagnosis, but thought a skiagram should be taken before a positive opinion could be given. He was consequently referred to the skiagrapher who the same day took a skiagram. This clearly showed a shadow just above the brim of the pelvis and in the line of the ureter, which was interpreted as a stone impacted in that canal. The shadow was distinct and clear in outline, and in a note from the skiagrapher, who also kindly sent me a skiagram, a positive opinion was given as to the presence of stone. Two weeks later the patient came in for operation. During these two weeks he abstained from work, lived very quietly, and had no attacks of pain. The incision employed eventually corresponded to the lumbo-ileo-inguinal incision employed for removal of a tuberculous kidney and ureter, and extended from the last rib, adjacent to the edge of the erector spinae, downwards and forwards in front of the anterior superior spine of the ileum, and then parallel and about two inches above Poupart's ligament, down to almost its centre. The structures were divided or separated down to the peritoneum, which was then carried upwards and towards the middle line, as in the operation for tying the external or common iliac arteries. The lower limb of this incision was first made, as it was expected to find the stone in that part of the ureter where it crosses the brim of the pelvis, as there is naturally a slight narrowing at that site. The ureter was readily found and palpated, first downwards to well below the pelvic brim, and then upwards to the renal pelvis, but no stone was felt, nor was there any evidence in the ureter itself of any thickening or dilatation, as if obstruction had at any time occurred. The incision was then extended upwards and the kidney delivered onto the loin and the pelvis and renal substance palpated, and the latter then incised from pole to pole and its interior thoroughly examined, but no stone was discovered. A ureteral bougie was then passed through the incision in the kidney into the ureteral orifice, but could not be passed downward to any great length, as the delivered organ formed an angle with the ureter, so a small incision was then made in the ureter itself lower down, and from this point the bougie was readily passed on into the bladder. In doing this the two precautions noted by Fenwick were borne in mind, namely, that the ureteral catheter passed from above

downwards can easily slide over the mucous-covered stone, for, as he points out, all arrested ureteric stones are embedded in thick jelly, and the surgeon may be unaware that he has touched one; and, secondly, that the bougie may never reach the bladder at all, but press the ureter down in front of it at the spot where the tube bends upwards to enter the bladder. In this case no obstruction was encountered. A stitch was then inserted in the small opening of the ureter, three mattress catgut sutures passed through the substance of the kidney, the capsule united with a continuous catgut intine and the long incision in the muscles and skin closed in the usual position, no drainage being employed. The patient was catheterized eight hours after the operation and bloody urine withdrawn; the urine continued bloody for four or five days, none escaping by the lumbar wound. One week later the bladder was sounded for stone, with a negative result. It is now over eleven months since the operation, and the patient, though engaged in heavy farm labor during the last six months, has had no further symptoms of pain or distress. This was clearly a case of what has come to be known as phantom calculus, and the three questions that arise out of a consideration of the case are:

- (1) To what were the symptoms due?
- (2) To what was the shadow due?
- (3) Could a further clinical investigation of the case, previous to operation, have eliminated the presence of stone?

The fact that the patient has had no return of symptoms since the operation would lead one to infer that the condition had been one of slight mobility of the kidney, bringing on attacks comparable to Dietl's crisis, as seen in cases of pronounced floating kidney, the relief of the symptoms being due to the organ becoming fixed by adhesive inflammation. This, I think, is the most reasonable explanation. No mobility of the organ could be made out previous to the operation, but the patient was so muscular and well-developed that mobility of the first, or even second, degree might have existed and yet been impossible of detection by palpation. At the time of the operation the bed of the kidney was opened into from below. The relationship of the parts did not suggest an abnormal condition, but the organ was quickly delivered onto the loin without very close observation being made as to its mobility, and subsequently, when no stone could be discovered and we began to look about for some other condition to account for the symptoms, it was impossible for us to decide with certainty whether increased mobility had previously existed or not. It is said that in the normal condition the kidneys move an inch and a half with each respiration, but why this should be so,

seeing that these organs are retroperitoneal, it is somewhat difficult to understand. There was no appearance of tuberculosis of the organs or the ureter, and no congenital anatomical anomalies existed; the bougie readily passed through the ureter, thus eliminating stricture. Monserrat, of Liverpool, reports a case of constriction of the ureter with symptoms and history very similar to this case, the symptoms being referable to the right side, appendicitis diagnosed and the appendix removed, but without affording relief—the condition was eventually discovered by catheterizing the ureters. Small stones travelling along the ureter and on into the bladder might give rise to identical symptoms, but then there would be a history of these passing through the urethra, or, if retained, giving rise to continued vesical irritation—in addition, careful sounding of the bladder did not reveal the presence of any foreign body. It might be possible for loose accumulations of uric acid crystals in the pelvis of the kidney or in the ureter to give rise to temporary obstruction, and for these to be eventually washed away by the vis-à-tergo, and passed, unnoticed, in the urine. Gastropsoxis, with intestinal derangements, may produce attacks simulating renal colic, the pain being more of a dragging character—a case is reported where proper diet and hygienic conditions relieved a patient of attacks that had persisted from childhood. However, whatever the exact determining cause of the colic-like attacks, the patient has received absolute relief and is able to follow his usual occupation without restraint.

The most likely condition to give origin to the shadow in the skiagram would be a fecal concretion, lying in that part of the descending colon placed in front of the ureter. The patient was submitted to the examination without any previous examination of the bowels, and it is just possible that a hardened fecal mass lay in the colon and in the direct path of the rays. It is said that scybalous masses are much more obvious in an X-ray photograph than a calculus, and to avoid a misinterpretation a conal skiagram should be taken in two or three days, the bowels always being well emptied; but in this case the patient returned to his home the same day and no further opportunity was given to do this. To make this report more complete I have urged my patient to have a second skiagraphic examination, but so far have been unable to induce him to do so.

The whole question of phantom ureteral calculi came up for discussion before the Philadelphia Academy of Surgery, and is reported in the *Annals of Surgery* for February, 1907. Numerous X-ray plates were presented, showing shadows which were

thought to be those of ureteral calculi, but on operation no calculi were found. Da Costa operated upon such a case and found a calcareous lymphatic gland. Shoemaker found a loose calcareous mass the size of a pigeon egg free in the peritoneum. T. G. Beckett, skiagraphist to Alfred Hospital, Melbourne, reports and illustrates a case in the *British Medical Journal*, Oct. 19th, '07, in which operation showed the shadow to be due to calcified tuberculous deposits. The condition most frequently misinterpreted is a tubercular state of the glands lying along the course of the ureter and calcified mesenteric glands, but numerous other conditions have been met with. Phleboliths in the pelvic veins have given origin to shadows, as have also small dense masses of dermoid material, forming either the white or fat of dermoid tumors. Atheromatous plates in blood-vessels is another condition that has given rise to mistakes, as have also small hard calcareous masses in the end of the Fallopian tubes. On the right side a hard concretion in the tip of the appendix, pointing over the brim of the pelvis, has also given rise to a misinterpreted shadow. With these numerous conditions to be thought of, it is only to be expected that with ordinary methods inaccurate conclusions will be sometimes drawn. The question of importance to decide is whether the shadow is due to intra or extra-ureteral conditions, and for this purpose a means has been evolved by Fenwick which can leave no possible doubt in the mind of the operator. An explanation of Fenwick's method leads up to a consideration of the third question.

To eliminate the presence of stone when a definite shadow is shown lying in the track of the ureter requires the use of almost every clinical expedient known to the specialist in renal surgery. The generally accepted opinion has, until recently, been that if such a shadow is shown a diagnosis of stone is indicated, although the clinical symptoms may be equivocal; but experience teaches that all methods of examination are uncertain when taken singly, and that diagnosis should never be founded on one symptom or method alone, new or old, but that all should be employed, and only when the results of several coincide is it safe to form a positive opinion. While every symptom of stone is variable within wide limits, the absence of hematuria, even after the most acute attacks of pain, is strong presumptive evidence against the presence of a calculus; but, on the other hand, blood may be present in the urine in cases of movable kidney after attacks of Dietl's crisis, and so, for confirmation of our diagnosis, the more specialized methods of examination must be resorted to, which, of course, includes the use of the X-rays. No cystoscopic exami-

nation was made in this instance, as in cases of stone the orificial appearance of the ureter is not at all characteristic, unless pyelitis is present, or unless the stone is near the vesical opening; even obstruction to the urinary efflux is not essential unless the calculus is round and smooth and completely blocks the canal; urine may readily flow past an irregularly shaped calculus, such as are formed by the oxalates. Catheterizing the ureter gives more definite information as to the potency of the canals, but the method adopted and followed by E. Hurry Fenwick gives the most precise results. When in doubt, he passes along the ureter a bougie which casts a shadow with the X-ray; the patient is then radiographed, and as the bougie just fills the canal of the ureter he can tell at once, by tracing the ureteric shadow of the bougie, as to whether a stone is in the ureter or not. The plates illustrating this method are very beautiful, the bougie stands out very plainly, and mesenteric glands are distinctly outlined, lying just outside the track of the ureter. Fenwick claims there is but little difficulty in passing the bougie, using a ureter cystoscope in the male and a Kelly's tube in the female, but such methods lie more in the realm of highly specialized surgery, and not all of us can hope to command the manipulative skill to use them. However, this case illustrates that it is only by the adoption of these more advanced methods that the nature of obscure cases can be accurately foretold, and until such come into more general use operation will of necessity frequently precede precise diagnosis.

Society Report.

TORONTO GENERAL HOSPITAL EX-HOUSE STAFF CLINICAL CONFERENCE.

* The ex-House Surgeons of the Toronto General Hospital held their first Clinical Conference at the Hospital, on the evening of October 24th, Dr. W. P. Caven, President, in the chair.

TUBERCULOSIS WITH MITRAL STENOSIS.

Dr. Caven presented a patient, remarking:—"My special reason for presenting this patient is that he demonstrates the fact that you may have pulmonary tuberculosis in conjunction with mitral stenosis. Mitral stenosis is a condition which some would lead us to believe is incompatible with pulmonary tuberculosis. We are all familiar, I think, with the danger of mistaking cases of mitral stenosis for pulmonary tuberculosis—the symptoms suggesting pulmonary lesions—cough, expectoration of blood, and shortness of breath."

Dr. Kinnear, of the House Staff, then read a partial history of the case as follows:

Name, E. G.—Complaint. Patient complained of spitting blood, soreness in chest at level of manubrium sterni and on left side about mid-axillary line. He coughed a great deal at night and suffered from shortness of breath on least exertion. These symptoms had been gradually increasing since about one year ago.

Family History.—Father, mother, two brothers and three sisters living and well; one brother dead, killed in Japanese war.

Personal History.—Born in Russia, attended school until 16 years of age. Had acute rheumatism when 6 years of age. Came to Canada three years ago. Settled in Toronto and began working as a mattress maker. Worked at this till about two weeks ago. Factory well lighted and roomy, but not well ventilated. Patient does not use alcohol nor tobacco, drinks a little tea and a little coffee. No history of venereal disease. Patient's appetite always good; and he has had plenty of nourishment. Sleeping apartments not well heated nor cleaned.

Present Illness.—About a year and a half ago patient began to feel a pain in the region of the heart; when walking or going upstairs he would feel a shortness of breath and a thump-

ing sensation. About a year ago patient began to cough, which first began as a cold due to exposure to a draught. His coughing continued after the cold cleared up and gradually grew worse. Patient also expectorated a great deal of clear phlegm. Appetite gradually decreased. He lost in weight gradually; weight a year ago 145, weight now 125. He gives a history of sweating profusely at night, but no chills. He has gradually lost strength. About four weeks ago began spitting blood but had no initial hemorrhage. This continued until admitted to the Hospital. About three weeks ago he was sent to a doctor, examined, and advised to enter a hospital.

General Inspection.—Patient is lying in bed, head and shoulders supported with a number of pillows, breathing slightly labored but seemingly not suffering a great deal. Eye clear, fairly bright, lips and eye show anemic condition. Patient somewhat cyanosed, marked particularly over hands. Muscles fairly well developed. Confined to bed by order of his physician. Temp. 96.2, pulse 88, respiration 22.

Circulatory System. *Inspect.*—Apex beat seen in fifth interspace just internal to nipple line. No bulging over precordia. Pulsations seen at apex in epigastrium and markedly in neck in front of sterno mastoid.

Palpation.—Apex beat felt in fifth interspace just internal to nipple line. Pulsation felt in epigastrium and at root of neck, marked impetus given to hand over the whole of precordial region.

Percussion.—Area of deep dullness. Base—second interspace. Left border—mammary line at fourth rib.

Superficial Dullness.—At level of fourth rib about one inch internal to nipple line and at left border of sternum. A presystolic murmur is heard at apex of the heart.

Auscultation.—A distinct presystolic murmur is heard in the mitral area. A systolic murmur is heard over aortic area and propagated into root of neck. This presystolic murmur, best heard in the mitral area, may be heard over any part of the chest, either on the right or the left side. There is also present a systolic mitral murmur. The second sound follows immediately after murmur. Pulse 88, rhythm regular. Force lessened, volume rather empty. Tension poor; no sclerosis. Cyanosis present, well marked in hands and feet. Hands and feet cold; no dropsy. Fingers clubbed; circulation of capillaries poor.

Respiratory System.—Breathing 22 per minute; used mouth almost entirely. Cough short and hacking, produces soreness

in chest and throat. Expectoration, about one-quarter of a pint each day; yellowish, rather tenacious, and copiously streaked with blood. Amount of blood varies.

Microscopic Examination of Sputum.—Bacillus tuberculosis. Streptococci and staphylococci present.

