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The Canadian Practitioner and Review.

Vol. XXXIV. TORONTO, APRIL, 1909. No. 4

Original Communications.

NOTES ON A RECENT VISIT TO SURGICAL CLINICS IN GERMANY AND SWITZERLAND.*

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During a recent visit to Europe the writer had an opportunity of visiting a number of surgical clinics, both in Germany and Switzerland, and he considered it might be of some interest to the members of the Academy of Medicine to narrate some of his experiences, and to note some comparison of the methods employed in the different hospitals in the countries visited.

At Heidelberg Professor Narath began his clinic in the early morning, as is common in most German hospitals, and conducted it in a large operating theatre, sufficiently commodious to accommodate the entire class, consisting of seventy-five students. The method of instruction was excellent. It was at once evident that the professor was an expert anatomist, as well as a surgeon of ability. He used the blackboard freely with colored chalks, and demonstrated by this means the anatomical details of the case under inspection; thus, in the case of a boy with fracture at the lower end of the humerus, with paralysis of the ulnar nerve, he demonstrated diagrammatically the distribution of the nerve, going into such detail as the osseous and facial attachments of the interossei muscles.

* Read before the Academy of Medicine, Toronto.

A further feature of Professor Narath's clinic which appeared to the visitor as admirable, was his method of instructing the class whilst the operation was in progress; for example: He made his assistant do a gastro-enterostomy for obstruction of the pylorus, whilst he, at the same time, demonstrated the steps of the procedure by narrating what was going on, and by demonstrating each step of the operation by means of chalk diagrams upon the blackboard. The professor took no part himself in the operative procedure, but advised from time to time what technique should be employed.

All kinds of cases were brought into the operating theatre: both pus cases and aseptic cases were treated in the same room. Plaster jackets were applied there, and, in addition, dressings were done before the class, and patients were brought in for the purpose of illustrating the subject under discussion in the clinic. A great many of the operations were conducted under local anesthesia, novocain being used for the purpose. Such cases as colotomy, goitre, etc., were operated upon in this manner.

At Freiburg one was interested in visiting the Pathological Institute, where one was kindly received by Professor Aschoff, who visited Toronto two years ago. He has recently published an important contribution to the "Pathology of the Appendix," in which, among other things, he arrives at the conclusion that eighty per cent. of all individuals who have arrived at the 6th or 7th decade show evidence of, at some time, having suffered from appendicitis during lifetime. In his laboratory he has stored away a numerous number of appendices which have been removed during surgical operation, and which he has investigated carefully by histological methods. This collection, along with his autopsy findings, has been utilized for the purpose of arriving at the conclusions embodied in his paper.

Professor Goldmann, in Freiburg, combines the qualities of a well-trained pathologist with those of an expert surgeon, and he continues his pathological researches at the same time as he conducts a large surgical clinic. At present he is much interested in the pathology of cancer, and is working upon the method of invasion of blood vessels by cancerous growths. He showed some beautiful instances of vital stain in mice, and demonstrated, among other things, that in cases of cancer, experimentally induced in mice, the cancer cells absorbed nearly all the pigment injected.

In his surgical clinic, Professor Goldmann uses local anes-

thesia very largely, preceded by an injection of scopolamin two hours previous to the operation. Goldmann has utilized the X-ray very largely in connection with his surgical work, and, among other things, he demonstrated the relationship of the trachea to the goitre, and stated that he has found it of service to observe by this means in what manner the trachea is diverted from the middle line. Occasionally, as the result of such investigations, he has found it better to remove the smaller side of the goitre instead of the larger portion of the growth. Here, as elsewhere in Germany, one found that Freyer's method of performing supra-pubic prostatectomy was in favor; in fact, nowhere did the German surgeons seem to approve of the perineal route, which has recently been abandoned by them for what they invariably call "Freyer's Operation."

In Professor Krönig's clinic in Freiburg, one found an enthusiast in the employment of spinal anesthesia. Stovain is employed for the purpose, and the professor has already operated upon over one thousand cases under this form of anesthesia. He always uses a preliminary injection of scopolamin an hour and a half, and another one hour, before the operation. The apparatus which he used was so constructed that in each case the pressure of the cerebro-spinal fluid was measured at the time of the injection. The writer saw him perform what might be called "A Fantastic Operation."

This was a case of a patient who suffered from dysmenorrhea of unknown origin. She was placed under the anesthetic and by means of the transverse incision above the pubes, the pelvic viscera were exposed. Both ovaries were removed with a segment of the tubes by a V-shaped incision into the broad ligament. A piece of each excised ovary was removed for microscopic examination. The ovaries were then placed in normal saline at the body temperature in a glass jar, and exposed in this for ten minutes to the influence of the X-ray. They were then brought back, a second piece removed for microscopic examination, and then each ovary was stitched into a pocket formed between the round ligament and the remaining part of the broad ligament. The wound was then closed.

The professor stated that the menopause was not induced by the operation. He also informed me that it was yet too early to state what results would be obtained by the surgical procedure, as it was too soon to come to a conclusion.

The lighting of the operating-room in Professor Krönig's clinic was a feature of some importance. It consisted of an arc lamp erected in the south wall of the theatre, the rays of which passed through ground glass, and impinged upon a mirror which was suspended from the roof of the theatre. The mirror was so poised that it could be turned at the required

angle to reflect the rays of light directly down upon the field of operation. The light was excellent and under such complete control that perfect light was provided wherever it was required.

Professor Krönig illustrated well the active habits of some of our German colleagues. He rides every morning at six o'clock, and begins his operating at eight.

Professor Kraske, whose name is well known in connection with the operation for excision of the rectum, is the head of a very large hospital clinic, in which he controls no less than three hundred beds. On enquiry regarding his supervision of such a clinic, one was told that a great deal of the work necessarily devolved upon his assistants, and in fact many of the patients were not seen by him. It is interesting to note also that this is the type of hospital which is to be found all over Germany. The hospital is a Government institution, and the surgeon, such as Kraske, receives a small salary ($1,500) for attendance upon the patients of the hospital clinic. He then receives fees from students, and, in addition, is provided with a private theatre and wards for the treatment of his private patients. It would appear that under such circumstances the head of the clinic does all his surgical work within the walls of the hospital.

One sees from time to time in Germany, even among men well known for their contributions to surgery, work which would not appeal to an advanced surgeon in this country; as an example, the operation of gastro-enterostomy performed by Kraske. After completing the anastomosis, he proceeded to close the abdominal wound. This he did by passing in some three or four aluminum sutures, which extended through the peritoneum and muscles, and were twisted. The length of the incision was about eight inches, and the whole of its superficial portion was left open to granulate without a single suture, gauze being laid in the gap.

In Basel one visited the magnificent hospital operating theatre of Wilm's, the most complete and perfect to be seen anywhere. Here, too, if one might advise the visitor, one would suggest that he should, if possible, gain access to the beautiful private surgical hospital, which has recently been opened in Basel by Professor Haegler, a surgeon of eminence, and who is most thorough in his technique, more particularly in the development of aseptic methods. He has written an interesting monograph on "The Cleansing of the Hands for Surgical Work."

From Basel one journeyed to Berne, in Switzerland, where one of the most eminent surgeons of our time, Professor Kocher, was visited. Here one found a man in his seventieth year doing work which attracts world-wide attention. Although no longer a young man, he still accomplishes a most arduous task. He appears daily in his surgical clinic at eight o'clock in the morning, conducts a clinic before the students for an hour and a half, and then proceeds to his operating-room, where he is engaged until noon or one o'clock. He then goes home to lunch, and, as is the habit in most Swiss and German towns, has his time of relaxation in the middle of the day. He has a large private hospital, and he devotes the latter part of the afternoon to work among his private patients. He then has consulting hours at his house in the evening, and thus from early morning until late at night he is engaged in active professional work. The visitor thoroughly appreciates the fact that Professor Kocher also takes much time and pains to show kindness and hospitality to the stranger visiting his clinic.

The work in Professor Kocher's clinic was extremely interesting, and one has there an opportunity of seeing many cases of goitre. The operation is conducted under local anesthesia, novocain being used for the purpose, the solution being made up with normal saline, and the addition of a small amount of adrenalin. In most cases from half an hour to one hour before operation, one-eighth of a grain of morphia is administered. Under exceptional circumstances, a general anesthetic is given; thus, in a girl fifteen years of age, ether on an open mask was chosen in preference to novocain, because the child was frightened, and would not remain calm under a local anesthetic. In all the goitre cases the collar incision is used. All bleeding points are secured with great care, and in the case of one operation, conducted by Dr. Albert Kocher, there were no less than fifty-one forceps in the wound at one time. During the operation the parathyroids were sought for, and when recognized were carefully preserved from injury. The infra-hyoid muscles were divided, but not the sterno-mastoid; the latter muscle was retracted sufficiently to give free access to the growth.

In connection with the thyroid work in Kocher's clinic, it is interesting to note the operations for the transplantation of thyroid disease in myxoedema.