Physical Examination.—Anteriorly, chest fairly well developed, a marked Harrison's sulcus present. This is more marked on the left side. Intercostal spaces small, no bulgings. Clavicles quite prominent; marked depression above and below clavicles. Respirations even, somewhat labored, expansion fair, breathing abdomino-thoracic. Posterior wall of chest shows a marked curvature, increasing the antero-posterior diameter of chest. There is also lateral curvature to the left.

Palpation.—Vocal fremitus seems to be fairly even over anterior chest wall, but more marked on the right upper posterior part of the chest. Expansion fairly good.

Percussion.—A boxy sound all over the right and left upper part of the chest just below clavicles. No area of dullness detected.

Auscultation.—Breath sounds are loud; local expiration prolonged over right upper posterior part of chest; cog-wheel breathing on area just below the right clavicle. Coarse râles are heard in left axillary area. Fine râles are heard in the left upper posterior part of the chest around upper and inner part of scapula.

Digestive System.—Appetite good; bowels regular; no diarrhea. Teeth not very good; tongue clean and digestive system normal in every respect.

Nervous System.—No history of nervous diseases; reflexes normal; no tremor. Special senses normal.

Genito-Urinary.—Negative. Examination of urine: S.G. 1024; reaction alkaline, no albumen, no sugar.

Dr. Caven pointed out that the case illustrates the fact that the minor manifestations of rheumatism are often associated with endocarditis, and that the mitral orifice contraction is most often associated with such a condition. Asked as to the cause of crepitations along the border of the third rib, Dr. Caven said that it had been attributed to the effect of pressure upon the lung at that part by the distended auricle.

Reverting to the prognosis in mitral stenosis, Dr. H. B. Anderson reported a case of a woman who had died, aged 67, who had suffered from the time she was 40.

The Chairman called attention to the danger of pregnancy in women with mitral stenosis; that the women suffering thus

are often warned against marrying; that in pregnant women abortion is considered by some authorities as justifiable. He, however, had seen a somewhat remarkable case in which a woman with mitral stenosis had been twice safely confined during a period of 15 years. The patient finally died. She succumbed to an embolism, gangrene of one leg and one arm supervening.

MITRAL DISEASE—STERILITY.

Dr. J. F. W. Ross cited cases of mitral disease in women accompanied with sterility. In certain cases of mitral disease complicating abdominal conditions he refused to operate. He had attended several cases of parturition complicated with mitral disease. In one case the labor was a most serious one, the patient, as is usually the case, sitting up during delivery. He considered it a very serious complication of pregnancy.

BRAIN TUMOR.

The Chairman then presented a second patient, Dr. Kinnear giving the history of the case.

T. B. Complaint.—Defective sight, pain on using eyes, aching at upper border of orbit; headache across forehead, vomiting and inability to sleep. Duration: 3 months.

Family History.—Father dead, age 56. Rupture Mother, age 56, living and well; 3 brothers, living and well; 1 sister, living and well. No history of nervous trouble.

Personal History.—Born in Surrey, England. He came to Canada two years and nine months ago; he has done out-door work most of his life. Has always been very healthy previous to this attack, though he mentions headache and occasional vomiting as occurring for sometime previous.

Habits.—Drinks whisky, beer and tea in moderation. Also smokes and chews tobacco; denies venereal disease.

Past Illness.—Scarlet fever about 25 years ago. No histories of injuries to skull or eyes.

Present Illness.—Three months ago, in the afternoon, while working at his trade patient had a sudden feeling of dizziness and fell to the ground. (No previous history of anything of the kind.) Patient says it was a sunstroke; up to this time patient was perfectly well, having had no trouble with his eyes. On falling he did not lose consciousness; was taken home in street car and went to bed. In the space of about thirty minutes following stroke patient vomited two or three

times. A bad frontal headache followed and eyes ached. He went to work the next day as he did not think that "pains" incapacitated him from work. Sight was normal; worked for seven or eight days, his eyesight getting worse all the time; then had to stop because he could not see well enough to use his tools. On his way home he got a prescription from a chemist for external application. The chemist told him to use that and report for a time. He used this treatment for three weeks; eyesight getting worse all the time, with frontal headache most often in the early morning, and vomiting before breakfast three or four times a week, unaccompanied by nausea. From the first attack patient found difficulty in getting to sleep at night, which difficulty increased as time went on because of (1) pain in the eyes; (2) unsleepy feeling, and (3) slightest noise would wake him. Patient now went to see Dr. H., who sent him to the Eye and Ear Department of the Toronto General Hospital, where he has been treated for about one month for optic neuritis. His eyes have been getting worse; frontal headache, and vomiting before breakfast two or three times a week have continued up-to-date. Vomiting seems to definitely occur in the early morning.

Present Condition.—Weight, 160 lbs. Well developed, 5.5 in. in height; not confined to bed; temperature and pulse normal; face flushed; eyelids are slightly enflamed and half cover eye-ball. The eyes are very sensitive to light. He closes one eye to rest it while he uses the other one. The left eye is more painful than the right. Over the left eye the eyebrow is depressed as if every effort was being made to keep the eye closed; corneal reflex is normal. On exercising the muscles of the eye-balls it can be seen that some of them are not functioning normally.

Right Eye.—Intense swelling of right papilla, whitish patches of exudation. Veins are large, swollen, and tortuous; small flame-shaped hemorrhage around the disc above and along the nasal and temporal veins; white patch running up from centre of disc along ascending temporal vein about two disc diameters in length; one or two small flame-shaped hemorrhages along descending temporal not so large and not nearly so numerous.

Left Eye.—Very much the same, less exudation. Hemorrhages, etc., are below; in lower portion of disc is semi-circle of hemorrhages, clearer out in periphery.

Lids.—Slight weakness of levator palpebrum of left eye. Orbicularis all right; movement of each rectus on both sides is

defective; conjugate movement is greater toward the left than the right, the right eye not moving beyond central line. The right eye does not move outward and downward, nor upward and outward, while the left eye does. Left eye ceases to converge less than eight inches. Centre scotoma for red in left; right normal.

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No pigmentations, no eruptions, frontal headache, appetite good, bowels regular. Great difficulty at night—does not sleep more than one and a half hours, and the slightest noise arouses him; does not feel sleepy at night; does in day time. Pulse 72. Temperature 99.

Nervous System.—Frontal headache; great difficulty in sleeping at night; drowsy during the day. Corneal reflex normal. Facial muscles normal, tongue, in protrusion, diverges slightly towards right. Handclasp weak. No tremors. Knee jerk diminished; no atrophy of muscle; no locomotor symptoms.

Alimentary Symptoms.—Vomiting generally comes on suddenly while eating breakfast; feels no nausea—does not retch; no pain in the stomach at any time; vomitus has no perceptible odor; is occasionally streaked with blood. Occasionally is troubled with diarrhea; tongue heavily coated in centre with brownish fur; appetite good; bowels regular.

Respiratory System.—Negative.

Circulatory System.—Negative.

Treatment.—Pot. iodide in 10 gr. doses T. I. D. increased to 15 gr. on Oct. 20—to 20 gr. on Oct. 25th and 25 grs. on Oct. 29th to 30 grs.

Upon its being pointed out that the lesion seemed to implicate both sixth nerves, Dr. H. B. Anderson and Dr. Shuttleworth drew attention to the seeming impossibility of this occurring without affecting other nerves.

Dr. H. B. Anderson referred to a case of brain tumor in which similarly the symptoms had come on suddenly. There was intense headache, vomiting and dizziness. The external recti muscles were early affected. There was also evidence of involvement of the 3rd, 5th (motor and sensory) and hypoglossal. There was double optic neuritis followed by atrophy. The growth was evidently below the internal capsule, making pressure over the area from the 3rd back to the hypoglossal. Post-mortem revealed a syphilitic gumma.

The Chairman called attention to the relief of symptoms, particularly the optic neuritis which had been observed by Horsley after trephining.

Later History.—On November 8th, the patient was operated upon, a portion of occipital bone was removed with a trephine, and the dura mater was felt to be very tense, more especially on the right side. The skin flap was then loosely sutured with silk-worm gut, thus completing the first stage of the operation. Patient said he had not as much pain in the eyes as before the operation. On November 13th, the second stage of the operation was performed. The dura mater was incised. Brain tissue seemed abnormally soft. No tumor was located. After this stage of the operation he complained of pain in the occipital region and could not be restrained from pulling off the dressings on his head, thus getting the wound infected, and on November 20th died of septic meningitis, the temperature for the past two days being over 105 deg., and pulse over 130.

At autopsy over the right posterior part of the brain was seen a purulent discharge. On making sections of the brain there was found a diffuse glioma about the size of a hen's egg, involving both frontal lobes, but was much larger in the right frontal lobe than the left. The cerebral convolutions were flattened from pressure.

GOUT.

Dr. Geo. Strathy, of the House Staff, presented a patient suffering from gout, giving the following notes:

Complaint.—1. Swelling, agonizing pain and tenderness on pressure in the joints. 2. Small joints of hands and feet stiff, irregularly enlarged and deformed. 3. Deposits of chalky lumps in and about the joints and along the tendons. 4. Bleeding piles. 5. Slight cough.

Duration.—Began 25 years ago; much worse during past five years.

Family History.—F. D., aged 68, gout; M. D., aged 65, dropsy; 2 B. L. and W. (although 1 B., aged 65, has lumbago); 2 S. L. and W. Father's father died of gout. No gout on mother's side.

Personal History.—Patient aged 55. Born in England, came to Canada 25 years ago and lived near Muskoka until one year ago, when he became a resident of Toronto. All his life he has been a clerk at indoor work, leading a sedentary life

and getting very little active bodily exercise. For the past four years he has been unable to do any work. He has never been exposed to lead poisoning. He claims to have been always a very moderate eater as to amount, but has been accustomed to having meat three times a day. He uses three cups of tea per meal, smokes one ten-cent package tobacco per week, has not chewed tobacco for the last year, but all his life has indulged "not wisely, but too well," in fermented liquors, using as much as twelve dozen glasses of port wine or one dozen glasses of beer daily. He is not married.

Previous Illness.—Had no children's diseases. Age, 13. Typhoid fever lasting three months. Recovery complete. Age, 21, gonorrhoea, lasting six weeks. Glands swollen, but no rash. No sore throat and falling out of hair. Recovery complete. Age, 30, rheumatism (?) Started suddenly one afternoon in right knee and remained in that joint for two weeks.

History of Present Illness.—Without any cause which the patient can assign, this trouble began 25 years ago, suddenly one afternoon, with severe pain in the right knee. The knee quickly swelled up to double its normal size, was very hot, tense and tender. During this attack, which lasted two weeks, the patient was restless, irritable and troubled greatly with dyspepsia. Two years later he had a similar attack, lasting one week, and the same knee alone was involved. One year later he had another recurrence, this time the metatarsophalangeal joint of the right big toe being involved. Next, his right ankle was affected. Then a similar process of involvement followed on the left side and accompanied by an attack of sciatica and lumbago.

The above conditions have been gradually growing worse, the attacks becoming more frequent and of longer duration.

Eight years ago his hand became involved, and the patient noticed little lumps like chalk appearing first in the first interphalangeal joint of the right hand, and then gradually coming in various places in and about the small joints of the hands and feet. These lumps break down and ulcerate, leaving a yellowish surface behind. Four years ago the hand became deformed. Two years ago these chalky lumps appeared in the helix of the ear. The larger joints have escaped so far.

The patient says he has been greatly benefited during the previous attacks by a prescription containing wine of colchicum, tincture of gentian and potassium iodide.

When the swelling subsides, after an acute attack, the skin desquamated. During an acute attack the patient suffers more

at night. Attacks now occur 3, 4, 5 times a year, and last from two days to two weeks, usually four days.

Present Condition.—Patient is very bright mentally, though suffering greatly. He is lying motionless in bed with his legs drawn up and all the joints flexed. He is unable to use his hands and feet on account of their stiffness and pain.

Height, 5 ft. 10 $\frac{3}{4}$ in., weight averages 175 lbs. (Patient says he loses about 15 lbs. with each acute attack.)

Development and nutrition, fair. Expression, anxious. Complexion, florid. Over the nose and malar bones the vessels are prominent. (Teliangectasis). Skin moist and somewhat cyanosed: Over the temporal region and sides of face is millet-seed sized papulo-vesicular eruption. There are tophi in the helix of the ear, alae nasi and along the tendons on the backs of the hands. There are two scars of old ulcers on the external surface of the right shin. Glands nowhere enlarged. Respiration is labored. Slight hacking cough. Temperature 101.3-5 deg. Muscles are very flabby.

Hands.—Markedly deformed. Flexed at metacarpo-phalangeal joints and also at the distal inter-phalangeal joints. Marked ulnar deflection. All the inter-phalangeal joints are ankylosed, and there are tophi on their exterior surfaces. The joints are swollen, hyperemic, glazed, tense, reddish-purple color, and vessels prominent. There are yellowish-white deposits on the exterior aspects which vary greatly in size. Joints are very tender.

On the second inter-phalangeal joint of the index finger of the left hand is a large yellow vesicle, the size of a five-cent piece, which is soft and tender. Smear from its contents shows pus cells and needle-shaped crystals of sodium biurate. The little finger of the left hand shows remnants of a similar lesion, which has ruptured, leaving a yellow, dried-up deposit behind. On the ring finger of the left hand is an ulcer, small, shallow and smooth, with a yellowish discharge, which leaves a white chalky deposit on the surrounding skin. Joints, toes, ankles, knees, elbows, show similar change to a much less marked degree than in the hand.

There is no pain in the sterno-clavicular joints and shoulders. Bones.—Nil. Eyes.—No burning or itching—no episcleral congestion. Sclerotics show jaundice. There is an arcus senilis.

Digestive System.—Subjective.—Appetite very poor. Bad

taste in mouth. Vomiting. No pain in stomach. Great thirst. No belching. Bowels free. Bleeding Piles, No sore throat.

Objective.—Teeth badly stained. Gums pale. Pyorrhœa alveolaris present. Tongue coated. Breath offensive and heavy. High palate. Abdomen is full and there is some bulging in the flanks. On percussion there is a highly tympanic note everywhere except in the flanks.

Stomach.—Greater curvature is two inches above umbilicus. No splashing.

Liver.—Upper border at the lower border fourth rib. Lower border at the costal margin (in the mammary line).

Spleen.—Not palpable.

Circulatory System.—Subjective.—Shortness of breath. Swelling of ankles. No palpitation nor precordial pain.

Objective.—Pulse 100 per min., rhythm regular. Vessel walls sclerosed. Tension, high. Volume only fair. Force, good. Rise and fall abrupt, and maintenance not well sustained.

Heart.—Inspection.—Apex beat not visible. No bulging.

Palpation.—Apex beat, a mere flicker in the fifth interspace four inches from middle line. No thrills.

Percussion.—Right border $\frac{1}{2}$ in. external to the right border of the sternum in the fourth interspace. Left border $\frac{1}{4}$ in. outside nipple line. Apex in nipple line in fifth interspace.

Auscultation.—The heart sounds are very faint and indistinct. First sound is weak and the second aortic sound is accentuated. No adventitious sounds. No murmurs.

Blood Examination.—Feb. 7, 1907. R. B. C., 4,500,000; Hbg., 70 per cent.; W. B. C., 8,000.

Respiratory System.—Cough expectoration. Dyspnoea. No pain in chest. No night sweats.

Objective.—Inspection.—Barrel-shaped chest. Poor expansion. Abdominal type of breathing.

Palpation.—Expansion, poor. Vocal fremitus diminished.

Percussion.—Hyperresonance everywhere.

Auscultation.—Breath sounds are broncho-vesicular below that level. Rales and rhonchi present, but constantly changing positions.

Sputum Examination.—Amount, small. Color, greenish-yellow. Consistency, thick and tenacious (lumps of mucus). Stain used, carbol fuchsin and methylene blue. R. B. C., none. W. B. C., pus cells present. Epithelial cells, desquamated squamous. Crystals, no uric acid crystals. Bacteria, staphy-

locus, streptococcus, diplococcus, rod-shaped bacillus. Spirals, none.

Genito-urinary System.—Subjective.—Frequency in micturition. No worse at night. No pain. Red sediment in urine which adhered to the chamber. Never passed any calculi.

Objective.—Kidneys, not palpable.

Urinalysis.—Transparent, light amber-colored urine, with light sediment of both brick dust (urates) and cayenne pepper (uric acid) deposit. Odor is strong. Specific gravity, 1012.

Reaction.—Faintly acid. Quantity in 24 hours not known.

Chemical.—Urea, 0.2. Albumen, none. Sugar, none. Bile, none. Phosphates, present. Urates, present. Chlorides, present.

Microscopical.—Epithelium, present. W. B. C., none. R. B. C., absent. Casts, absent. Made Feb. 7, 1907.

Crystals—(1) Uric Acid. (2) Oxalates.

Amorphous—(1) Urates. (2) Feathery Phosphates.

Nervous System.—Subjective.—Headache. Hot feet at night. Cramps in calf and abdominal muscles. Sweating.

Objective.—Patient is very intelligent, and is not suffering from hallucinations, delusions, nor torpor. His comprehension and utterance of speech is good. Memory, excellent. Attention, good. Sleep fair, when pain of joints does not keep him awake.

Motor Functions.—Voluntary power not much impaired. State of nutrition, fair. Irritability, all right. Reflexes, pupil normal. Knee, normal. Plantar, normal. Ankle clonus, absent. Babinski, absent. Co-ordination, nothing abnormal.

Sensory Functions.—Subjective. No numbness, tingling, formication nor abnormal sensation of heat and cold.

Objective.—Sensations of pain; touch, temperature, are normal.

Special Sense.—Sight, smell, taste and hearing normal. Cranial nerves all normal.

Selected Article.

THE MORE RECENT TREATMENT OF THE INSANE.

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Gentlemen,—I have named my address for this afternoon “The More Recent Treatment of the Insane,” because I am always protesting against treating insanity as an entity, as a definite disease. We have to consider the insane person, and the treatment of the insane differs very materially now from that of even a very few years ago. A history of the treatment of the past is almost an essential to an understanding of the stage which we have reached now. By the way, the recovery-rate is not much greater now than it was 100 or 150 years ago. That, of course, one regrets, and hopes for better things. The Biblical treatment of the long past was not unreasonable; the treatment of Saul by David was certainly correct; and as to the treatment of Nebuchadnezzar—turning him out into the country till he recovered—that was a case of non-restraint treatment effecting a cure. We have only come back to that even now. The next idea was that all insanity was associated with theological error, that, in fact, every insane person was afflicted by some spirit, generally a spirit of evil, but sometimes a prophetic spirit. Therefore the only way was to eject the spirit. Consequently chains, chastenings, and whips were used. Sometimes he had to be cast out by stinks, therefore remedies like asafetida, which is still used in the treatment of neuroses, were used for the ejection of the devil. There is still, in the centre of Europe, a cathedral and a town, and around it some fifteen villages, called Gheel, “The City of the Simple,” where for seven hundred years the people have been treated at the shrine of Dymphna. Here I spent a week of great interest years ago. I suppose I am asked once a week whether there is any objection to a patient being treated by “Christian Science,” thus coming back to the old thing. Hypnotism I am constantly being asked about, and I shall refer to that later. As society came more closely together, people said they must be protected against the accidents resulting from the insanity of certain people and, to effect that protection, the insane were shut up. Asylums grew, and are growing still. In the earlier days they were not specialized; all cases of all kinds, whether curable

or incurable, were lumped together. Now one of the great developments is the separation of them; so that there are not only idiot asylums, but idiots are being separated. Thus you find schools for feeble-minded and institutions and colonies for the weak-minded, who are not distinctly idiotic. And one of the developments which will have a very great influence in the future is hospitals for the insane. I have said to you before that there are two words which I should like to get rid of from the English language—"asylum" and "lunatic." It will take a hundred years, even after they have been abolished, to do away with the stigma; the old feeling that a person affected in his mind is therefore alien and must be shut off, so that a person suffering in his highest faculties is an outcast. And when one remembers that a very large proportion of these people get well, and a larger proportion than the public believes remain well for the rest of their lives, it is a shame that they should be treated as if they were altogether useless as soon as they have had one attack of mental disorder. In Glasgow—and we must admit that north of the Tweed they are in advance of us in many ways—they have now a receiving hospital, so that every person suffering from mental disorder who falls into the hands of the equivalent of the relieving officer or the police is sent to this hospital, not to an infirmary or an asylum straight away, unless he happens to be a typical general paralytic, or to have some incurable disease of that kind. There are two wards in this receiving hospital, and I spent a day there not long ago to see the types of cases, and to see the results. The result is that not more than half these cases go to an asylum at all, but are discharged. Drink is, of course, the cause in many of these cases, but not by any means the majority. I said to the superintendent that I supposed the acute alcoholics came back fairly frequently, but he said "No"—that their experience was that, short of a year, or even more, the treatment of an alcoholic for a month or six weeks in the hospital was as useful, in the long run, as asylum detention for two or three months. In fact, he said that unless an inebriate was going to be secluded for a year or two, the result of hospital treatment in bed, with strict supervision and dieting, and medicine to a certain extent, was as useful as prolonged treatment, and much more useful than simple detention for three or four months.

Another development is hospital asylums, of which type Bethlem is the oldest example. St. Luke's is another old institution. Scattered over the country there are establishments

like the Holloway Sanatorium. What salvation is in that word "sanatorium"! People do not mind going to Holloway Sanatorium, but if it were called the Holloway Asylum they would shy at it. In York there is a retreat, and similar institutions at Exeter, Gloucester and Manchester, and they are to a great extent self-supporting; some pay for their care, some pay but very little; but those who pay more help to support those who pay very little. At Bethlem Hospital the majority of patients pay nothing at all; a certain number pay two guineas a week; in some places patients are received for even a guinea a week. There is another development, which I feel particularly interested in, because when I was at Bethlem I revived it, that of voluntary boarders. At that time there was still permission for the Royal hospitals, such as Bethlem, to receive a certain number of patients suffering from mental disorder, as voluntary boarders. I had difficulties, and I had a struggle. The authorities said: "Well, but this man is of unsound mind; he has got delusions." "Yes." "Will you receive a voluntary boarder who has got delusions?" "Yes." "But he could be certified." "Yes, but that is exactly what I don't want. The man says, 'I am supposed to be of unsound mind. I do not think I am. I am quite willing to come into a hospital where I can be under observation, and where you will see that you are wrong and I am right.'" A person who has had an attack of mental disorder once or twice and has recovered, says, "Next time I get like this I shall prefer to return." I remember in the old days a patient driving to Bethlem Hospital and saying, "I want to be taken in; I feel I am going off my head; only if you take me in you will send word to my family where I am." At Bethlem Hospital there are probably twenty-five voluntary boarders; at Virginia Water there are a large number of voluntary patients, and one hopes it will be still further developed. You can understand that in county asylums it would be rather a dangerous thing to have voluntary boarders. The Commissioners quite properly require that those who wish to become voluntary boarders shall say in writing that they wish voluntarily to so place themselves; and there must be some statement by an outside medical man, preferably a general practitioner, that in his judgment the case is a fit and proper one. Over and over again this sort of thing occurs to me: A man comes and says, "I will kill myself." "Nonsense! You feel you will kill yourself?" "Yes, and I will." "Don't. It will be inconvenient for you, for your friends, and for me, now you have consulted me. I will telephone to see if they will receive you

at either of these institutions." Yes, they can receive him, and he goes. I send with him a note that I consider him a fit and proper person to go as a voluntary patient, and he goes. The wave of despair passes; he is treated medically, and is discharged recovered. The more people recognize that hospitals for mental disorder can be used like homes or like hospitals of another type, the more will be removed the current dread of those institutions. It is a great thing to feel that they are going there for treatment, not for detention; the great trouble felt by the insane is that they are no longer free agents.

The next improvement, again along Scotch lines, is boarding-out. They have a patient here and a patient there at small houses, people who have been acutely insane but have recovered up to a certain point. And we must remember that many surgical and medical cases have only partially recovered when they leave the hospital, but they may have at once to perform their social duties. One who has had acute insanity may be left lamed in mind; he may no longer be able to fill the position he did; he is weak-minded, but he may be perfectly harmless; he is the class of man who is a hewer of wood and a drawer of water in asylums. A large amount of work is done in asylums by chronic patients. Some of them are specialists; there was one in Bethlem who would do nothing but polish brass knobs, though he still believed himself to be the Holy Ghost. Boarding such people out enables them to live happier, freer, and less costly lives; and no doubt the practice is extending in England. In 1890 it was decided that there should be no more private asylums' licenses granted; consequently, the hospitals have grown, and are receiving large numbers of patients of a class who used to be sent to private asylums or to the cheaper asylums. Hundreds of people all over the Kingdom are asking to have patients. Nurses leave asylums, marry, and say they have a nice little house and can take a patient. Three thousand doctors have applied to me for patients, therefore there are a large number of patients living scattered about, I presume, and I fear there is great danger of abuse. The abuse which called lunacy legislation into being was largely the fact that, literally, people were living upon lunatics under their care; people farmed them. I am always maintaining that we do not so much want certification of the insane as notification of them. Let there be a notification of insanity when it reaches a certain line, just as there is a notification of fever. If a person is insane, but not dangerous to society, let it be known and the patient kept under some kind of supervision. Other-

wise, I feel sure there will be abuse. Certain so-called "colonies" I find very helpful; there are epileptic, feeble-minded, and inebriate colonies. I do not like to give names, but I will describe one. A doctor has a farm of 1,200 acres. On that he has ten or a dozen small villas, bungalows, cottages, and in each of these is a farm bailiff, a cured patient, a city missionary, a cured inebriate, a cured morphinomaniac, or someone else who has experienced mental trouble. In each of these houses are two or three borderland cases, who have fallen in some way, and are out of step with society, yet who are not dangerous or suicidal. These individuals are absorbed into this colony, and they are gradually educated back to self-respect; they are trusted. The doctor himself knows nothing about payment; that is arranged with the head of each house. The results are extraordinarily good. I had a letter from him this week, wishing I could go down and see the batch of discharges which he is sending to Canada, they having been there a couple of years and learnt many occupations, including, of course, agricultural ones. Of course, one has to recognize that there are failures, but who does not fail? Our successes are built up upon our failings. Therefore the future treatment of insane people, especially young, growing cases, is to put them in healthy conditions. Insanity is not a disease depending on a micro-organism, though it may in some cases spring from diseased states; but it is a want of relationship of the individual to his surroundings, and if you modify his surroundings you may often get him back to usefulness.