While Professor Kocher was operating upon a goitre, his son carried out the following procedure upon a patient who was suffering from myxœdema. He cut down upon the tibia, divided the periosteum and gouged out a cavity in the bone. A portion of the thyroid tissue

which Professor Kocher had removed was then implanted in the cavity in the tibia and the periosteum stitched over this. The wound was then closed. This method of dealing with patients suffering from myxœdema has given sufficiently marked results to encourage further attempts in this way.

In excising the knee joint for tuberculous disease, one noted the fact that the tourniquet was used during the operation, and also that, although no sinuses existed, the wound was carefully drained by several glass drainage tubes. Before sawing the bone an abscess cavity which existed behind the tibia was thoroughly curetted and then swabbed with a mixture of carbolic acid, one part, and camphor two parts. After the dressing was applied, the whole limb was secured in plaster of Paris, which, we were told, was to be renewed in twenty-four hours; further, some gauze which had been packed into the abscess cavity was enclosed there, to be removed at the end of eight days.

Kocher's assistants did several operations, such as appendicectomy and hernia. The clinic was conducted before 200 students, 70 per cent. of whom were women, the latter chiefly Russians. Anatomical and pathological details were demonstrated by means of models, blackboard diagrams and X-ray exhibitions.

The care with which Professor Kocher would carry out the details of a difficult operation was exemplified by a case of gunshot injury of the arm, in which paralysis of the musculospiral nerve had resulted.

The injury had been received two months previously. The nerves of the brachial plexus were exposed in the axilla and the various nerves recognized by stroking them vigorously in a transverse direction with forceps and watching the muscular contraction which occurred in the hand and forearm. Loops of silk were passed around the nerves to preserve their identity. Finally the musculo-spiral nerve was secured and found intact in this part of its course. The arm was now turned over and an incision of six inches long was made on the posterior part of the arm and the musculo-spiral nerve exposed in its groove, and at this point was found to be divided. The ends were freshened and sutured with fine silk. The operation up to this point lasted two hours and a half. The patient was then handed over to an assistant for the purpose of closing the wound.

In performing a gastro-enterostomy for malignant disease of the stomach, Professor Kocher found that the stomach would not come up far enough to permit of the posterior operation. He then proceeded to anastomose by the anterior method. Two clamps were applied to the stomach through holes made in the gastro-colic omentum, isolating a V-shaped portion of the stomach. The jejunum was brought up and a good loop clamped off. Simple silk suture was used for the purpose of effecting the anastomosis.

In Professor Arnd's clinic in Berne one had an illustration of how much German patients will sometimes endure without anesthesia.

The case referred to was that of a man who had a simple fracture of the femur of three weeks' standing with angular deformity. Professor Arnd prepared the region of the knee and with antiseptic precautions drove two stout nails, each five inches long, one into the inner and the other into the outer condyle of the femur. Antiseptic dressings were applied about the nail where it entered the skin. Beyond the dressing picture wire was fastened to the nails in such fashion as to form a loop extending two inches beyond the heel. One was informed that extension would be applied to this loop of some forty pounds, and by this means it was hoped the deformity might be overcome. The patient complained severely of the pain during the operation, and I was informed that the only anesthetic he had received was one-half gram of veronal about three hours before.

At Lausanne one was interested in seeing the clinic conducted by Professor Roux. This eminent surgeon, who has made numerous contributions to surgery, is an operator who attains what one might describe as spectacular effects. He is very rapid in his work, as might be evidenced by the fact that one morning he did five major operations in two hours. These included a gastro-enterostomy, ligature of a ruptured patella ligament, cholecystostomy, appendicectomy, and an exploratory incision for suspected malignant disease of the stomach. The appendix was removed through the smallest incision I ever saw made for that purpose.

The wound was certainly not more than an inch and a quarter in length. He pulled the peritoneum into the wound, and after opening it introduced his finger, which completely filled the wound, and sought for the appendix. McBurney's gridiron incision was employed. The appendix was brought readily into the wound, sutured, and after crushing was separated by the thermo-cautery; the opening was closed by purse-string sutures. Buried sutures were used in the abdominal wound, and the skin closed, as is usual in his clinic, by the use of Michel's hooks.

Roux is quite an original character. He talked very rapidly and excitedly, and has a custom of never informing his assistants as to his definite intentions when he begins an operation; he takes pleasure in keeping them guessing as to what is going to take place next. His assistant told me that he was, under these circumstances, much surprised during the development of an operation which had been recently conducted for œsophageal stricture.

In this case the stricture was at the root of the neck, or slightly below that point. He proceeded to open the abdomen and selected a sufficiently long loop of jejunum, which he brought up into the wound. He isolated this portion of the bowel and restored the continuity of the bowel by anastomosing the divided portions above and below the seat of the division. The isolated piece of intestine was carefully ligated along the line of the mesentery some two inches from the bowel, so as to leave the arterial arcades of anastomosis, and their connection with one of the large mesenteric vessels uninjured; the

latter had been carefully preserved as it furnished the blood supply to the lower end of the jejunum loop. He then tunnelled up under the skin in front of the left side of the sternum and the left costal cartilages. The lower end of the isolated jejunum loop was anastomosed to the stomach in its anterior wall near the cardia. The upper end was anastomosed to the œsophagus in the neck, the piece of bowel passing up in the tunnel formed for its reception under the skin, and in front of the sternum and cartilages. This operation was done some months ago on a boy fourteen years of age, and I saw the patient in the ward and observed the result of the procedure. Roux's assistant told me that the lad was thin and emaciated to the last degree when he underwent the operation, and after the anastomosis described had been done, he increased rapidly in weight, and now appears in excellent health. One could observe when he was given water to drink the peristaltic wave passing down the piece of jejunum as it lay under the skin of the chest wall. By this operation Roux had succeeded in restoring the continuity between the mouth cavity and the stomach.

Roux in his clinic used two large blackboards, on which he made numerous freehand drawings. The students numbered about eighty, sixty per cent. of whom were women. After the clinic he proceeded to operate, and after he had finished he sketched upon the blackboard the important steps of each procedure, for demonstration to the students, who would assemble the following morning.

In a case of cholecystotomy he brought out a very much enlarged gall bladder into the wound and sutured it carefully by continuous suturing to the parietal peritoneum. The gall bladder was then opened and two large gall-stones removed. I was informed that in three weeks the gall bladder would be closed and returned into the peritoneum. Roux does not excise the gall bladder, because he states, "You never know when you may wish to perform a cholecystenterostomy for malignant disease."

In a case of tuberculous cystitis in a man thirty years of age, the bladder was washed out under ether with carbolic of the strength of one in twenty. One readily believed the accuracy of the statement made that the procedure was excessively painful and required the administration of morphia subsequently. It is said, however, to be very effective in this serious manifestation of tuberculous disease. The operation is done once a week.

In Munich one visited the large and well-equipped hospital, where one had every facility for obtaining information regarding the conduct of clinics, and the work of the hospital in general. Professor Müller, who visited Toronto some three years ago, was found conducting a clinic in the medical wards. He was giving a clinic on hearts, instructing what he called his "Percussion Class." On each bed a slate and pencil and chalk were found for the purpose of making illustrations, and these seemed very useful. About a dozen students were following the professor. In the space of three-quarters of an hour he had visited some twelve or fourteen cases, pointing out at each the salient features. He would leave two or three stu-

dents at a case as he went with the balance of the class to another patient. He worked with great rapidity, and talked incessantly. Many cases were auscultated by placing the bare ear to the bare chest. At all other times a single wooden stethoscope was employed.

In Professor Angerer's clinic in surgery, one found the usual extensive allotment of beds to the surgeon in charge of the clinic. Professor Angerer had 350 beds under his care, and associated with him were twelve assistants. The surgical portion of the hospital is quite new; all wards are large and well ventilated, and contain about 20 beds each. In this wing of the hospital, too, the gynecologist had one hundred beds, and here, too, wards are provided for many private patients. The operating-room in which Angerer operated was large, and would seat about three hundred students.

A fibro-adenoma of the upper jaw was removed in a woman about twenty years of age. The anesthesia was very badly provided for; the patient was sitting almost bolt upright in a very insecure posture. She had had morphia before the operation. Chloroform was given on a mask, but after the operation was begun no further anesthetic was administered and there was no local anesthesia. The operation lasted forty minutes and consisted in the removal of the greater part of the upper jaw. The patient moaned incessantly. I was told that the degree of anesthesia was what they called "Half Narcosis."

The visitor to Munich should not fail to see the magnificent and luxurious Anatomical Institute, which has just been opened. It is the most extensive and complete thing of the kind to be seen anywhere. The limitations of this paper will not permit a detailed description. Ample facilities are furnished for gross and microscopic anatomy; numerous rooms, with library, private retiring rooms and lunch room. Elaborate apparatus is found in the X-ray and photographic rooms. There is a museum in connection with the Institute, which is open to the public during certain hours of the day. In this institution they dissect some 200 cadavers in a year, but they have about 600 students studying anatomy.

Turning aside to some extent from the beaten road, the visitor is well repaid by visiting Jena, a small town famous as being situated near one of Napoleon's battlefields. The town had only 21,000 inhabitants. The object of visiting Jena is to visit the surgical clinic of Professor Riedel. This surgeon, although doing his work in a small town, draws his patients from all over the German Empire. The chief part of his work is done in the surgery of the gall bladder and bile ducts. Many will recall his name as associated with the abnormal enlarge-

ment of the right lobe of the liver, which has for some years been described in text-books as "Riedel's Lobe." The school in Jena is a small one, and in Professor Riedel's clinic are found only fourteen students; no women. The professor used the blackboard freely in illustrating his clinic. He occupied an hour in demonstrating the clinical features of osteomyelitis occurring in the tibia and femur of a girl thirteen years of age.

Osseous anchylosis had occurred at the hip joint, and after the students left, he proceeded to operate in this case. Leaving the anchylosed head in position, he did a transverse osteotomy through the great trochanter. He then excavated a hollow to form a new acetabulum for the reception of the upper end of the femoral shaft which he rounded off; he dissected a band of tissue and stitched it between the fragments with cat-gut in order to secure the formation of a false joint at that point.

A posterior gastro-enterostomy was done by an assistant using interrupted silk sutures without clamps of any description. A good long loop of jejunum was utilized and lateral anastomosis of the loop carried out. The anesthetic was chloroform, as is usual in this clinic. It was started, in this case, by an assistant, and for the last three quarters of an hour, continued by the ward tender. In an operation for excision of the hip joint an incision fully ten inches long was made over the trochanter major. The neck and greater part of the trochanter were sawn through. The acetabulum was said to have been involved. This large wound was left open without suture and packed with gauze.

On visiting the wards with the assistant, it was pointed out that most of the cases were either gall bladder or appendicitis. One case had recovered where an abscess secondary to gall bladder trouble had formed in the liver and ruptured into the lung. He drained this successfully.

In an operation for cholecystitis, Professor Riedel removed the gall bladder. Cholecystectomy he does very frequently and in this respect his methods differ from those of Roux above referred to. The case in which he had operated was said to have been a case of "Cholecystitis Concrementosa."

In the morning clinic Riedel occupied an hour and a half with demonstrations on appendicitis, illustrating his clinic with cases of fecal fistula and ileus.

At Leipsig one naturally visited the clinic of Professor Trendelenburg. He began his clinic at 7.30 a.m., and the arrangements for teaching in his operating theatre are excellent. One is not so sure that they are equally well adapted for aseptic surgery. There were eighty students (five women), in his clinic. As each case was brought in he called four students for questioning purposes. His thorough method of instruction may be illustrated by referring to a case of undescended testis, with hernia. This case he went into thoroughly, describ-

ing the causation, varieties and treatment. Then he turned on the electric current, darkened the room, and, with the epidiascope, he showed photographs of all varieties of cryptorchism and ectopia testis and complications of hernia and tumor. All these illustrations were of photographs from his own clinic. These photographs were kept in a cabinet, and filed in groups according to the disease. He had all his pathological specimens in a room adjoining the theatre, where there was quite an extensive museum. These museum specimens were likewise collected from his own clinic.

As each case was operated upon, the field was first painted with tincture of iodine, and then with a mixture of oil and benzine.

As the professor was proceeding with one of his operations, there was a sudden stir in the operating-room, and it was explained that one of the patients in the ward had developed thrombosis of the pulmonary artery. Professor Trendelenburg said he would try to remove the clot. The woman, aged about fifty years, was suffering from thrombosis of the right femoral vein, with oedema of the limb below. She had a rapid pulse and marked dyspnoea, these symptoms having developed suddenly. By the time she reached the operating-room, however, she had rallied somewhat, and the professor made up his mind that the case was not pulmonary thrombosis, but acute dilatation of the heart. This led him, however, to exhibit some interesting things. First, the heart of a calf, with a cicatrix in the pulmonary artery. He had induced thrombosis in the calf by tying the jugular and inducing the clot to pass back to the heart in some way. Then he cut down and removed the thrombus from the pulmonary artery, and the animal recovered. After six months he killed the animal, and hence the specimen. He then showed me two other specimens. These consisted of two clots (one broken and the other bifurcated), each about six inches long. These were from two cases in which he had operated in man. One patient had survived the operation 36 hours and the other 19 hours. The latter, he said, died from hemorrhage from the internal mammary artery, otherwise he thinks he might have saved him.

It was interesting to an Edinburgh graduate to learn from the professor that he spent his first year as a medical student in Edinburgh in 1867, and heard Syme, Simpson, Christison and other celebrities of that date. He said his main object in going to Edinburgh was to learn English.

An incident which illustrated the enthusiasm which still

exists in this surgeon was that when he thought the writer would be disappointed because the operation for pulmonary thrombosis did not come off, he remarked, "Never mind, come this afternoon at five and I shall do it for you on the cadaver."

The visitor at Leipsig will be repaid by visiting the Children's Hospital, where he will be courteously received by Professor Tillmanns. This is a comparatively small hospital of sixty beds.

At Berlin one is naturally interested in the work done in Bier's clinic. Professor Bier is best known in connection with the work he has done in utilizing hyperemia as a therapeutic measure. The clinic begins at eight in the morning. There were one hundred and twenty-five students present, of whom ten were women. In this theatre one-half of the front row of seats is reserved for visiting doctors. The blackboard and X-ray demonstrations are excellent. The clinic lasts for an hour and a half every day, and then operations begin and continue for the rest of the morning. Bier is a good anatomist, and one admired his method of naming each structure as he cut it, whether operating on the trunk or the extremities.

He did a Kraske operation for rectal cancer in a patient about fifty years of age under spinal anesthesia, tropacocain being used for the purpose, preceded an hour and a half before operation by scopolamine. After injection of the tropacocain the patient is inverted with the head down, the table being at an angle of forty-five degrees with the horizon. It was noticed in this clinic that silk was constantly used for suture material; in a radical cure of hernia, for example, silk was used throughout from peritoneum to skin inclusive.

In one case of hernia operation, Bier used an electric knife, which he stated was being employed by him for the first time. It consisted of a glass rod through which ran a wire. This terminated in a spear-shaped extremity, evidently of platinum. The tissues were not charred but cut cleanly, and it produced a perfectly clean-cut wound, such as would be made by a sharp knife. It was explained that a high tension current was used. The knife was again employed by Bier in a case of excision of the parotid gland for carcinoma.

In a case of intestinal obstruction, due to general peritonitis, following appendicitis, the abdomen was opened and Professor Clapp's apparatus was used to evacuate the contents of the intestine. A piece of distended bowel is taken and clamped off, after pressing the contents momentarily into the neighboring bowel. This empty bowel is opened and a tube introduced into the intestine, and secured there by purse string sutures. The contents are evacuated by aspiration without soiling the peritoneum. The bowel was threaded on the rubber tube, which could be pushed on for a distance of about two feet into the interior of the intestine.

A case of recurring sarcoma of the thigh was presented, in which Professor Bier, some months previously, had removed the growth, and in the effort to effect a radical cure had amputated the limb, along with the innominate bone, down to the pelvic brim, controlling the hemorrhage at the time by compressing the abdominal aorta with an

elastic band. One was informed that the control of hemorrhage was perfect and that no damage was done by compression, to either bowel or kidney.

The methods of utilizing hyperemia are illustrated in both the polyclinic and the "Septic Wards." Professor Schmieden, who visited Toronto some years ago, was particularly kind in his endeavor to give one every facility for seeing the work carried on in the clinic.

In the septic wards there were numerous cases of cellulitis of the hand and arm. The routine treatment for these was: (*a*) Employment for twenty hours of constriction above the affected area to induce hyperemia. There must be no pain or tingling, else the bandage is too tight. (*b*) Elevation of the limb for one hour, without constriction, to permit the edema to go down. (*c*) Daily dressing, with squeezing out all the pus and discharge, along with passive and active movements of the affected parts. The dressing seemed very painful. Professor Clappe tells me he uses this method for both staphylococcus and streptococcus infections, and the cases he showed illustrated both varieties. He does not cup these cases.

There were two cases of osteomyelitis treated in the following fashion: The tibia had been exposed from end to end with only one suture in the middle of an incision ten inches long. Iodoform gauze was laid in the incision. The dressing in all cases consisted of gauze wrung out of "superoxygenated water."

In the polyclinic one had an opportunity of observing many applications of the hyperemia method:

1. Whitlow and phlegmons, as in the septic wards.

2. Various forms of arthritis.—Stiff joints and tendons. Active hyperemia by hot air for twenty minutes to one hour. The apparatus was a large air chamber, the size of a large hot-air furnace, about ten feet in diameter. Holes in the side of this are fitted with rubber caps of various sizes to fit arms above and legs below. Sixteen patients can be accommodated at once. Hot air is applied to this chamber, which is kept at a constant temperature.