Now as to treatment. It seems to me we are always inclined to sway backwards and forwards. First, every lunatic must be shut up, and now the feeling among certain physicians seems to be that every lunatic ought to be sent travelling; and I have sometimes said that part of the Atlantic must be paved by these people. It is a very dangerous thing to send a person of unsound mind travelling unless you know all about him. Some time ago I was told a patient was to be sent for a voyage, and I said I was very glad I was not going with him. Next I heard that after being a short time at sea he attempted to drown himself. The consequence was that the rest of the voyage, which was to do him so much good, had to be passed in the cabin under the strictest supervision. Doctors have the common failing of recommending that which suits themselves. If a person has an inflamed eye he does not at once go to a picture gallery. He is put into a dark room, and is kept quiet. Melancholia, in many cases, is mental pain; and do you sup-

pose that when the mind is suffering painful impressions it is best to exercise it? It requires rest. One man finds rest at the sea-shore, another in pottering about a garden or on a farm. One man, who had an attack of melancholia which lasted a year, showed me a road he had made entirely, including quarrying the stone. He said, "That was my cure for melancholia." Doctors sometimes say, "Don't you think it will be a good thing to make him buck up?" I think it would be disastrous; but there are some to whom it would be immensely useful. A man makes a fortune before he is middle-aged, and he is induced to retire from business. He has devoted twenty-five years to making money, and thinking of nothing but money and the making of it. He retires; and he has not got a healthy vice at all. If you cannot get him back to some business, then if you send him for a year or two's travel he may gradually settle down into a different man. Travelling is useful in certain hypochondriacal cases. When insanity depends upon physical disease, treat that disease; do not treat the insanity, but treat the individual. Travelling has its advantages, but it also has grave dangers. I have seen many people made very much worse by travelling, and many cases have ended fatally as a result. Then comes the swing of the pendulum the other way. "You say hospital treatment for the insane is good; very well, give them all 'rest cures.'" If the patient is badly nourished, if his digestion is failing, if he be physically weak, Weir-Mitchell treatment may be of enormous advantage. But if the person be a self-indulgent adolescent, he or she must not be allowed to soak in self-indulgence; it would be the worst thing possible. Brooding leads to hatching, and brooding in bed leads to all sorts of delusions. I have seen a person put to bed slightly depressed, and get up confirmedly deluded. But in some cases it is beneficial, as in the following case which recently came before me. I was asked whether a certain lady would not be benefited by a "rest-cure" in a nursing home. First, one had to decide: Is that person really insane, dangerously, so that it is not justifiable to send her to a nursing home? No. She was hypochondriacal, quarrelsome, and inclined to upset the household generally, wherever she was. She was about $2\frac{1}{2}$ st. below her normal weight. She was put into a nursing home, isolated from her friends. Nurse No. 1 does not get on with her; Nurse No. 2 did very well. There are the surroundings of peace; she is not seen much by a doctor, nurses look after her chiefly, and massage is increased. She puts on $2\frac{1}{2}$ st., and even more, and begins to think she

is going to become too fat. But she is inclined to say, "I am so happy here that I will stop here." Now comes the time to break down adhesions, and therefore one tells her to go somewhere else. She is sent to the home of a cultured lady who has had experience of such cases, and slowly she gets perfectly well. If she had had her way she would have gone on having "rest cures" for the remainder of her life. I have known a patient drift into that condition and not leave her room for twenty years; she liked the habit of living in retreat. One use of the Nursing Home is: You are called suddenly to see a woman who has become insane. Pending a decision as to the future, it is extremely convenient to be able to say: "Yes, the doctor thinks that a rest would be good for you, therefore you must go to bed, and you must have a nurse." That, of course, is watching to see which way the current is going to run.

Next, as to treatment by drugs. Nowadays people are apt to disparage drugs and drug treatment, but there is no doubt they are useful in some cases of mental disorder. They may prevent, or may shorten, a breakdown, or they may alleviate it in some way. I remember the day when patients were kept quiet by antimony and purges. That is no better than mechanical restraint; we have got past chains, sudden baths, shower-baths, and electricity. But it is important to remember that purges may be essential. I have known a person freed of his delusions by a very copious action of the bowels. You may need to purge so that you may be sure you are starting fairly. And in regard to sedatives, there seems to prevail a sort of healthy dread. In regard to half the patients I see in consultation the doctor says he is not giving anything to induce sleep. That may be right in principle, but no principle is right if you dogmatize on it too absolutely. If you have a patient suffering from sleeplessness, it is your duty to procure him sleep somehow. Nowadays the latest drug is always the best—veronal, or trional. Paraldehyde is the nastiest, and, therefore, in many cases, the best. Both bromide and chloral are given less than they were. After the diet, see that the patient does not take so much tea and coffee. If the patient has his last meal at 6 or 7 and goes to bed at 10.30, it is well to give a little hot soup, or something of the sort, with a little stimulant in it. Sleeplessness, especially in old age, is frequently relieved by stimulants.

Baths at one time were much used, and in two or three ways. The old brutal method was the "surprise bath," intended more as a punitive than as a therapeutic measure. In some cases,

especially adolescents, a warm or hot bath, with a cold effusion to the head and neck, is useful; and very violent patients have derived much benefit from the prolonged bath, which can be readily arranged in any house. At Bethlem I have kept patients in such a bath eight or nine hours, and they frequently calm down quickly, when everything else has failed. In cases of chronic sleeplessness, it is good to add to the hot bath $\frac{1}{4}$ lb. of mustard to which has been poured a quart of boiling water, first letting it stand for ten minutes. Turkish baths are sometimes useful.

I have no experience of the subcutaneous injection of saline fluids.

Finally, I may say, I never, or very rarely, neglect to reason with my patients. (Dr. Savage gave instances of good results from this.) As to hypnotism, that is a subject large enough for a separate lecture. But hypnotism would do harm in patients who are emotional and already too sensitive. However, it is often successful in inducing sleep in those who badly need it. Sometimes delusions are shifted by hypnotic suggestion. Society is very much alert on the subject of prophylaxis, but we have not got so far as our American friends, and I do not think we ever shall: "Although it is desirable for the good of the community that only individuals who are mentally sound should propagate their kind, it is scarcely to be expected that the passage of laws similar to the one in Minnesota will in any degree do away with the possibility of marriages, even amongst those who are mentally defective. Hence we are left with only two methods by which these doctrines can be met, namely, ample provision for the poor unfortunates in institutions, or, if they be left at large, castration."—*Medical Press and Circular*.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, H. J. HAMILTON, C. J. COPP,
F. A. CLARKSON AND BREFNEY O'REILLY.

Solomon's Test in the Diagnosis of Gastric Carcinoma.

Solomon's technique is simple. The patient is placed on an exclusively milk diet until mid-day. In the afternoon he receives liquid nourishment without albumen. Late in the evening he receives an abundant lavage of the stomach, until the water issues perfectly limpid. During the night no nourishment is given. The following morning the stomach is washed with 100 cc. of physiological solution of chloride of sodium. In the lavage liquid a search is made for albumen. According to Solomon, albumen is found in gastric carcinoma in varying quantities (from 1-10 to 1-2 gr. per 1000). This albumen comes from the serum which transudes from the surface of the tumor. Romano and Reicher have found, from their own investigations; frequent causes of error in Solomon's test,—these causes are due to the presence of mucus in the lavage water. Further, the results may be of little importance owing to considerable contraction of the stomach, which makes a perfect lavage almost impossible. Moreover, the same investigators assert that the test would be positive only in those cases in which there is an ulcerative process in the stomach; that it would never give an early diagnosis of carcinoma; and that it would not indicate the nature of the ulceration. According to *Mongour* (*Semaine Med.*, 1906, No. 8), the albumen comes from the sanguineous exudate which occurs the gastric ulceration.—Translated from *Giornale Internazionale delle Scienze Mediche*, by HARLEY SMITH.

Absence of the Thyroid Sign in Obstinate Forms of Acute Rheumatism.

Vincent states that in 74 cases of acute rheumatism, he has observed the thyroid sign, namely, swelling, and pain on pressure of the thyroid body. In a certain number of cases, in which the evolution has been slow and the treatment difficult, he has not found the thyroid sign. In those cases, however, in which, notwithstanding the intensity of the symptoms, the

treatment gives good results, he has found the glandular swelling persist through the acute period, diminish when improvement takes place, re-appear when the rheumatism signs return. Vincent is led, accordingly, to believe that the thyroid body plays an important part in the defence of the organism against the rheumatic process. This, also, would explain the usefulness of the iodine and the iodides in obstinate forms of rheumatism.—Translated from *Giornale Internazionale delle Scienze Mediche*.

Acute Heart Failure and its Treatment.

The various etiological aspects of acute cardiac failure may be classed according to Charles Bolton in two groups: (1) It may be due to some organic condition affecting the heart, the blood, or the blood-vessels; (2) or it may result from nervous disturbance, as in sudden death from vagus inhibition or in tachycardia. In the first group the trouble is mainly mechanical, and arises from interference either with the systolic or force-pump-function. The failure of the systolic function may be due to excessive resistance to the blood output into the pulmonary or the systematic circuit; for instance, to acute Bright's disease, or to acute pulmonary engorgements, such as that sometimes produced, according to Kronecker, by the diminished barometric pressure of high altitudes. Or it may be due to any of the multiple causes which lead to impairment of the muscular power of the myocardium, whether toxic, ischemic, or by implication of the auriculo ventricular bundle of His. On the other hand, the failure of the diastolic function may be of two kinds: there may be excessive filling or, on the contrary, deficient filling of the cardiac cavities.—*Progressive Medicine*, Sept., 1907.

The Use of Digitalis in Valvular Diseases.

E. H. Colbeck's conception of the value of digitalis is based upon his belief that it raises the cardiac tonus still more than that of the arteries, and in proportion to any hypertrophy of the myocardium—provided the latter has remained free from degeneration, as may be assumed to be the case in the younger subjects. This guides him in the administration of digitalis in aortic incompetence. As to the magnitude of the pressure that is exerted by the arterial recoil, it has been shown in animals that if the aortic valve be suddenly rendered incompetent the aortic pressure is sufficient to produce aneurysm, or

even rupture of the wall of the unprepared heart. In the ordinary clinical case the stress is gradual, and the fibre is educated to an increased tonus; but when subsequently accidental overstrain occurs digitalis should be invaluable for the purpose of restoring the vigor of the heart. The simultaneous action of the drug on the right side of the heart is not without influence in the restoration of compensation. In practice, then, it may be inferred that digitalis should seldom, if ever, be given in cases of aortic regurgitation which have developed during or after middle life, since the ventricular wall is seldom perfectly sound.

In *aortic stenosis* digitalis is contra-indicated apart from the occurrence of cardiac failure. In this lesion an augmentation of the tonus of the heart and peripheral vessels could but increase the work with which the left ventricle has to contend.

In *mitral incompetence* beneficial results are invariably obtained from the administration of digitalis. On the left side of the heart a rise of tonus and consequential hypertrophy enable the right ventricle to cope with the increased resistance in the pulmonic circuit, and by maintaining the blood pressure in the pulmonary veins and left auricle it resists the reflux through the mitral opening and ensures an adequate supply of blood to the left side of the heart. A rise of tonus in the arterioles and capillaries would no doubt greatly minimize the disturbance in the systematic circuit due to this cause, though the increased resistance to the discharge of the ventricular contents would augment the reflux through the mitral opening.

In *uncomplicated mitral stenosis* the supply of the blood to the systemic circulation tends to become increasingly restricted. A rise in the tonus of the left ventricle and peripheral vessels would still further diminish the charge of blood delivered to the aorta. No doubt the effect of increased cardiac tonus on the right side of the heart would be of benefit provided the blood supply to the left ventricle could be thereby augmented. It may be inferred, therefore, that digitalis can be of no benefit to mitral stenosis in the absence of failure of the right ventricle, and in this event, so soon as the pulmonary blood pressure has been raised to the point at which the maximum charge of blood is delivered to the left ventricle, the drug would again act prejudicially.—*Progressive Medicine*, Sept. 1, 1907.

LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF J. PRICE-BROWN.

A Case of Closed Sinusitis of the Ethmoid Labyrinth, with Exophthalmos. Harry Kahn and Mortimer Frank, *Laryngoscope*, September, 1907.

The patient, a girl of fourteen years, had passed through attacks of nearly all the usual exanthemas. On recovering from chicken-pox, a protrusion of the left eye occurred, becoming gradually more pronounced. There was no headache, no hydrorrhea, no parosmia, no pharyngeal nor laryngeal irritation. The only apparent indication being the pushing of the globe of the eye outwards and forwards.

On rhinoscopic examination the septum was seen to be straight, but a large tumor-like mass, polypoid in character, was found to occupy the position of the normal anterior end of the left middle turbinal, filling the whole of the olfactory space.

On application of cocaine and adrenalin, the mass remained immovable and hard, and there was no pus visible. On resection of the growth, a large volume of white odorless pus escaped, which continued from day to day up to the time of the report of the case, a month later. The ethmoid at the time was cleaned out as fully as possible, and free drainage obtained. The discharge is gradually decreasing, and the protuberant eye returning to its normal place in a satisfactory manner.

That the treatment followed is the appropriate one is borne out by the fact that in the *Medical Record*, Vol. 70, page 689, Fish reports five cases of enucleation of the eye in patients suffering from closed ethmoid sinusitis. And the writers close with the words: "Warning should be taken by the ophthalmologist not to enucleate an eye of this type without first looking into the nasal condition."

The Alveolar Route of Operating Upon the Maxillary Sinus. —Melville Black, *Laryngoscope*, September, 1907.

This article strongly advocates operation through the alveolus as the primary method of treatment in chronic antral disease. He insists that to be effectual, the opening should be large, with an all-round diameter of three-eighths of an inch. He makes the first opening with a quarter-inch trephine and then enlarges it with a burr.

After thoroughly curetting and washing out through the artificial opening, a saddle bridge, made of rubber or one of the finer metals, is adjusted. This can be easily removed and replaced by the patient as required for cleansing purposes. When an artificial plate is worn, covering the part, no other plate is needed.

The treatment consists of first curetting and washing; and subsequently, in addition to the latter, cauterizing the whole of the lining membrane of the antrum, with pure carbolic acid, applied by means of bent cotton-carriers—the effect being immediately neutralized by syringing the antrum with alcohol. This carbolic treatment is repeated once a week. When the artificial opening closes before healing is complete, it is enlarged, under cocaine, by a cataract knife. The rimming out is easily accomplished, and the treatment resumed. The cases usually get completely well in from six weeks to four months; and there is rarely a recurrence. If such a thing should happen, the old cicatrix can readily be reopened and the treatment repeated.

A Case of Sarcoma of the Maxillary Sinus.—F. L. Rogers,
Laryngoscope, Oct., 1907.

This case was exhibited to show the condition of the growth after seven months of active treatment.

The patient in early life had syphilis, resulting in destruction of the septum. Many years later, when he presented himself for treatment for swelling of the left upper jaw, a perforation was made through the nose, expecting empyema of the antrum, but nothing was found. Later on, an opening was made through the canine fossa, exposing a growth attached to the anterior wall of the antrum, which so crowded the inner wall of the sinus and the inferior orbital plate, as largely to destroy these bodies. A considerable portion of the growth protruded into both nasal and orbital cavities.

The tumor was removed with the curette as completely as possible. Two months later recurrence took place, followed by very rapid growth. Later on, it was decided to remove the superior maxillary bone, and the operation was commenced. But such extensive destruction of tissue was met with that the operation was abandoned, and the cavity being cleansed out as thoroughly as possible instead. Some weeks later the odor became exceedingly offensive, and various kinds of treatment were resorted to, to mitigate the conditions. Among others,

methylene blue, combined with quinine and belladonna, were taken for several months; X-Ray was used, with the effect of destroying the unpleasant odor, but without checking the progress of the disease; the Finsen light was also applied, aiding, the writer believes, in producing an abscess where trypsin had been injected. Latterly, undiluted injecteo-trypsin was injected into the cheek opening, with seemingly better effect than anything else in checking the progress of this growth and removing fetor. For a month or so, prior to exhibiting the case, there had been no apparent enlargement, and no mal-odor, the reporter believing that there was even diminution in size.

Several times when the growth has encroached upon the mouth, interfering with mastication and deglutition, portions have been removed, to give relief; but each has been followed by very marked and rapid increase.

The operator asked for further light, but received none.

Primary Melanosis of the Palate: Buccal Fistula of Recent Sarcomatous Origin.—J. N. Roy, *Montreal Medical Journal*. Nov., 1907.

This is an exceedingly interesting case on account of its rarity, the writer having found only two similar cases on record. The patient, a blacksmith, when 23 years old, injured his palate somewhat with the stem of a clay pipe. One year later he discovered, in the median raphe of the vault, a small, round spot, three millimetres in diameter. During the following twelve years this spot increased in diameter to about six millimetres. The only symptoms was slight roughness to the tongue on pressure. About this time iodine was applied, and pain commenced to appear, with gradual extension of the pigmentation to the surrounding parts, and dark masses, with a hemorrhagic tendency, began to show themselves. Four years later, all the space within the dental arch of the superior maxilla was filled with melanotic granulations. At the end of another four years, together with the melanotic granulations, depression of the palate occurred, chiefly on the left side, a naso-buccal fistula having formed. This was attended by neither hemorrhage nor suppuration.

Examination now revealed melanosis of the entire hard palate. Granulations of brown or blackish color were scattered all over, the left side being greatly depressed. At a point between the middle and posterior thirds of the hard palate a probe passed readily into the nasal cavity.

There was no dysphagia, but the voice was nasal, and the pharyngeal reflexes absent.

Macroscopic, together with microscopic examinations, led to a diagnosis of melanotic sarcoma, resembling melanotic endothelioma; and as the patient positively refused operative measures, the necessary mutilation, together with possible complications and doubtful prognosis, being explained to him, the case was allowed to progress under resorcin and hygienic treatment, the fatal issue being still delayed.

The writer concludes: "I should like to remark how unusual this case is, presenting a primary melanosis of the palate, without co-existing lesions of the eye or skin, a slow evolution of twenty years, and a recent rapid sarcomatous growth."

Epithelioma of the Larynx: Removal by Thyrotomy; No Recurrence after three and a half Years.—Henry L. Swain (New Haven), *Journal of Laryngology*, September, 1907.

This was the case of a clergyman, aged forty-seven, who had been complaining of hoarseness for six months. Examination revealed a white papillomatous mass growing from the upper aspect of the left cord, and apparently growing out of the cavity. Nearly the entire cord was covered by the growth. Some time later the whole visible mass was removed, in small pieces intra-laryngeally. It was very friable. Microscopical evidence was negative. Two months later recurrence took place, and again the mass was removed. During the next two months the operation was repeated five times.

Six months after the first examination it was decided to operate more radically.

Thyrotomy and resection were then done after the usual modern methods. This time microscopic examination revealed the growth to be epithelioma. Recovery was rather slow but satisfactory. A fairly good vocal band has reformed, and after the lapse of three and a half years there has been no further recurrence.

Non-Recurrent Carcinoma of the Larynx Removed Through the Natural Passages. Fletcher Ingals (Chicago), *Journal of Laryngology*, September, 1907.

A laborer, aged forty-four, after being hoarse for six years, presented himself for treatment. For three weeks he had complained of pain in the region of the left half of the thyroid. No dyspnea, but almost voiceless.

Examination revealed a pinkish-gray tumor involving the anterior five-sixths of the left vocal cord, filling the ventricular opening and obstructing the glottis. The growth had the appearance of malignancy. The greater part was removed at the first sitting. Three days later more fragments were removed. Microscopical examination was made with the report that the neoplasm was a slowly-growing carcinoma, with keratohyaline transformation of the epithelial cells. Several other growths were removed in a similar manner from the region of the left cord, at varying intervals. Subsequently, sedative measures were carried out for several months, with gradual improvement of the patient's condition. Finally, after a year's interval, the voice was found to be normal and the larynx well. The conclusion is drawn that in certain cases of carcinoma of the larynx, it is better to try endo-laryngeal methods, before resorting to the more formidable operation of laryngectomy.

OPHTHALMOLOGY AND OTOTOLOGY.

IN CHARGE OF J. T. DUNCAN.

In the *Therapeutic Gazette* is an excellent symposium on Iritis. The first article is by Burton Chance, on "Iritis in General Disease."

As might be expected, those diseases dependent upon the evolution of micro-organisms within the body are likely to produce disorders in such highly vascular structures as the iris and ciliary body; consequently we may assume that all cases of iritis and iridocyclitis, not dependent upon traumatism, have as their causative basis a general toxemia.

1st. *Syphilis*.—Iritis is seen both in *hereditary* and *acquired* syphilis.

(a) *Hereditary*. In this it is seen during the first two years of life, at about six years of age, and occasionally it manifests itself for the first time in late adolescence. In these later groups it may occur alone or along with interstitial keratitis. One or both eyes may be attacked. Attacks of iritis in infants and children if not traumatic are almost invariably due to inherited syphilis.

(b) *Acquired Syphilis*. In acquired syphilis, iritis, or iridocyclitis, may be met with at two periods, either within a year after the infection, or at a much later time. It generally de-

velops as a plastic inflammation, or as one which is accompanied by the formation of gummata. Usually it occurs at the time of definite general manifestations, and until these signs accompany it, it is difficult to decide upon a correct diagnosis as to the causation. At the outset the inflammation is limited to one eye. At times one meets with iritis in the tertiary stage of syphilis ten or fifteen years after the original infection.

Rheumatism.—Iritis may develop in the rheumatic; nevertheless it is rare in rheumatism.

Gonorrhoea.—Frequently, when iritis attacks young men who have had gonorrhoea, with indeterminate rheumatic symptoms, the arthritis is an infectious process capable of permeating the system; and the cause of the iritis is believed to be the gonococccic material. We find in some cases a distinct connection between the general disease and the iritis.

Gout.—It is doubtful whether iritis develops in true gout. He hesitates to classify as gout those irregular cases of so-called uric acid diatheses. Nevertheless, competent observers have declared that iritis does occur in gout; but before accepting this dictum as final we must exclude rheumatism, gonorrhoea and syphilis as other probable causes.

Tuberculosis.—Iritis in tuberculosis is less rare than it was once thought to be. It is found in scrofulous children and in adolescents with enlarged lymph glands, who may or may not have demonstrable tuberculous deposits in their lungs.

Acute Infectious Diseases.—Iritis may occur in the course of the acute infectious and exanthematous diseases. It has been seen in typhoid fever. I noted it in a goodly number of smallpox patients, and also in others suffering from epidemic cerebrospinal meningitis.

Malaria.—I have known sailors who have had malaria while in the East, and others who resided years ago in the malarious districts of this country, to have iritis, which has recurred and recurred until after a prolonged antimalarious course had been followed out.

He also holds that in meningitis, pyæmia and diabetes iritis is seen.

After an article on the Symptomatology, by Risley, the treatment is spoken of by Ziegler, under the headings:—1, Local; 2, Systemic, and 3, Surgical.

I. *Local Measures.*—The local treatment of plastic iritis (rheumatic, spongy, and syphilitic) has for its keystone the prompt and effective use of a mydriatic. Atropine sulphate gr. iv to fʒ should be instilled until the pupil dilates widely. If

synechia have already formed they will probably break loose.

Some patients have an idiosyncrasy against atropine, and in these cases hyoseyamine sulphate may be used.

The supra-orbital neuralgia is usually nocturnal in its manifestation, and may often be relieved by belladonna spread over the eyebrow and covered by dry heat. A more modern analgesic, however, is found in hyoscine hydrobromate, which I have often used with almost magical effect, when instilled in the strength of gr. 1-4 to f ʒj.

In addition to the mydriatic, hot stupes are most valuable to relieve the pain, congestion and sluggish circulation. A towel should be wrung out in hot water (kept hot) and held to the eye from ten to thirty minutes three times a day. This application encourages rapid absorption and increases the action of the mydriatic.

Leeching is absolutely necessary, in many cases, to relieve the overloaded blood-vessels and lymphatics, especially where the congestion creates a muddy-colored iris. As soon as this depleting effect manifests itself the action of the mydriatic is greatly enhanced, and the "brow-pain" and weight in the eye begin to disappear.

While we no longer confine these patients in a darkened room, it is well to have them wear an eye-shade, or "London smoke" glasses, as the admission of too much light is both dazzling and painful to the afflicted eye.

II. *Systemic Treatment.*—Internally, calomel is our sheet-anchor, particularly in the early stages. I usually order gr. 1-4 four times a day for five days, and if the symptoms are still marked, repeat the dose for a second period of five days.

Later, if antisyphilitic treatment is indicated, daily inunctions of unguentum hydrarg. ʒj are ordered, and ascending doses of potassium iodide, ranging from gr. v to gr. c (well diluted) t. i. d., are given for a considerable period of time (six months to two years).

If the rheumatic tendency is more pronounced, sodium salicylate, aspirin, or salacatin may be administered liberally.

Serious iritis or iridocyclitis runs a more chronic course, and does not yield to treatment so readily. Atropine must be used with great caution, as glaucomatous symptoms may develop at any moment, when eserine would be indicated. Calomel, salicylate of soda, and turpentine may be used singly, seriatim, or conjointly.

In traumatic iritis heat is contraindicated, and cold compresses constantly applied (day and night) are most efficient. Calomel

gr. 1/10 every hour or two hours is valuable. Atropine is generally indicated.

III. *Surgical Procedures.*—In chronic iritis, or in the recurrent form, if marked posterior synechiæ or pupillary exclusion are present, iridectomy is often indicated.

In conclusion I may repeat: iritis occurs in such protean forms, and is so manifestly hybrid in its types, that the treatment must be based upon the essential elements in the symptom-complex exhibited in each individual case. The prognosis is generally good.

Prevention of Deafness.

By far the greater number of diseases which affect hearing owe their origin to a pathological condition in the nose or throat, the point of entry being the eustachian tube. A comparatively small number arise externally from the auricular canal, such as impactions of wax, eczema and furunculosis of the canal, foreign bodies, traumatism, etc., but the majority of these do not offer serious menace to the organ of hearing. Even in these cases, however, care should be exercised. Rupture of the drum from excessive force in syringing for cerumen or from inexperienced efforts to remove a foreign body may be responsible for subsequent deafness.

The toothpick nor the hairpin should ever be employed to relieve an itching ear, as injury is frequently thus done. Suppurative inflammation of the ear should be promptly relieved by incision, thereby preventing many cases of deafness. Nasopharyngeal catarrh, being an important factor in the development of ear disease and consequent impairment of hearing, is the more important factor on account of its frequency, and should, therefore, be treated with the care and perseverance that its importance demands.

Subjective noises in the ear is another late symptom which first attracts the attention of the patient. Many of such patients consult the aurist only after the disease has made such headway that cure is out of the question, whereas in the early stage it could have been arrested and much benefit attained.

Editorials.

RE-ORGANIZATION OF THE TORONTO GENERAL HOSPITAL.

We publish in this issue the interim report on the re-organization prepared by a committee appointed by the Board, Nov. 7th, 1906.

It has been finally decided that for the present there shall be three co-ordinate sections in Medicine; three in Surgery; one in Obstetrics; one in Gynæcology; one in Ophthalmology; and one in Rhinology, Otology and Laryngology. In making the division as to the "Eye and Ear" Department, the most modern custom has been adopted, that is, there is a separate service for the eye and another for the nose, throat and ear.