3. Rheumatism.—Whatever that term implies is treated by hot air massage. This is compressed air driven by a motor with rapid vibratory force, and impinges on a part through a glass nozzle the size of a small fire hose. It is very grateful to the feel, and is said to do much good.

4. Suction hyperemia.—Also applied in arthritis, with special apparatus for arms and legs.

5. Orthopedic.—A case of flat foot was being treated in a closed box, with a pulley apparatus so arranged that when

suction was applied hyperemia was produced at the same time as the deformity was corrected.

6. Tuberculous arthritis.—Two hours constriction daily, with massage and passive movements. Between times the limb is supported on suitable splints, so devised that the individual can get about without bearing weight on the affected joint.

7. Cupping.—In certain cases, such as mastitis, cervical abscess, and abscesses in different parts of the body.

One feature of Bier's clinic which appealed to one as of value was that near the operating theatre was the department for experimental surgery, where animals could be operated upon, with all the necessary technique for aseptic surgery. After spending the greater part of the morning in the operating theatre, Professor Schmieden retired to the room for experimental work, and performed a transplantation of a portion of a vein into an artery in a dog.

In Berlin one found Professor Casper doing special work in connection with the surgery in the urinary organs; more particularly is he known in connection with cystoscopic work. The writer found him in his laboratory, overseeing the analysis of urine in some of his cases. He was vigorously wielding the wire stirring rod in testing the freezing point of a sample of urine. After completing this he proceeded to investigate microscopically the urine withdrawn from each ureter in a case in which he proposed to operate on the following morning.

At his clinic in the hospital he performed nephrolithotomy and nephrectomy in a man fifty years of age. This case was one in which there was a large club-shaped calculus, about three inches long, in the kidney. He clamped the pedicle of the kidney before splitting that organ to excise the calculus. To the onlooker it seemed that an attempt might have been made to save the kidney.

One admired his skill in doing cystoscopic work. He is not only expert in getting a good view of the interior of the bladder, and in passing the ureteral catheters, but he displayed great skill in using the operating cystoscope, by means of which he snared portions of a growth in the bladder which he was removing piecemeal in a patient 72 years of age.

Casper, as is the case in other surgical clinics visited, prefers the suprapubic method rather than the perineal for prostatectomy. Three recent cases of this operation were exhibited.

At the Krankenhaus am Urban, Professor Körte was visited. With him the visitor made ward rounds; he saw 180 patients in three-quarters of an hour! He simply obtained verbal re-

ports from his house surgeons as he went along. Six house surgeons accompanied him. His assistants seem to stand in awe of him, and he never spoke excepting to find fault. After the ward visit, several operations were performed in the theatre.

At the Charité hospital, one visited the clinic of Professor Hildebrandt, who conducted his clinic at ten in the morning. He gave a demonstration of various cases in a theatre accommodating one hundred students. As is usual in these German clinics, some three or four students were brought down to the floor of the theatre, and questioned upon the case under observation.

After the students had withdrawn, a number of operations were performed: Colotomy for intestinal obstruction; excision of half the tongue for cancer, with preliminary ligation of the lingual artery; dermoid cyst of the middle line of the neck, etc. At the same hospital Professor Bumm conducts a clinic in gynecology. He is a skilful operator, and does very thorough and neat work. This was particularly observable in a case in which he performed a vaginal hysterectomy and colporraphy. The Charité is a huge hospital, containing many buildings and pavilions, laid out quite irregularly, and one easily loses one's way in the labyrinth of walks between the various buildings. It is like a small village.

The Government hospitals in Berlin are in most instances very extensive. The Charité is a type, as is also the Krankenhaus Moabit, where one visited the clinic of Professor Sonnenburg. This hospital accommodates some 1,200 patients. It is built in separate buildings, each building being in itself a complete pavilion, capable of accommodating thirty patients. There was no attempt at architectural beauty, but the individual pavilions looked like so many long sheds one story high, extending off at right angles from either side of the many walks.

The finest hospital in Berlin is undoubtedly the R. Virchow Krankenhaus. The hospital at present accommodates 1,600 patients, and before the end of 1909 will be enlarged to accommodate 2,000 patients. The grounds are beautiful, with fine walks and carefully cut hedges. The walks are carefully kept and many garden seats are distributed throughout the grounds. There is a separate operating pavilion, which forms one of the most perfect arrangements for the conduct of surgical operations that one could see anywhere. It is beautifully finished in white tiles, with the stone floor which is a common feature of all German hospitals. There are two operating-rooms, one of which is reserved for septic work.

There are some thirty or forty pavilions in this hospital, each separate and complete. Asphalt walks run in various directions, and the house staff make their rounds chiefly on bicycles, as the distances between different points in this small village are considerable.

Professor Borchardt has charge of the surgical clinic. He is apparently a younger man than most of the senior surgeons met elsewhere. He was engaged, when found by the writer, in dressing a case of sarcoma which he had successfully removed from the neural canal, where it was causing symptoms of pressure on the spinal cord. He had had eight similar cases, with only one death. Borchardt informed me that spinal and cerebral surgery was comparatively rare in Germany.

He put up two fractures, one of the humerus and the other of the radius, in which the apparatus of Bardenhauer, of Cologne, was used. The principle of this apparatus is exactly that which is carried out in the Aikin's splint for fracture of the arm. The apparatus is somewhat elaborate, although very efficient. It might be described as a glorified Aikin's splint.

The visitor to Berlin who is interested in seeing all that is worth seeing in connection with hospital and laboratory work should not fail to visit and become a member of the Anglo-American Club. The membership fee is five shillings, and this entitles one to all the privileges of the club. They meet once a week at a restaurant, and on each occasion have a paper read by some prominent man in Berlin. The subject may be medicine, surgery, obstetrics, gynecology, or some laboratory subject. The feature of the club is that at each meeting the members are asked to report for the benefit of their fellows any special clinic or laboratory work or special class that might be of service to others. This information is published by the secretary for the benefit of the members. There is a reading-room in connection with the club, where all the current journals are available, and through this society one can readily obtain information which may be of great value in aiding one whilst pursuing his studies in Berlin.

This paper may be concluded by reference to one or two comparisons as to the conditions found in the different German and Swiss clinics visited:

1. *Size of Clinic:*

In Kraske's clinic, in Freiburg, 300 beds.
In Roux's clinic, in Lausanne, 160 beds.
In Angerer's clinic, in Munich, 350 beds.
In Riedel's clinic, in Jena, 200 beds.
In Trendelenburg's clinic, in Leipsig, 300 beds.
In Körte's clinic, in Berlin, 200 beds.
In Hildebrandt's clinic, in Berlin, 300 beds.

2. *The Number of Students:*

The following list will suggest the number of students attending an individual clinic:

Narath, in Heidelberg, 75 students (8 per cent. women).
Kocher, in Berne, 160 students (60 per cent. women).
Roux, in Lausanne, 80 students (60 per cent. women).
Angerer, in Munich, provides room for 300 students.
Riedel, in Jena, 14 students.
Trendelenburg, in Leipsig, 80 students (6 per cent. women).
Bier, in Berlin, 125 students (9 per cent. women).

In regard to women in attendance, it would be noticed that most of the women attending German clinics are Russians.

3. *Operating Theatre:*

The operating theatre is used both for operations and as a place for the clinic. Patients from the wards are brought in indiscriminately and students are usually called down to the floor of the theatre for questioning purposes. The blackboard and X-ray demonstrations are excellent and most efficiently carried out. At Leipsig, in Trendelenburg's clinic, the use of the epidiascope was most effective in demonstrating photographs and pathological specimens taken from the museum, which immediately adjoins the operating theatre. A point of the clinics which appealed to one as excellent was the fact that the various teachers were all expert anatomists, and took great pains to impress upon their students the importance of observing anatomical detail in connection with the various cases.

All cases, septic and otherwise, were brought into the same theatre. An exception to this rule was found in Kocher's clinic, in Berne, and Borchardt's, in Berlin, where a special room was used for aseptic cases. Occasionally several operations were proceeded with at the same time in the same theatre; thus there were three major operations under way at once in Narath's theatre. A further feature in Narath's clinic was that already alluded to, namely, the Professor demonstrating what was going on while his assistants operated. In Riedel's clinic it was observed that opportunities were afforded for a student to do minor operations, such as excision of a cervical gland under general anesthesia. The floor of the operating theatre was quite a feature. It was invariably made of stone, with a bell trap in the centre. Everything was thrown upon the floor. Solution basins were emptied on the floor and bloody sponges were always thrown there. This produced a very untidy appearance. The maximum was reached in one theatre where the attendant went around with a wooden hay rake, after the operation, to clear up the floor.

Lighting of the theatre:—

Light was usually obtained by direct sunlight, but in the case of Krönig's theatre, in Freiberg, a very excellent method of producing light from an arc lamp has already been described. (See above).

4. *The Technique of Operation:*

(*a*) Preparation of the patient—

It would appear that the preparation of the patient was always done in the operating theatre. The patient was brought to a room adjoining and entirely divested of clothing, which was replaced by gowns or some such covering provided for in the theatre. The shaving and scrubbing up was carried out on the table, and the area to be operated on was prepared then and there.