The Board, however, reserves the right to change this system if it be deemed advisable at any future time. The age limit will be 55 for heads in Surgery, Obstetrics, and Gynæcology, Otology and Ophthalmology, and 60 for heads in Medicine. The term limits for heads will be 10 years, which may in individual cases be extended to 15 years for special reasons. These term limits will apply only from dates of appointments under the present regulations. The heads of all services may be specialists in their departments as a rule, but specialists may combine eye and ear treatment, and gynæcologists may do general surgery in their work outside the Hospital.

The Hospital and the University authorities have reached a very important position from a scientific standpoint.

There will in the near future be established in the Hospital two new departments, one of Pathology and Bacteriology, and another of Pathological Chemistry, each in charge of a professor appointed and paid by the University.

We also publish an important letter from one who has given much attention to the subject of hospital management for many years. We believe, too, that he voices the opinions of the majority of physicians of Toronto outside the University Staff. Without attempting to discuss in detail "General Practition-

er's'' communication, we desire to express the opinion, which we have always held, that non-school men should have representation on the General Hospital Staff. At the same time we don't agree with our correspondent that the outside representation should be equal to that of the school men, as such proportion has not been the custom at any time in the past. In addition, we may say to our correspondent that there are not now enough beds for six services in Medicine and six in Surgery.

BRIDGE WHIST.

The Bridge Whist craze is perhaps the strangest growth of modern times. Anne Rittenhouse thus speaks of what may be termed a disease in the United States (*Broadway Magazine*):

“We are Bridge mad! We live it and eat it. We sleep, talk and worship nothing but Bridge. Our dinners are shortened that we may hasten to Bridge. We play it in town and country, in the mountains and at the seashore; we play it in season for excitement, and out of season for recreation. We even carry it into the sanitariums, where worn-out nerves cry enough, and play it on our pillows. It would almost seem that in the course of time the fashionable funeral will not be complete unless Bridge tables are set out during the ceremony. Is Bridge immoral? Yes, and again yes!”

Of course a game of Bridge is not necessarily immoral, but gambling for high stakes, no matter what game may be played, always leads to a certain amount of immorality and dishonesty. From the physician's standpoint, the question of immorality is not the main issue. We have to consider especially the effects upon health. The game has a wondrous fascination, especially for women who are nervous, emotional and fond of excitement. The high tension produced by continuous playing for many hours at a time, frequently morning, noon and night, wears out the nerves. Typical Bridge hysteria is one of the most serious forms of modern neurasthenia.

The victim often seeks a cure in health resorts, fashionable springs, baths, etc., but the deadly game is always with her

and she steadily goes from bad to worse, until the intelligent physician can readily make out the diagnosis. Her haggard face and general symptoms of nerve break-down tell plainly the story of physical ruin. In some instances the first symptoms are disorders of the temper. "Is your wife a Bridge fiend?" the society man was asked. "Well, I wouldn't say so much as that, but I might call her a Bridge vixen."

The physician can seldom do much in the early stages of the disease, but he should put forth his best endeavors, even though in a large proportion of cases his good advice be treated with scant respect. In all cases, but especially in the latter stages, the first part of his prescription should be—absolutely no more Bridge.

IS MOTOR SPEECH LOCALIZED IN BROCA'S CONVOLUTION.

From time to time during the last year, Professor Marie of Paris has published a series of articles attacking the orthodox theory of the speech centre in Broca's convolution. He has been able to study a great number of cases of aphasia, and to follow fifty of them to autopsy, with the result that he now states most emphatically that the whole theory of cerebral localization of speech rests entirely upon schematic construction.

In every case of aphasia, says Marie, there exists a more or less marked impairment of the power to understand spoken language, sometimes difficult for the examiner to appreciate, but still always present. No aphasic can, for example, execute perfectly the following order:—"From the three pieces of paper of unequal size lying on the table give me the largest, crumple up the middle-sized one and throw it on the floor, and put the smallest in your pocket."

The failure to perform this order is not due to word-deafness, for the patient cannot do it, even after someone shows him the actions required; but is due to a marked impairment of intellectual power, which, Marie thinks, always accompanies aphasia. The aphasic musician, for instance, can no longer read music, or play from memory pieces that were once familiar.

The main arguments against the localization of motor speech in the left third frontal convolution are two in number:— (1) Cases have been observed in which Broca's convolution was destroyed without any aphasic disturbances. (2) Typical cases of motor aphasia have come to autopsy, in which the convolution in question was absolutely intact.

It is quite true that the larger number of cases of aphasia coincide with a lesion of Broca's convolution, but there still remains the question of proper interpretation. The softening of the convolution arises from a thrombus in, or obliteration of, the Sylvian artery, but this cortical lesion is only an incident in the general havoc arising from the damaged blood-vessel, and must be regarded as an extension of the main focus, situated more posteriorly.

Marie has done some valuable work in the study of the blood supply to the cerebral region under discussion, and finds that the point of origin of the branch supplying the third frontal convolution is by no means constant. It may arise from the main trunk of the Sylvian artery at some distance from its point of bifurcation; or it may branch off at the very place where the bifurcation occurs; or, lastly, it may arise beyond the division. It is, therefore, easy to understand why the third frontal convolution may be softened and the other parts escape. Probably this is what occurs in those cases already noted with a lesion and no aphasic symptoms.

He has also taken the trouble to re-investigate the two cases upon which Broca established his theory, both brains being in the Musée Dupuytren, in an excellent state of preservation. He is disappointed to find that in the first case the softening not only involved the convolution that passed into medical history, but also the lower half of the Rolandic area and the greater part of the supramarginal and first temporal gyri. Furthermore, no section was made into the brain.

And so, putting all these facts together, one must conclude that the whole doctrine of motor speech localization is very inexact and most probably erroneous, resting on an uncertain basis of facts inaccurately observed and falsely interpreted.

OVARIAN PREGNANCY.

This interesting subject came up for discussion at the November meeting of the Section in Surgery of the Academy of Medicine, Toronto, in connection with an interesting case reported by Dr. Primrose and Dr. Hunt, in which an alarming hemorrhage took place from the ovary. The possibility of ovarian pregnancy was suggested, and in the discussion which followed some of the Fellows stated that they did not believe that ovarian pregnancy ever occurred. But it is well known and generally accepted that ovarian pregnancy has occurred, and, therefore, is possible. Cases have been reported by Koumer, Catharine Van Tussenbroek, Thompson, Mendes de Leon, Holleman, and more lately by Freund and Homé.

On Jan. 12th, 1901, before the Obstetrical Society of London, the subject was thoroughly discussed by Mr. Bland-Sutton, Dr. Galabin and others, and Mr. Bland-Sutton presented microscopic sections obtained during a recent visit of his to Amsterdam, by the courtesy of Dr. Catharine Van Tussenbroek. Dr. Van Tussenbroek's case was a celebrated one, and, as Dr. Galabin said, the Obstetrical Society was to be congratulated that this much-controverted question might be considered finally settled, since Mr. Bland-Sutton, who had taken so much trouble to assure himself about Dr. Van Tussenbroek's case, was converted.

Another recent discussion of the same question was that before the Glasgow Obstetrical and Gynæcological Society on May 23rd, 1906, when a case of ovarian pregnancy was described, with lantern and microscopic demonstration, by the President, Dr. Keely, and Dr. A. Louise McIlroy. On this occasion, Dr. Munro-Kerr referred to a similar case of his own, not yet fully published, and stated his belief that these cases of ovarian pregnancy proved the foetal origin of the syncytium, and also cleared up many points on the unbedding of the ovum.

It is some two hundred years at least since belief in ovarian pregnancy was clearly stated, but we had no positive proof of it until the modern cases cited above were thoroughly examined and accepted.

**RECOMMENDATIONS OF THE COMMITTEE OF THE
BOARD OF TRUSTEES OF THE TORONTO
GENERAL HOSPITAL ON STAFF
REORGANIZATION.**

In making appointments to the Visiting Staff the Board of Trustees shall regard especially the previous training and record of the applicant, his capacity to render service to the sick in the Hospital, his scientific attainments, his teaching capacity and the promise he gives for future work.

All appointments shall be made annually.

There shall be no remuneration to members of the Visiting Staff.

In making appointments to the Staff sex shall be no bar.

The members of the Visiting Staff shall not be allowed to serve on the Staff of any other General Hospital.

SERVICES.

The following shall be the services in the several departments of the Hospital:—

In Medicine (including Dermatology and Neurology), three co-ordinate services.

In Surgery, three co-ordinate services.

In Obstetrics, one service.

In Gynaecology, one service.

In Ophthalmology, one service.

In Otology, Rhinology and Laryngology, one service.

With respect to the above recommendations as to co-ordinate services in Medicine and Surgery, it is understood that the decision reached by the Committee at the present time and with regard to the existing situation is not to preclude the Board at a future time from re-opening the question and considering whether a different system might not better serve the interests of the Hospital and of medical education.

Each of the services in the several departments shall be under a head with such associates and assistants as may be found necessary.

It is the intention that the divisions now existing in the Hospital by which the eye and ear work constitutes one department and the nose and throat another shall be abolished, and that, instead, there shall be an Eye Department separate and distinct from a department which shall embrace the ear, nose and throat.

The several services in all departments shall be so organized as

to include both indoor and outdoor patients, and the heads of such services shall be responsible for the treatment of all such patients.

The heads in Surgery shall retire from their position at the age of 55, and the heads in Medicine at the age of 60 years. The Board of Trustees, however, may decide by a majority of the whole Board to extend the age limit to 60 years in the case of Surgeons and 65 years in the case of Physicians for special reason. The age limit for Surgeons shall apply to the heads in the Departments of Obstetrics, Gynæcology, Ophthalmology, Otology, Rhinology and Laryngology.

The term of service of heads of the several services in all departments shall be ten years, this term to be extended for five years for special reason if a majority of the whole Board of Trustees so decides. This term limit shall apply only from the date of appointment under the present reorganization.

The three heads in Medicine shall not engage in general practice, but shall confine their work outside of the Hospital to consultation.

The three heads in Surgery shall practice Surgery only.

The head of the service in Obstetrics shall practise Obstetrics and Pediatrics only.

The head of the service in Gynæcology shall confine his work in the Hospital to Gynæcology only, but may outside engage in Surgery, but not in general practice.

The head of the service in Ophthalmology shall confine his work in the Hospital to Ophthalmology, but may outside practise the three other specialties of Otology, Rhinology and Laryngology.

The head of the service in the Ear, Nose and Throat Department shall confine his work in the Hospital to these specialties, but may in his outside practice also treat diseases of the eye.

There shall be a Department of Pathology and Bacteriology and a Department of Pathological Chemistry. These two departments shall be placed in charge of professors of the University, it being understood that the University is willing to assume payment of the salaries of such professors.

The Department of Anæsthetics shall be under the supervision of one head.

GENERAL REGULATIONS.

All public ward patients shall be entered under the care of heads of services, and shall be available for the clinical instruction of students of the Medical Faculty of the University of Toronto.

Members of the Medical Profession who are not on the Staff of the Hospital shall have the privilege of attending patients in the private, semi-private and semi-public wards.

There shall be a Medical Board, the work of which shall be advisory only. This Board shall consist of the heads of the various services.

Seniors who, by reason of the age or length of service limit, will be obliged to sever their connection with the Active Staff, may be given positions on the Consulting Staff.

The appointments to the reorganized staff shall be made at the earliest possible date, but the Board may decide not to give them effect until the close of the present college year.

Having regard to the requirements of Sec. 20 of Cap. 59, 6, Edward VII., "An Act respecting the Toronto General Hospital," which provides that the Trustees shall allow any medical student of the University of Toronto to visit the wards of the Hospital and to attend them for the purpose of receiving instruction from the members of the Faculty of Medicine of the University of Toronto, the Committee recommends that, in order to make adequate provision for such clinical instruction being given, the Board of Trustees should appoint a committee to confer from time to time with a committee which it is suggested the Board of Governors of the University should similarly appoint for the purpose of determining from time to time the facilities which shall be offered for such instruction and proper regulations with reference thereto.

The second interim report of the Committee of the Board of Trustees of the Toronto General Hospital on Staff Reorganization was presented to the Board, and carried without amendment. The report is as follows:

"Your Committee recommends that the senior professor in Medicine and the senior professor in Surgery in the University of Toronto shall be ex-officio members of the Active Staff of the Hospital. In the event of these professors being heads of services in the respective departments of Medicine and Surgery in the Hospital, they shall be subject to such regulations as apply to the heads of services, but at the termination of their *active* service as such heads, they shall continue as ex-officio members of the Active Staff.

"With regard to the headship of the services in the several departments, your Committee make the following recommendations:

"(1) That Drs. A. McPhedran, W. P. Caven and G. Chambers be appointed as heads of the services in Medicine.

"(2) That Mr. I. H. Cameron, Professor of Surgery in the University of Toronto, be appointed, ex-officio, a member of the Active Staff of the Hospital, and that Drs. G. Bingham, A. Primrose and H. A. Bruce be appointed as heads of the services in Surgery.

"(3) That Dr. J. F. W. Ross be appointed head of the service in Gynæcology.

"(4) That Dr. Kennedy McIlwraith be appointed as head of the service in Obstetrics.

"(5) That Dr. Geo. McDonagh be appointed head of service in the Ear, Nose and Throat Department.

"(6) That Dr. R. A. Reeve be appointed head of the service in the Eye Department. With regard to this recommendation your Committee considered it in the interests of the Hospital to infringe on the rule as to age limit adopted by the Board, by reason of Dr. Reeve's special qualifications for the position. It is recommended, however, on account of such rule, that the appointment, if made, shall come up for special consideration annually."

NOTES.

Canadian Hospital Association.

At a meeting of the Executive of the Canadian Hospital Association at the Hospital for Sick Children, it was decided to hold the next meeting of the Association in Toronto, in the Parliament Buildings (if the rooms can be obtained), on Easter Monday and the following Tuesday, 1908. The meeting will open at 2 o'clock on Monday; the Tuesday session will be held at 9.30 a.m. and 2 p.m.

A reception will be given by the President, Miss Louisa Brent, in the new Nurses' Home of the Children's Hospital on Easter Monday evening at 8 o'clock.

Dr. S. S. Goldwater, Superintendent of the Mount Sinai Hospital, New York, and President of the American Hospital Association; Dr. C. K. Clarke, Superintendent of the Toronto Hospital for Insane; Del T. Sutton, Esq., editor of the *National Hospital Record*, Detroit; Dr. W. J. Dobbie, Superintendent of the Toronto Free Hospital for Consumptives, and Henry M. Hurd, Esq., Superintendent of the Johns Hopkins Hospital, Baltimore, have promised to give papers. A number of the Canadian superintendents have also been invited to contribute to the program.

Graduate Nurses in Toronto.

We learn from Miss Anna M. Greer, in an article published in *The Canadian Nurse* for November, that there are 300 graduate nurses practising their profession in Toronto, and probably 100 more qualified, but not practising. It has been thought for some time that an organization of these nurses should take place. It was hoped that the establishment of a Nurses' Club would do much good by bringing its members in contact with each other.

An effort was made between one and two years ago to have the nursing body of Ontario incorporated by Act of Parliament, and placed in a position somewhat similar to that of the College of Physicians and Surgeons of Ontario. For certain reasons, which it is unnecessary now to discuss, the Bill was withdrawn before any vote was taken upon it. After the withdrawal of this proposed Bill, the idea was evolved to form a club of the graduate nurses in Toronto, with headquarters where the social as well as the material welfare of all nurses would be looked after by their own members. In the same connection provision will be made for the Registry, which is now under Miss Barwick's care, and for reading rooms, club room and a luncheon room.

A charter was taken out giving the proposed Club full powers in the direction indicated. A large proportion of the money required will be realized by sale of stock in small shares, which will give the holders certain privileges in the club. In connection with the Club it is hoped that there will be a residence for 40 or 50 nurses, who will keep in close touch with the Registrar.

At the annual meeting of the College of Physicians and Surgeons in Manitoba the following physicians were elected for the ensuing year:—President, Dr. Rogers; Vice-President, Dr. O'Brien; Registrar, Dr. J. S. Gray; Treasurer, Dr. Jas. Paterson.

At the last meeting of the Saskatchewan Medical Society, held at Indian Head, Nov. 7th, the following officers were elected: Dr. Thompson, of Regina, President; Dr. Charlton, Secretary.

At the recent meeting of the Provincial Medical Association of Alberta, at Edmonton, Oct. 15th, the following officers were elected:—President, Dr. H. C. Wilson, Edmonton; First Vice-President, Dr. Malcolmson, Frank; 2nd Vice-President, Dr. H. R. Smith, Edmonton; 3rd Vice-President, Dr. McEachran, Calgary; 4th Vice-President, Dr. Hewetson, Pincher Creek; and

Secretary-Treasurer, Dr. Dunn, Edmonton. The next annual meeting will be held at Banff.

Thirty-three candidates went up for the last licensing examination for British Columbia, and among them were three ladies.

We learn from the Western Canada Medical Journal that it is now twenty-five years since the federation of the Manitoba Medical College, and the original incorporators, Drs. Blanchard, Good, Patterson, Jones and Sutherland, are still practising in Winnipeg. About 20 freshmen have registered this year for the five years' course, and there are in all the years over 80 students.

Florence Nightingale Honored.

Florence Nightingale, the English philanthropist, has been decorated with the Order of Merit by King Edward. She is the first woman to receive this distinction, which up to the present time has been bestowed only upon nineteen men, each one of marked eminence.

The Order of Merit was founded by King Edward in 1902 for the recognition of especially distinguished services in all walks of life.

It is expected that the new Medical Building for Queen's Medical Faculty, Kingston, for which the Ontario Government donated \$50,000 last January, will be opened January 14th, and it is also expected that Dr. Lewellys F. Barker, Professor of Medicine in Johns Hopkins Hospital, Baltimore, will be one of the speakers at the function.

A damage action to recover \$10,000, brought by Miss Appeline Belland against Dr. R. Barrington Nevitt, Toronto, was tried Nov. 28th in the non-jury Assize Court, before Mr. Justice Maybee. Miss Belland underwent an operation at St. Michael's Hospital last February. She claimed at the trial that the doctor exceeded his instructions, and that, moreover, he allowed the operation to be witnessed by a number of students. She also stated that she received very unkind treatment in the hospital, that the doctors were cruel to her, and that the nurses tried "to make way" with her.

Dr. Nevitt in the witness box said the operation was an exceedingly difficult and dangerous one, and that it was utterly impossible to perform it in any other way. If the operation had been left incomplete the patient would inevitably have died.

The patient was non-suited, and the case was summarily dismissed by Mr. Justice Maybee.

Personals.

Dr. F. W. Rolph (Trin., '05) is at present living at 831 West Bloor Street.

Dr. F. J. Ball (Tor., '93) has removed from Rugby, Ont., to Regina, Sask.

Dr. F. J. Cawthorpe (Tor., '98) has removed from Tiverton to Park Hill, Ont.

Dr. R. J. Reade (Tor., '04) has removed from Deer Park to 17, Classic Avenue, Toronto.

Dr. Adam A. Beatty, of 201 Bloor Street, Toronto, arrived home from Europe Dec. 5th.

Dr. W. C. Gilday (Tor., '05) is at present engaged in post-graduate work in London, England.

Dr. D. A. Evans (Tor., '03), of Lisle, has sold his practice to Dr. Rawson Harris, of London, England.

Dr. E. L. Hodgins (Tor., '03) has been admitted a member of the Royal College of Surgeons of England.

Dr. J. E. Gibbs (Tor., '96), of Victoria, B.C., has recently returned from Vienna, where he was doing post-graduate work.

Dr. J. T. Clarke, Toronto, who spent two months in Halifax, taking a course at the Military Hospital, returned home Dec. 2nd.

Dr. C. A. Langmaid (Tor., '06), after doing post-graduate work in Glasgow and Edinburgh, was, at last accounts, visiting Cardiff, S. Wales.

Dr. Alfred E. Morgan has been appointed Associate Coroner for Toronto, and Dr. Leeming Carr has been appointed Associate Coroner for Hamilton.

Dr. A. L. W. Webb (Tor., '03), formerly of Brighton, after practising a year in Wooler, sold his practice and good-will to Dr. S. Anderson, Nov. 1st.

Dr. C. More Stewart (Tor., '97), after spending a year as Resident Surgeon in the Toronto General Hospital, practised for a time in Ailsa Craig. He went to England about two years ago, and was for a time Resident Surgeon of the Throat Hospital, Golden Square. He has recently passed the first examination for the Fellowship of the Royal College of Surgeons, England.

Dr. D. J. Armour (Tor., '94) has been appointed Hunterian Professor of Surgery in the Royal College of Surgeons, London, England. Last year he was Lecturer of Surgery in the College.

Miss Smedley has resigned her position as Superintendent of the Western Hospital, Toronto, owing to her approaching marriage. Miss G. Woodland has been appointed her successor, and commenced her duties Dec. 15th, 1907.

Dr. T. Alexander Davies has recently returned to Toronto after an extended period of post graduate work in Glasgow, Edinburgh, Dublin, and Vienna, and is now engaged in practice of diseases of the eye, ear, nose and throat at 56 Wellesley Street.

Dr. F. E. Etherington has resigned the Secretaryship of Queen's Medical Faculty, Kingston, on account of the pressure of his duties in the Department of Anatomy, of which he is professor. Dr. A. R. B. Williamson has been appointed as his successor.

Dr. Rachael R. Todd (Tor., '06), of Toronto, after completing a year's service as Assistant House Physician in the New York Infirmary for Women and Children, has gone to Baltimore, where she has been appointed one of the Resident Physicians to the City Dispensary.

Marriages.

On Oct. 5th, in London, England, Dr. Geo. W. Badgerow (Tor., '94) to Miss Maude Oxley.

On Nov. 6th, at Manitowaning, Dr. Henry Glendenning (Tor., '05), to Miss May McLeod.

On Nov. 14th, Dr. W. B. Hendry (Tor., '04), to Miss Elizabeth A. MacMichael, B.A.

On Sept. 11th, Dr. Arthur L. Hore (Tor., '04), of Acton, to Miss Ethel Hagey.

On Oct. 16th, Dr. J. Heurner Mullen (Tor., '97), of Hamilton, to Miss Ethel Lazier.

Obituary.

E. H. COLEMAN, M.D.

Dr. Coleman, who graduated in 1866 and for 40 years lived in Sidney Township, near Belleville, died Oct. 31st, aged 75. During the last few years of his life he did little or no active practice. He had a stroke of apoplexy Aug. 1st, which was followed by paralysis.

EDWARD J. T. FISHER, M.D.

Dr. Fisher, of 121 Spadina Avenue, Toronto, a graduate of Victoria in 1867, died at midnight Dec. 8th, aged 64. The cause of death is said to have been paralysis following apoplexy.

J. A. ATTRIDGE, M.D.

Dr. Attridge, formerly of High Gate, Ont., and for several years a practitioner in Detroit, was fatally shot in that city on the evening of Dec. 4th.

LORD KELVIN.

Lord Kelvin (William Thompson), England's greatest electrician, died December 17th, after an illness of two weeks, aged 83. He visited Toronto and Montreal in 1897 with Lord Lister and other members of the British Association for the Advancement of Science. The degree of LL.D. was conferred on Kelvin, Lister and others by several Canadian universities. Lister, at the special convocation of the University of Toronto, in the course of his short address, said: "I cannot consider myself worthy, as it were, to unloose the tie of the shoe of men like Lord Kelvin."

WILLIAM BAYARD, M.D., LL.D.

Dr. Bayard of St. John, N.B., died December 17th, aged 94. It will be remembered by many that on the 1st of August last there was an interesting function in St. John, when a large number of physicians of the Maritime Provinces met at the house of Dr. Bayard to offer their congratulations on the seventieth anniversary of his graduation as a doctor in medicine from the University of Edinburgh. He was highly respected and much beloved by his many friends in all parts of Canada. He was President of the Canadian Medical Association at the meeting held in Kingston in 1895.

Correspondence.

THE RE-ORGANIZATION AT THE TORONTO GENERAL HOSPITAL.

To the Editor of THE CANADIAN PRACTITIONER AND REVIEW :

Dear Sir,—After a struggle of over thirteen months, the Trustees of the Toronto General Hospital have reported on staff re-organization. The report was prepared by a committee appointed by the Board on the 7th November, 1906. This committee, it would appear from the report, has very carefully studied the whole question of hospital arrangement from the standpoint of the medical faculty of the University of Toronto alone, and I am told they did not think it necessary, or even courteous, to consult with the members of the staff unattached to that faculty. The report, therefore, as might be expected, is entirely favorable to the teaching staff of the medical faculty, and wholly ignores the fact that interests other than school interests were entitled to and should have been given consideration.

By the adoption of this report, the Toronto General Hospital becomes, practically, an integral part of the medical faculty of the University of Toronto, as it is understood all appointments as heads of services are to be given to members of the teaching staff to the exclusion of outside members.

The action of the Trustees would have been characterized by a desire for a greater amount of public good if, as it has always been maintained, there should be an equal representation of the school men and the non-school men appointed to the staff, and if the members of the medical faculty desired to have three services in Medicine and three in Surgery and one in each of the other departments, they should in fairness have conceded an equal number to the non-school representatives.

When one recalls all the facts and circumstances relating to the foundation of the Toronto General Hospital, the character of the donations which have from time to time been given for its maintenance and endowment, and the magnificent contributions from many of the citizens, it might have been expected that the Trustees would have taken this broader and more public-spirited view, and would not have allowed the making of the appointments to the staff to be so fully dependent on the question of clinical teaching and status in the medical faculty.

The students now play the most important rôle in the Hospital, as all public ward patients are to be practically handed

over to them as clinical material. Wards which were formerly assigned to poor patients are now denominated semi-public wards, and no doubt many patients who can ill afford to pay will of necessity have to pay in order to obtain admission, and will be taxed to the full. The number of beds set aside for the sick-poor has been, therefore, lessened, and the General Hospital, whose doors have been for a generation or more thrown wide open to the poor of the city, is, it would seem, henceforth to be conducted largely as a business proposition rather than upon benevolent lines, and almost entirely as an educational institution practically to be controlled by the Governors of the University of Toronto.

The whole spirit and attitude of the Trust has apparently changed, and modern methods of commercial life have entered into the management of the institution, until the intent of the words over the main entrance, "I was sick and ye visited me," seems to be relegated to the background.

Do some of the present Trustees ever think of the Hospital as a place of charity, except, of course, in the conventional sense. Or is it coming to be regarded by them wholly as a business enterprise to be run at a profit?

As the general practitioner is now to be excluded from attendance upon the poor in the General Hospital, a movement for the establishment of a large and up-to-date municipal hospital, which would be open to all the doctors of the city of Toronto, may be expected. The field for such an hospital in a city the size of Toronto, with its foreign population increasing almost daily, need only be suggested to be appreciated, and its benefits to the community at large would be untold. Such a movement would, no doubt, receive the hearty endorsement and support of the ratepayers of the city.

Yours truly,

GENERAL PRACTITIONER.

TORONTO, DEC. 11th, '07.

SEWAGE-DISPOSAL AND WATER PROBLEM.

To the Editor CANADIAN PRACTITIONER AND REVIEW:

Sir,—I regret that I was away from home when you wrote asking my opinion regarding the sewage-disposal and water problem of Toronto for insertion in your last issue.