(*b*) Gloves—

The wearing of gloves during an operation was quite an interesting study in the various clinics visited. The following summary will serve to indicate how varied the procedure is in this respect:

In Roux's clinic, in Lausanne, no gloves were worn.

In Goldman's clinic, in Freiburg, the operator wore, first, a linen pair, and over that, a rubber pair of gloves. The assistants and nurses wore no gloves.

In Krönig's clinic, in Freiburg, rubber gloves were worn by the nurses only. All others had bare hands.

In Kocher's clinic, in Berne, the custom varied. In a case of excision of the knee, the operator and the assistants all wore rubber gloves with linen ones over that. In a case of gastro-enterostomy, Kocher alone wore gloves, his assistants had none.

In Niehan's clinic, in Berne, rubber gloves were worn and linen over the rubber, and during a single operation, where the operator wore rubber gloves over a pair of linen ones, the linen gloves were changed three times during the operation.

In Trendelenburg's clinic, dry gloves were worn. It was noticed that Trendelenburg donned his gloves dry without washing his hands.

In Bier's clinic, in Berlin, the operator occasionally wore gloves, and the assistants almost invariably did so, but the nurses who handled the instruments wore no gloves.

In Borchardt's clinic, in Berlin, all wore dry sterile gloves; rubber gloves and in addition sleevelets of rubber. This custom was carried out both by the operator and his assistants and nurses.

(*c*) *Masks*—

In no instance did one observe masks worn by German surgeons.

(*d*) *Caps*—

The only clinic in which caps were worn was in that of Kocher's, in Berne, and it appeared that all the nurses and assistants wore caps, the only individual who had his head uncovered was Kocher himself.

(*e*) *Boots*—

The German surgeons seemed to be most particular about their boots, and this would appear necessary from the condition of the floor of the theatre previously alluded to. These consisted of large, commodious clogs, which were slipped on over the ordinary boot, and protected the individual from the wet.

(*f*) *Anesthesia*—

In Narath's clinic, in Heidelburg, local anesthesia was almost exclusively used, *e.g.*, for goitre, colotomy, etc., Novocain in normal salt solution being employed. When a general anesthetic was given (as was the case in amputation of the leg) the anesthetic chosen was always chloroform.

In Freiburg, in Goldmann's clinic, local anesthesia was largely used (goitre, hernia, etc.), always preceded two hours before by scopolamine.

In Krönig's clinic, Freiburg, one found the method of spinal anesthesia extensively employed. He has done over one thousand cases, preceded by a preliminary injection of scopolamine one hour and a half, and another one hour before the operation.

In Kocher's clinic, in Berne, in an operation of excision of the knee, the anesthetic used was, at first bromethyl, followed by ether on an open mask. In all goitre cases local anesthesia (with one exception) was used. This is preceded by a hypodermic of morphia, one-eighth to one-quarter grain, one-half to one hour before the operation, unless contraindicated. He uses Novocain (2 per cent. "standard solution"), made up to 1 per cent. with normal saline and a few drops

of adrenalin added. From 5 to 25 c.c. are injected. When general anesthesia is used in Kocher's clinic, the anesthetist who begins the anesthetic often hands the administration over to another before the operation is completed. In one operation the assistant began the anesthesia and after the major part of the operation was completed, the sister continued the anesthetic whilst the wound was being stitched up. In one instance the anesthesia was completed by the ward-tender.

At Lausanne, in Roux's clinic, ether on the open mask was employed.

In Munich, in Angerer's clinic, the anesthesia was badly carried out, as is seen in the case of operation on the upper jaw referred to above.

At Jena, in Riedel's clinic, chloroform on an open mask was the invariable anesthetic, given usually by the assistant, but often turned over to the ward-tender before the case was completed.

At Leipsig, in Trendelenburg's clinic, the anesthesia was almost invariably chloroform, given on a Junker's inhaler.

In Berlin, Bier employed spinal anesthesia in a case of excision of the rectum. Tropacocain was used and the patient inverted at an angle of 45 degrees with the head lowermost. Morpho-scopolamine was administered one and one-half hours, and again three-quarters of an hour before the operation. In other cases general anesthesia was employed and that chloroform.

In Hildebrandt's clinic, in Berlin, chloroform was the general anesthetic.

One must not close this sketch without testifying to the unvaried courtesy and kindness with which one was received in the different clinics visited.

100 College Street.

INVOCATION TO HIPPOCRATES.

By James S. Sprague, M.D., Stirling, Ont.

Venerable and ever-illustrious shade, our father in Medicine, O Divine Hippocrates, the son of Heraclides, thou of the Aeclepiadæ, who, before all others in our literature, doth stand alone in excellency. Thy name is in all nations equally venerated as by us. May thy name be ever thus sanctified, and may thy rulings, even thy medical kingdom which thou didst see, and now seest *in Coelis,* be those of these times on earth. May such rulings come, and the decisions of thy exalted spirit come, and thy will ever be done; for we, leaderless lambs, are at the mercy—the unrelenting mercy—of the patent medicine man. We pray thee to lead us no longer into grievous and thoughtless temptations, and if ever, even now deliver us from evil—the same evils—Eth-pharmacal, or made-for-the-doctor-at-the-front-door and at the back-door-for-the-dear-people, preparations. Food, ordinary bread (*pabulum diurnalis*), give to us. Such is *quant. suf.*, for we know (hence these tears) that the Eth-Pharm. Co. is getting all the cake, the cream and wine.

Are we, who are widely known as easy marks—yet as equally recognized as the prop, in fact, the hope of, and encouragers of interests concerning the public Health (its protection always being established as the Supreme Law)—yes, are we, in our indifference and want of *proper unity* in organization, to encourage and sustain the yellow-cover, and disgraceful and non-medical, non-ethical, medical journalism—such as exists? Why should we, who have placed our best garlands on thy altar, so wrapped in Theban lethargy, where, within the very shadows of thy temples and holy shrines, science cults, baseless as dreams, as false as Cassandra's prophecies, exist? Yes, why should we allow these to exist? Why not tell *our gullible brother* and the people, the errors and pitfalls whither the cults of erratics and visionaries are leading them? Are we, as Stoics, to sit "like unto our grandsires cut in alabaster," and silently tolerate, and even encourage by our contributions, what are so styled Medical Journals—better named Medical almanacs, better yet as Almanacoids—the preserve for un-

ethical, base or disgraceful (too often) cerebral bubblings of self-inflated and hired scribblers?

> "Oh, wad some Power the giftie gie us
> Tae see oursels as ithers see us,"
> Aye, better still, that ither swells,
> Wad see us as we see oursels.

Do not drag us further into the Serbonian bog, whither professors (non-pardonable), and country doctors (now and then fully pardonable, not knowing ethics, and foolish enough to believe the professors' stories in journals), have led us. Do now deliver us, deliver us from such evils and the Hydra—if ever, now. For not only are such so-called companies debasing Medical literatures, and the fair name of Medicine, but robbing us of our hard-earned shekels. Yes, even at this invocation are revisions being made in national Pharmacopoeias, in which such companies, in several instances, are urging, through the revisers, a fixed insertion of their patent compounds. Are we, who are thy disciples, faithful, and *inter homines eruditissimi,* adoring thee, thou venerable shade of the glory of Athens—thou of Cos, are we to abandon the B.P. and the U.S.P. for the price lists of the Pharm. Co. and the patent Medicine Almanac? If so, so direct—then we abandon Mat. Med., and Pharm.

The price list and its compounds need not have the stamp of the public analyst either. We thrice pray thee, thou harbinger of health to the once plague-stricken City of Athens, watered by the murmuring waters of Ilissus and Cephissus, to purify with equal celerity the temples of Medicine—*libera nos e malis in nostris temporibus,* for the odd and even named Proprietary Compound manufacturers are shaking the pillars of thy temples, and making slaves of us, thy disciples. Not least, free medical journalism from non-official preparations, and the marks of the fakir; so that thy name and our own names be not too unredeemably disgraced and lost among men; the people deceived, and we, too, impoverished in gifts, ever deprived of the offering of the ambrosial libations, and the chaplets to thy sacred altars and temples—*Salve Nos!*

Selected Article.

THE INTERNAL TREATMENT OF SYPHILIS.

By Dr. E. Rothschuh, of Aix-la-Chapelle.