For more than twenty years all sanitary authorities who discussed the question expressed the opinion that the sewage of

Toronto should be carried off to a safe distance and so disposed of as not to pollute the Bay, nor injuriously affect the lake. We have had opinions in abundance: Shanley, Keating, McAlpine, Mansergh, Herring, Gray, Jennings, and others, and a year or so ago the schemes of Mr. Rust and Dr. Sheard, after full consideration of all the reports of the foregoing, and of the float experiments of the late Mr. Alan McDougall and others, and the testimony of our native fishermen and navigators as to lake and bay currents. Any differences of opinion were not as to the necessity of getting rid of the filth of the city, but as to what "safe distance" and sufficiently "safe disposal" might mean. This was the only difference in the then final deliverance of the present City Medical Health Officer and Engineer referred to above. The latter thought that if the sewage were taken down three miles beyond the eastern city limits it might then be passed into the lake without treatment. The Medical Health Officer thought that the sewage should undergo treatment before being allowed to flow into the lake. This view was that which prevailed at a meeting of the Provincial Board of Health by formal resolution, at which the Medical Officer of Health and the City Engineer were present; disposal on a tract of sandy land north of the Woodbine, after septic-tank treatment, being the scheme decided upon.

The benefits expected from this scheme were:—(1) That the whole Bay and waterfront would have wholesome water. (2) That the pollution of our drinking water by the sewage and surface filth of the city would cease. (3) That we should not continue to foul and misuse the lake, in which all the communities along its shores have a common interest.

Nothing has since occurred to disprove the feasibility of the scheme then resolved upon, or to prove that the expectant benefits will not be obtained by its being carried into effect, or to lessen the necessity of its being carried out.

Experiments and observations have shown that our water supply is polluted, and that currents of polluted water are carried from the Eastern and Western Channels to the intake. The fear of this was one of the reasons for urging the removal and purification of the sewage by means of a trunk sewer, septic tanks and filter beds.

In determining conditions for sewage disposal in connection with some of the towns on the north shore of Lake Ontario to the east of us, some members of the Provincial Board of Health laid it down as an axiom that no community should be allowed to pour its crude sewage into the lake, and this position was

practically confirmed by resolution in the cases of towns applying for approval of sewage-disposal schemes.

How, then, is it to be advocated, now that the people of the Province, with the Provincial Board of Health and the courts at their disposal, should allow this enormous pollution to continue? Or, that a progressive city and educational centre like Toronto should continue the dirty and disgraceful conduct which has been commented upon by the Department of Public Works, in connection with the question of a grant to our harbor, and by several of our judges, when sanitary questions have been before the courts? It is a dark spot which makes a Torontonianshamed for the civilization and enlightenment of a city regarding which in most respects he feels a justifiable pride. During the past two years I have attended several International Congresses at which questions of sewage-disposal were discussed, and have visited several sewage-disposal works and water-filtration plants, and I assure you that it was very unpleasant to be asked how such things are done in Toronto.

It is disheartening and seems like waste time to have at this late day to try and convince people again of the necessity for a work which all sanitarians for so many years have acknowledged as urgently necessary.

As to the water supply, it has been generally held that the water of Lake Ontario, outside of certain limited areas of sewage contamination, is a wholesome potable water. I am not aware that this has been disproved. If it should now prove to be incorrect, then let us resort to filtration of this water; but first let us have samples taken and examined from situations well out in the lake, beyond areas exposed to pollution. The result will not lessen the necessity for proper disposal of our sewage, and in the meantime this should be proceeded with.

It has been stated that the water of the lake at the mouth of the Niagara River is so polluted by the sewage of Buffalo and other places that it is unfit for drinking; but what we want to know is whether the water a few miles straight out from our own shore is potable water. This is the water which would extend to our intake pipe if the filth of Toronto were so disposed of as not to befoul it.

Cities which have been quoted as reducing their death rate by purification of the water supply have also adopted efficient systems of sewage disposal. Chicago has no filtration, but purified her water supply by expending large sums of money on the Drainage Canal, by which she pumps her sewage and sends it off by the Desplaines and Mississippi Rivers. Berlin and Paris

are disposing of their sewage on tracts of sandy land, and, whilst filtering their drinking water, do not neglect efficient sewage-disposal.

Some of the cities and authorities quoted as examples and advisers to Toronto in the matter of water filtration are in the position of not having such a magnificent body of water as we have, or such facilities for obtaining a naturally pure supply and saving it from pollution.

If it be found necessary to filter Lake Ontario water we shall not improve the process by allowing our own sewage to be added to it before filtration. Besides the natural repulsiveness of the idea of drinking filtered sewage, it is an ascertained fact from observation that a comparatively clean water can be filtered more readily and at less cost than a very dirty one.

Toronto city fathers for the past twenty or twenty-five years have had plenty of outside expert advice and have done nothing. It is to be hoped those of to-day may get to work and have such further data taken by sanitary officials here, who know the situation better than outsiders, and are quite capable of making all necessary investigations and tests, and then it is to be further hoped that some means be taken to push the matter with the citizens by a vigorous campaign.

The report of Mr. Mansergh, which has been quoted in connection with our water supply, spoke in the following very strong terms of our wrong doing in pouring our sewage into the lake:

“During my stay in Toronto I did not meet a single individual who had a single word to say in justification of the existing state of things, excepting that it would cost a very large sum of money to remedy it. To discharge all the sewage of 175,000 people in its crude state into a tideless and practically stagnant harbor is obviously a very wrong thing to do, and every rational man must condemn it.

“If Toronto is ever to take the high position as a residential city which its climate and other natural advantages would justify, this blot must be wiped out. All the world over people are becoming more alive to the importance of safe sanitary surroundings and more critical in fixing upon a place of permanent residence; and a common enough question to be asked now-a-days is: Where does the sewage go to, and where does the water come from?”

What would his opinion be now when the population of Toronto, and consequent filth pollution, are more than half as much again?

WM. OLDRIGHT.

Book Reviews.

SURGICAL APPLIED ANATOMY. By Sir Frederick Treves, F.R.C.S. Sergeant-Surgeon to H. M. the King, Late Lecturer on Anatomy at the London Hospital. New (5th) edition, thoroughly revised. Pocket size 12 mo, 640 pages, 107 illustrations, of which 41 are in colors. Cloth, red edges, \$2.25, net. Lea Brothers & Co., Philadelphia and New York. 1907.

This is one of the rare works which is all meat. That it is widely appreciated is shown by the fact that 37,000 copies have been printed. It deals with a "borderland" subject, where two great branches meet and overlap. To write authoritatively accordingly requires full command of both, and Treves possesses this knowledge in a measure that has made him one of the most famous surgeons and anatomists in the world. He also has the gift of clear and logical thought and hence of terse and graphic expression. The author has again brought it up to the latest date, thoroughly revising it and adding considerably to its text and illustrations. The use of colors is a new feature of obvious value in connection with its subject.

A TEXT-BOOK OF PHYSIOLOGICAL CHEMISTRY. For Students of Medicine and Physicians. By Charles E. Simon, M.D., Professor of Clinical Pathology in the Baltimore Medical College. New (3rd) edition. In one octave volume of 490 pages. Cloth, \$3.25, net. Lea Brothers & Co., Philadelphia and New York. 1907.

Professor Simon has succeeded in the above work in presenting a volume dealing with the subject of "Physiological Chemistry" which has the two most important attributes of a medical publication—a clear, straightforward practical text brought thoroughly up-to-date.

The tendency in recent years towards the recognition of chemistry as a branch, not only of the preparation for the study of medicine, but of the routine clinical work in private and hospital practice, has demanded an authoritative book which would be of service to the ordinary student and practitioner, as well as to the chemist who devotes his time solely to research, and in Simon's work we recognize just such a treatise.

The subject matter has been freed as far as is practical from theoretical discussions, and stress has been laid on the more practical points; in the first section a general survey of the origin and chemical nature of the fats, albumens and carbohydrates has been undertaken; the second deals with digestion, resorption and excretion, including the ferments, juices, bile, bacterial action, etc.; finally comes a study of the tissues and organs of the animal body, the animal cell, muscle, nerve, and

other constituents; their physiology and products as seen in the urine and feces are fully considered. The volume closes with a series of about 50 exercises, suggested as suitable for use of students engaged in laboratory work. We congratulate the author on this production and beg to heartily recommend it to students of physiological chemistry.

THE CARE OF THE BABY. The New (4th) Edition. By J. P. Crozer Griffith, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Fourth Revised Edition. 12mo of 455 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$1.50 net. Canadian Agents, J. A. Carveth & Co., Toronto.

This is a simple, practical book, founded on a basis of science, written in a plain and interesting way. It will be found of great service to mothers, nurses, medical students, and active practitioners. The author discusses the hygiene of pregnancy, and then goes on to describe the characteristics of a healthy baby. He also gives minute directions as to the proper methods of feeding, dressing and caring for young children in health and in disease.

So great has been the demand, the W. B. Saunders Company, the medical publishers of Philadelphia and London, have found it necessary to issue another revised edition of their illustrated catalogue of medical and surgical books. In looking through the copy we have received, we find that since the issuance of the last edition six months ago, the publishers have placed on the market some twenty-five new books and new editions—truly an indication of publishing activity. The colored insert plates from Keen's new Surgery, which enhanced the value of the former edition, has been replaced by a new one from the second volume of the same work, and this alone gives the catalogue a real value. A copy will be sent to any physician upon request.

THE PRACTITIONER'S VISITING LIST, 1908, published by Lea Bros. & Co., is a neat little volume, bound in soft red leather, of a very convenient size and weight, and can readily be carried in the coat pocket. The first few pages contain a considerable amount of useful information in a very "get-at-able" form, including dose table, description of certain minor operations, etc., which one may find convenient to refer to in emergencies. Following this, in the body of the book, is provision for a daily record of visits, charges, cash account, obstetrical engagements, addresses, etc. The price is \$1.25, or with thumb-index, \$1.50.

Selections.

SURGICAL SUGGESTIONS.

Female Generative Organs.

Don't be tempted to exclude gonorrhoea because you see no bacterial or other evidence of vaginal or urethral infection. In women the presence of gonorrhoea may not make itself known for six weeks or more, and salpingitis may be the first evidence.

Before performing curettage, always make a bimanual examination of the uterus in narcosis. The finding may determine some other form of treatment. Again, after curettage, before allowing the patient to get out of bed, carefully examine the pelvis for signs of a possible exudate.

As a final cleansing step after curettage of the uterus, it is well to introduce, and at once withdraw, a packing of gauze. This brings out fragments of tissue not washed out by the irrigation.

No operation for sterility in the female should be performed without first excluding sterility on the husband's part.

In the early months of pregnancy examinations should be made to determine that there is no retroversion, or to treat it if it exists. A retroverted gravid uterus impacted in the curve of the sacrum always aborts.

Hemorrhage and Shock.

Restlessness, increasing pallor, increasing air-hunger, increasing weakness of the pulse, falling temperature (sub-normal), and the ephemeral effect of stimulation, all point to hemorrhage rather than shock. In addition, there is often some local sign or symptom.

In post-operative collapse, if, after studying the symptoms, there be any doubt whether the condition be due to shock or to concealed hemorrhage, the wound should be opened and bleeding sought for.

In dealing with secondary hemorrhage from the rectum (whether bleeding vessels are tied or not), it is better to tampon with gauze wrapped about a piece of stout rubber tubing than with gauze alone.

Dressings.

When a "wet dressing" fails to properly drain a septic wound, try a glycerin dressing—gauze wrung out in pure glycerin and covered with waterproof material.

A bichloride of mercury dressing should never be applied on an area of skin on which tincture of iodine has been recently painted. An iodide of mercury is formed, which is highly irritating.

Ichthyol, if used in ointment sufficiently strong (25 to 50 per cent.), is perhaps the most useful single medicament in aborting early superficial infections.

Subiodide of bismuth dusted on an oozing granulating wound promptly stops the bleeding. It is also an excellent stimulant to the growth of epithelium.

Collodion, commonly used to seal a puncture wound, as after aspiration, will not adhere if the spot is wet or bleeding. To obviate this, pinch up the skin, wipe it dry, apply the collodion and continue the compression a minute or so until the collodion has begun to contract.—From *Surgical Suggestions*.

The Diagnosis of Anemia.

R. C. Cabot, Boston (*Journal A. M. A.*, August 24), summarizes the conclusions of his paper on the diagnosis of anemia substantially as follows: 1. In the diagnosis of anemia all facts must be considered. The etiologic factors and the general physical diagnostic data are as important as the hematologic findings. This is particularly true of the secondary anemias. 2. There are but two important types of anemia if we are to judge by the blood examination alone. To the first type belong the anemias due to hemorrhage, malaria, nephritis, and other diseases leading to increased destruction of red blood corpuscles. He also includes chlorosis in this class, so far as the blood picture is concerned, though elsewhere than in his conclusions he mentions the characteristic usual non-reduction of red corpuscles and low color index. Here he says it is distinguished wholly by the absence of etiologic factors and the age and sex of the patient. 3. Pernicious anemia can usually, but not always, be distinguished by the blood picture alone. If this is supported by the history and physical examination the diagnosis is one of the clearest and surest in medicine. The most important single fact is the low red cell count with relative increase in hemoglobin. 4. The parasitic anemias are not always recognizable by the blood examination, but offer no difficulties in diagnosis if the eggs of the parasite are sought. Myelophthisic anemia is easily recognized by the evidences of its cause. The rare aplastic anemia has usually been observed in young girls and associated with severe purpura. The blood is like that in pernicious anemia, except that the erythrocytes are smaller and rarely contain nuclei.