It is remarkable how the treatment of syphilis varies in different countries. The Englishman has but little time to spare from business or recreation, and therefore takes his medicine in the form of pills or powder; the Frenchman delights in the elegance offered by the silver hypodermic syringe; the German and northern races, seriously minded and systematic, prefer the use of unguentum cinereum, according to certain fixed principles; the American, in deference to his happy-go-lucky disposition, has no particular preference, but supplements any of the above-mentioned methods by the liberal use of sarsaparilla; in the West Indies, Central America, and the tropical parts of South America, the natives make use almost exclusively of the herbal concoctions of their country, which must be regarded as the home of syphilis, and are completely cured. The rest of the world accepts the method of the people with whom it has most intercourse, with the qualification that in southern climes the inunction method is almost an impossibility, owing to diminished cutaneous respiration through the blocked skin pores, and to the fact that the film of grease produces an intolerable heat congestion. The real reason that northern races cling to inunction cures is that in their case these produce none of those unpleasant subjective symptoms so well known to medical men who have endeavored to carry them out in the tropics. The fact that even in England inunction is so little practised may partly be explained by climatic considerations; the greater humidity of the climate hinders evaporation from the skin, and this hindrance is naturally still further increased by a layer of grease. The results of these conditions are an unpleasant sensation of heat, amounting to absolute oppression and objectively increased irritability of the skin, acne, furunculosis, and eczema, especially in the presence of the gouty diathesis so prevalent in England.

Until, by the aid of some further development of Wassermann's serum-diagnosis or of Wright's opsonic index, we are in a position to say to what extent a syphilitic patient is in-

volved in the disease, we shall be unable to ascertain, with respect to any method of treatment, how far it combats the syphilitic virus; until this is the case there can be no universal method of treatment, and we must take into consideration not only the constitution and resistive power of the individual organs, but also the soil and source of the infection, and the locality of treatment. This applies particularly to countries containing large towns, to ports, and especially here in Aix-la-Chapelle, where a number of international patients are passed under review by the physician.

The internal method of treatment is one of the oldest forms —indeed, it is the oldest of any—for the Mexican and Central and South American Indians, from whom European syphilis has with certainty been acquired, made use of the sarsaparilla root, guaiacum and sassafras woods, and other drugs of their country, with or without the concomitant of vapor baths, in precisely the same manner as their descendants do to this day. The fact that we make but little use of these medical substances at the present time is due chiefly to the inactivity of the marketed products. Paul employed guaiacum wood with the greatest possible success, but only when it was gathered after the first sap-driving falls of the rainy season; I myself frequently achieved complete cure among the more mildly infected Mestizos of Central America by means of fresh sarsaparilla or roots of the Mimosa species with similar action.

We do not know how these drugs act, but of mercury we know just as little; the great authorities on syphilis deny their action altogether. The view held by the latter that, at the present day, mercurial cachexia no longer exists probably goes too far. These cachectic subjects do not find their way to the specialists, but fall into the hands of institutions devoted to spa treatment. Even at the sulphur springs we occasionally encounter persons of debilitated constitutions who imagine that we cure without the use of mercury at all. As is well known, this is not usually the case, but, as a matter of fact, we succeed in the treatment of some patients without mercury, by the energetic use of infusions, combined with the usual balneological procedures. The best known preparations of this class are the *Potio antisyphilitica Germanica*, prepared and used of old by John Hunter; the Roob Laffecteur, originally a secret remedy; and the decoctum Zitmanni, still the most popular preparation in Germany. Of these, the last-named only contains small doses of mercury. The excellent fluid extracts of Messrs. Parke, Davis and Co. also allow of a happy combina-

tion of sarsaparilla, sassafras, guaiacum and quinine bark, such as may be expressed by the following formula:

Extr. fluid sarsaparilla Honduras		℥i
" " ligni sassafras		
" " " guaiaci		āā ℥iiss
" " cort. cinchonæ succirubræ		ad ℥x

T.d.s. from two to four tablespoonfuls in hot thermal water or sudorific draught.

But mercury remains the sovereign remedy, having emerged victorious from all campaigns which have been waged against it since its introduction at the beginning of the sixteenth century. Internally, preparations of the most varied description have been used. Metallic mercury was used in the form of the Belloste cure by the French; the internal use of mercurial ointment, with a certain proportion of sapo medicatus, was for a long time regarded with favor by French physicians, and in England the employment of blue pills is still of frequent occurrence. In the latter country also still more frequent use is made of a mixture obtained by rubbing together one part of mercury with two parts of powdered chalk—the *hydrargyrum cum creta* of the Pharmacopeia. Hutchinson describes the preparation as being, perhaps, the most constant and least changeable of all. The French have lately returned to its use (Variot). The oxides are hardly ever employed; the red oxide produces violent diarrhea, the black is quickly decomposed. Of sulphur compounds, the red and the black sulphides are alike useless. The chlorides are still extensively used; the subchloride (calomel) formerly formed the principal constituent of numerous secret remedies, and even of so-called purely vegetable decoctions; at the present time it is used almost exclusively in the treatment of lues in infants. The perchloride, or sublimate, is still the most serviceable internal preparation for adults, though its unpleasant effects upon the digestive organs have been the chief stimulus for the discovery of substitution products by chemical industry. Well-known examples are the Dupuytren pills, the Desruelle and the Wedekind, and also the Dzondi method of sublimate medication. With the discovery of the favorable effects of iodine upon certain syphilitic manifestations, there occurred a predilection for iodine combinations. Thus, in France and in South America, and Eastern countries, which have shared the common fate of having suffered extensively from the disease, and have perhaps thereby acquired a certain degree of immunity, the use of pills composed of the moniodide is very prevalent. Thoroughly good results are yielded by Fournier's pills:

℞ Protiodide of mercury ..... gr. $\frac{3}{4}$
Extract of opium ..... gr. $\frac{1}{6}$
Ft. pil. i to be taken morning and night.

The biniodide is likewise much used in the form of pills, but chiefly, however, in the well-known Gibert's syrup, a preparation worthy of attention in practice among children; its formula is as follows:

℞ Biniodide of mercury..... gr. iii
Potassium iodide ..... ℥iiss
Syrup simpl. ..... ℥xvss

This is very well tolerated, and is suitable for cases where it is desired to combine mercurial action with an active amount of iodine; another modification of the same for adults, which does not interfere with the digestive organs in any way is:

℞ Hydrarg. biniod. ..... gr. $2\frac{1}{4}$—gr. $4\frac{1}{2}$.
Potassium iodide .....āā ℥ii—℥iv
Syrup Chinæ et hy. .....ad ℥xvss
Two or three tablespoonfuls (contents, biniodide gr. $\frac{1}{12}$, K.I. gr. $7\frac{1}{2}$) to be taken a day.

Among the newer salts of mercury and iodine, hydrargyrum sozoiodolicum must be mentioned, as it deserves a more extensive use than it has been hitherto accorded. A publication which has lately appeared confirms the favorable results obtained by Schwarz, Tausig and others. Schwarz's formula is as follows:

℞ Hydr. sozoiod ..... gr. ix.
Extr. opii ..... gr. iiss
Pulv. et Extr. Glycyrrh. āā q.s. ut. ft. pil. iv., xxxvi.
D.S. Two to be taken three times daily.

This formula has proved extremely serviceable in my hands. In cases where internal mercurial treatment is indicated, however, I prefer this salt—viz., the di-iodo paraphenol sulphate of mercury, containing 32 per cent. of mercury and 4 per cent. of iodine. This compound is now much used, as it produces stomatitis less readily and relapse is not so rapid. At the present moment mergal is very fashionable in Germany; how long it will remain so is difficult to say. The majority of the numerous publications on the subject favor its use; some of the more recent only—and this is in accordance with my own personal experience—draw attention to the earlier occurrences of renewed symptoms of the disease; I am also quite unable to share the view that the early occurrence of stomatitis is a favorable sign. The extensive use of mergal must be regarded as a proof that there is a place even in Germany for the in-

ternal treatment of syphilis; nevertheless, I am convinced that the majority of German specialists have either remained faithful to injection treatment or will return thereto.

The other salts of mercury play an unimportant rôle in internal treatment as compared with those above mentioned. The more generally used among them are perhaps the hydrocyanide, tanno-oxydulate, and thymo-acetate.

In former times, certain other drugs besides mercurials enjoyed a reputation for internal treatment, but these are now of historical interest only; gold, silver, and platinum, as noble metals, were prescribed in this disease, so difficult of eradication, and had their partisans; other drugs were chlorine, opium, ammonia, and digitalis. They have all been long abandoned, as well as acids, such as nitric, hydrochloric and citric. Of acids, chromic acid again found an advocate quite recently in Guenz, who, however, in spite of his energetic propaganda, obtained no support. Arsenic has always remained a valuable tonic agent for the internal treatment of anemic syphilities; as to whether the extensive use of atoxyl and similar modern arsenic injection methods will be followed by the discovery of specific effects upon the infection is a question which must remain undecided for the present; if so, the internal employment of arsenic will then have to be regarded from another standpoint, and modified accordingly. Sulphur also is a substance which was formerly used internally both in syphilis and skin diseases, and it is still a more or less open question whether the small quantities of sulphur in the sulphur springs have or have not any specific action upon syphilis; theoretically speaking, it is not impossible—and it is quite feasible that allied diseases, such as those due to spirochetes, protozoa, and trypanasomes will in future be influenced by means of the same curative agents—viz., sulphur or arsenic in certain definite compounds.

Finally, as regards iodine, the trouble which has been spent in the attempt to discover a substitute for potassium iodide, with its associated disagreeable by-effects, has not been altogether in vain. In the case of iodine, again, we do not yet know how it acts, whether specifically upon the micro-organisms or upon the toxins formed by them, or, what is more probable, as an "alterative" upon processes going on in the secretions and cells of the organism, in order to facilitate resistance to the infection. Speaking generally, the axiom that iodine is indicated for the tertiary forms, or, to put it more clearly, in all late forms of the disease, has maintained its

validity; but even in the early stages symptoms of a periostitic, rheumatic, or meningitic nature, as well as ulcerative processes, yield rapidly to the action of iodine, so that we do not now regard iodine as being the peculiar curative agent for any particular stage of the disease, but combine it at once with mercury; or, when threatening or very troublesome symptoms have been allayed by iodine, we proceed with casual treatment by means of mercury. Such, indeed, is the case in quartan or metasyphilitic diseases, such as tabes dorsalis, progressive paralysis, and the numerous cardio-vascular complaints which, according to the latest anatomo-pathological statistics and the tables of life insurance companies, bring about one-half of all syphilitics to a premature end, somewhere about twenty years after infection. Since the Wassermann serum examination gives a positive reaction in such cases, it must be our endeavor by refinement of diagnosis and more methodical treatment to provide against the occurrence of this stage. It is probable that with the aid of the serum examination above mentioned we shall be in a position to tell precisely when the body is entirely free from syphilitic virus, and we shall then carry out mercurial treatment, with intervals and in diminishing doses, until a condition of permanent negative reaction is reached. Presumably also—and this remark is substantiated by actual experience—early recognition of the cardiac and vascular diseases so much facilitated by the newer methods of diagnosis will demand an early and extended use of iodine. For this, if for no other reason, it is satisfactory that there exist iodine substitution preparations which possess the same action as the old potassium iodide, though not so rapidly exerted, and which give rise to much less iodism. The preparations which have been most extensively studied and favorably reported upon are iodipin (Merck), sajodin (F. Bayer and Co.), and iodglidine (Volkmar Kloepfer). Iodipin is produced by the action of iodine upon oil of sesame, and is used subcutaneously with striking results. Sajodin is the calcium salt of monoiodbehen acid, and is produced from rape seed oil by combination with hydriodic acid. Iodglidine is a stable combination of iodine, with nuclein-free vegetable proteid. All three preparations are noted on account of their property of liberating iodine slowly and evenly in the form of potassium iodide, and thus with a smaller amount of iodine and less danger of iodism they display the same activity as a customary dose of potassium iodide. Experience must teach us how far these preparations are able to replace the old and well-tried galenicals in those secondary

and tertiary manifestations of syphilis which require iodine treatment. As a prophylactic for specific cardiac and vascular changes and for their early treatment, they may certainly now be used with advantage, since in small doses (two or three tablets a day) they may be taken for months or even years without causing any disturbance worth mentioning. The only thing to be desired is that pharmaceutical technique might soon be in a position to bring these tablets before us in a less prodigious form, and, in comparison, I might cite the excellently convenient tablets of Messrs. Burroughs Wellcome and Co.

Iodival, a new organic preparation of iodine, seems to be the most perfect substitute for iodide of potash according to the results obtained recently in research work carried out with the drug. It has the very high contents of iodine (47 per cent.) and passes through the stomach unchanged, while it dissolves in the intestinal tract in the form of a sodium salt. In this form it is absorbed and carried into the fatty and nervous tissues, where it splits up its iodine gradually during the next forty-eight hours; the body is thereby kept under the influence of the iodine for a considerable time. The effect of iodival is keen, even when small doses are administered. It supersedes by far the effects of iodide of potash, which drug is excreted from the body in a much shorter time. The new organic derivative of iodine, "iodival," combines the advantages of not interfering with the functions of the stomach and showing a special affinity to the central nervous system, which renders it a very useful preparation to be prescribed in the treatment of brain syphilis and the late secondary manifestations, and in scrofula and arterio-sclerosis. The dose is 5 grains three times a day, and corresponds with about 15 grains three times a day of iodide of potash. A very interesting report has lately been published on the experiments with iodival by Prof. v. d. Eeckhout from the Pharmacological Institute, Heidelberg.

Other compounds of iodine which have been recommended, such as the iodides of sodium, ammonium, strontium and rubidium, cannot be said to possess any advantage over the potassium salt; if anything, the taste of them is even worse, and they are much dearer; tincture of iodine, taken in water, has also been praised, but on account of its horrible taste and its action on the teeth has not met with approbation. I can well recommend the use of the effervescing iodine compounds recently advocated by Friedländer. In my former practice in

the tropics I employed, with very favorable results for many years, the Sandow effervescing salts of iodine of 6 per cent. and 15 per cent., and still use them pretty abundantly even now in the warm seasons of the year; they are very trustworthy as regards the iodine content, do not disturb the stomach, and do not heat like corresponding quantities of solution of potassium iodide.

In summarizing, we may well say that the internal treatment of syphilis is still widely followed—and, in fact, that it is more often employed than any other method. That it is an effective method is proved by the circumstance that entire nations, including those most severely infected, such as maritime and southern races, have seen no reason for seeking a better. The question whether prolonged contact with the disease, and therefore some acquired immunity, accounts for its success among those nations whose preference lies in the direction of internal treatment, while nations less infected are obliged to employ methods more energetic, cannot be satisfactorily cleared up without further investigation into comparative and racial pathology. Be this as it may, the modern methods of diagnosis open up an immense field for activity, and it must be our hope that the manifold complications of syphilis may be recognized and treated correctly as such, and wherever possible prevented. In this, thanks to the products of modern pharmaceutical chemistry, the internal method of treatment will doubtless be called upon to play a great part. The principle applies here as in the whole field of medical science—do not judge generally, but individually!—*Folia Therapeutica.*

Progress of Medical Science.

MEDICINE.

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

Diuretin in Stenocardia.

Professor von Noorden, of Vienna, remarks on the excellent action of diuretin in stenocardia. Diuretin is to be taken three times a day, in doses of 0.5 to 0.6 Gm.; larger doses are unnecessary, and are, perhaps, even less effective. Diuretin and its allied combinations possess a definite vaso-dilator influence on certain vascular areas. This can be easily demonstrated in the case of the kidney. The small vessels of the heart are probably affected in the same way. This results in a diminished resistance and improved circulation, which account for the good effect in stenocardia. Improvement sets in after two or three days, and the difference is so marked that these must be ascribed to the action of diuretin in stenocardia—one of the most striking results which therapeutics can achieve. Diuretin should be persevered with for at least two or three weeks, but if a longer administration seems necessary there is nothing to stand in the way. The small amounts are well borne by the stomach. Von Noorden has never witnessed any bad effects from a long-continued administration of diuretin.—*Med. Klinik.*

Exophthalmic Goitre.

In the *Johns Hopkins Hospital Bulletin* of September, 1908, Berkeley reports on the use of lecithin in the above disease. Numerous observers have seen benefit from the use of salts of phosphoric acid, more especially those of sodium and the glycero-phosphates; the author for three years has employed an alcoholic solution of lecithin in the treatment of cases of nervous asthenia (not psychasthenia), and latterly in a few of Grave's disease. Curiously enough, both classes have no objection to the remedy, in spite of its nauseating quality, and do not tire of it certainly until the nervous symptoms are well under control and the weight-curve has risen to normal. Again, they state that often within one hour after administra-

tion the "nerves" are quieted, the tremor, palpitation, etc., are alleviated; in fact, the majority assert that in its sedative action it surpasses the bromides. Berkeley found by clinical observation that the same patients showed marked improvement when under the lecithin course, whereas, when the salts of phosphoric acid were administered marked remissions occurred.

Berkeley requires at least one litre of milk daily to be taken by the patient, careful attention to the dietetic regimen, cutting off only foods known to disagree with the subject. Care must be exercised in its administration when there is any disturbance of the digestive functions, and also that erythematous rashes, due to overdoses of the preparation, be avoided.

Lecithin is a constituent of probably every body cell, more abundant, however, in those of the nervous system and in the leucocytes; its action as an erythrocyte producer is far above manganese and iron; it acts best with a slowly coagulating blood; it is probably a stimulant to the resistive power of the tissues generally; also increasing the secretions of the ductless glands, and the phosphorus content of the leucocytes. By some lecithin is credited with the action of an antithyroid harmone.

Cerebral Arterio-sclerosis.

The following is a brief abstract of an article in the *Montreal Medical Journal,* by Colin K. Russell, dealing with the above subject.

The pathological findings are of especial interest; the dura mater is usually adherent, the pia slightly thickened, convolutions shrunken, ventricles dilated and the ependyma wrinkled; the cortex may show a worm-eaten appearance, due to arterio-sclerotic foci; in section the vessels, especially those of the lenticulo-striate nucleus, are prominent and gaping; the perivascular spaces showing general dilatation, accompanied by rarefaction of surrounding nerve tissue. Irregular cavities, in size at times as large as a pea, varying in number up to ten, situated in the region of basal ganglia, but never in the peduncles, bulb or cord, and rarely in the cerebellum, are met with, probably due to remote hemorrhagic foci and consequent softening. In recent lacunae, the periphery is infiltrated with phagocytes; later the wall shows a capsule of fibrous tissue; the cavity is sometimes traversed by strands of neurologlial tissue and vessels.

Clinically, the picture varies according to the distribution

of the degenerative areas. One must not lose sight of the fact that central arterio-sclerosis is not necessarily accompanied by concomitant peripheral lesions. The diagnosis lies between general paresis and senile dementia; in arterio-sclerosis one is struck by the labored mental action, feelings of helplessness and indecision, of rapid paroxysmal character. Consciousness of personality here remains for longer periods intact than in the other diseases; the affections become dulled, but are not perverted; excitement and delusive attacks are the exception; headache and vertigo are common; transient paresis and paresthesias occur; the pupil reactions usually remain intact; finally, after several years, dementia sets in, the patient succumbing to apoplexy, cardiac, renal or pulmonary complications.

Epilepsy.

An interesting note, by David Gayden, in the *B. M. J.* of January 23rd, 1909, deals with the subject of treatment of epilepsy. The Bradford Guardians tried the experiment of open-air treatment, plus appropriate occupation, and the exclusion of all drug therapy. The author suggested in addition to this regimen that sodium chloride be excluded from the preparation of foods and from the table, sodium bromide being substituted. It was found that during the periods in which this was carried out, the total number of convulsive attacks among the patients was greatly reduced; this method, of course, is of greatest value in institutions. In the preparation of bread, instead of having salt added in the usual way, sodium bromide is substituted. In this way from one to two drams or more is taken daily without discomfort on the part of the patient. Apparently, the results have been most gratifying.

Calcium Salts.

Arthur Luff, in the *British Medical Journal*, reviews the results obtained by the use of calcium in 120 cases coming under his own observation, in all of which a condition of lessened blood coagulability was proven or inferred. In 45 cases of the lymphatic type of headache, 82 per cent. were cured, four patients obtained no relief, and the remainder were benefited. It has been suggested by G. W. Ross, of Toronto, that this type, characterized by lassitude, slight anemia, subcutaneous edema and cephalalgia, experienced in the early morning hours, is due to "serous hemorrhage."

Thirty-seven patients suffering from chilblains were treated, with results almost identical with those obtained in the above disease. Eight cases of boils, which were associated with slight edema and coldness of extremities, were all reported as cured; seven of urticaria (non-dietetic), with similar associations, showed marked benefit in six; five of aneurism of aorta showed marked improvement. Cases of erythema, lichen planus, flushing of face, hemoglobinuria, pruritus, and several of excessive perspiration of hands and feet, were treated with excellent results; in all of these, slow coagulation of the blood was shown.

The author administers calcium lactate in 15-grain doses, dissolved in half an ounce chloroform water, one hour before meals, over a period of six weeks, the bowels being regulated by senna, salines being avoided, on account of precipitation occurring when exhibited in the presence of the lactate.

Syphilis.

G. Pugin Meldon, Surgeon to the Westmoreland Lock Hospital contributed an article bearing on the treatment of Syphilis to the Medical Press of Nov. 4th, 1908; his observations in brief may be summarized as follows:

After remarking on the interesting fact that lues was treated by the Chinese more than 4000 years ago by inunctions of mercury, Meldon then proceeds to consider the use of mercurials as advocated at the present time; he first warns against their indiscriminate use in cases showing albuminuria, advises careful preliminary examination, and if necessary treatment of the teeth, frequent weighing of the subject and finally careful attention to the general hygienic regimen. To turn to the methods of administration of mercury, for intra-muscular injections a cream composed of metallic mercury ʒ i, lanoline ʒ iv by) weight), vaseline oil (containing 2 per cent. acid carbolic) q. s. ad ʒ ii of the preparation, thus giving a strength of 1 grain mercury in 10 minims, with a maximun dose of 15 minims; he also advocates a cream of the same strength using Palmatin as a base and containing "Creo-camph," or the use of ½ grain of calomel in a similar cream containing "Creo-camph" 20 per cent. (equal parts of absolute creosote and camphoric acid) which being both antiseptic and analgesic is of great advantage. The routine employed is two or three weekly injections of calomel cream, followed by three or four weekly injections of the metallic preparation, an interval of two months now elapsing.

If no symptoms appear before the end of that period, four fortnightly treatments of metallic preparation are given, followed by two months rest, the four treatments and period of rest are repeated, until patient is pronounced clear of infection, say for at least 2 years. If symptoms re-appear they are brought under control with the calomel injection. If the general condition and weight of the patient fail, it is wise to lessen the dose and give an interval of rest.

The only soluble salt used by the writer is the following: Hydrargyi perchloridi gr. vi, sodii chloridi gr. ix, aqua distill. ℥ iv; he injects 5 minims (which contains 1/8 gr. mercury perchloride) three times weekly at the commencement, decreasing this to bi-weekly treatments. The routine is similar to that above described except that the intervals of rest are of one month's duration and the injections bi-weekly.

Points to be noted in the technique are the sterilization of needles and syringe with boiling oil, cool instrument before using, and do not warm the cream. The end of needle should be wiped before insertion, as a subcutaneous deposit of mercury gives rise to a painful nodule.

Mercury may also be administered by the more usual methods of inunction, fumigations, or per oram. The author believes that the benefit derived from iodides is largely due to its setting free residual mercury in the system; however, in the early headaches of syphilis it undoubtedly acts quite independently of mercury.

The use of "atoxyl" (sodium arylarsonate) in sleeping-sickness, like syphilis a protozoal infection, suggested its use in the latter disease. The action of the arylarsonates is probably due to their phagocytic properties, while mercury is directly germicidal. Meidon uses "Soamin" (a sodium salt of arylarsonic acid) less toxic and safer than "atoxyl." It is administered in intramuscular injections of 6 to 10 grains, on alternate days, until 75 to 100 grains have been injected; if mercury is used in the same patient an interval of at least two weeks must elapse between their respective administrations. It is seldom that under "Soamin" any symptoms re-appear. Finally the author holds that the surgeon assumes grave responsibility in withholding mercury in cases of lues, but justifies the use of arylarsonates alone where there is an idiosyncrasy to mercury, where tuberculosis complicates and where a prolonged course of mercury would not be carried out by the subject. Here the short course of "Soamin" affords better chance of cure than one of mercury carried out over a similar period. B. O'R.

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. M'ILWRAITH, FRED. FENTON AND HELEN MACMURCHY.

Treatment of Dysmenorrhea and Uterine Hemorrhages.

F. Girardi, of Cervinora, has used styptol in menorrhagia as well as in metrorrhagia, and reports that its action was to be relied upon. In every instance the bleeding was rapidly diminished, even in those cases in which hamamelis and hydrastis had been of no effect. The analgesic action of styptol was especially noticeable. The preparation also proved beneficial in cases that had been operated upon. For example, one year after a curettage, styptol promptly diminished both pain and hemorrhage when these symptoms reappeared.

Furthermore, Girardi recommends styptol to the operating gynecologist, because, when given after adnexa operations, ovarectomies, etc., it tends to prevent complications, and has a sedative action on the pelvic organs.

The author found styptol especially valuable in dysmenorrhea, as it not only diminishes the bleeding, but relieves the pain that is wont to appear several days before menstruation.

Besides its hemostatic action, styptol also acts as a sedative. It sedative effect is probably due to a diminution of the irritability of the peripheral nerves, especially those of the genito-urinary system.—*Riv. internaz. di Clinica e Terapia.*

Acute Inversion of the Uterus.

I read with some interest Mr. Holthusen's contribution to the "Journal" of January 23rd, as during the past few months two instances of a somewhat similar nature have come under my care, being the only cases of this description I ever met with, occurring, rather singularly, within five months of each other.

One, which occurred in July, 1908, was in a primipara, aged 23. The first two stages of labor were normal, but upon its expulsion the placenta was found attached to an inverted uterus, though not technically adherent. It was speedily separated with little or no hemorrhage. There was great disturbance of respiration and circulation, cyanosis, etc., in fact the patient had the appearance of imminent dissolution. On returning the uterus, which was effected with little or no diffi-

culty, the alarming symptoms gradually subsided. The patient, who was a very healthy young woman, made a splendid recovery.

The second case happened in December, 1908, in the second pregnancy of a woman, aged 30, with hip-joint disease and a weak heart. Labor was tedious and recourse was had to instrumental delivery. On some amount of hemorrhage taking place, it was found that the vagina was occupied by the uterus as well as the placenta. The latter was easily removed, but the return of the former to its natural position was an affair requiring the exercise of some care and manipulation. What immediate after-effects there were seemed more attributable to hemorrhage than to disturbance of the parts. The patient lived six weeks, then died from cardiac debility, anasarca, etc.

H. G. Harold Clarkson, *British Medical Journal.*

Bacteria of Puerperal Uterus.

A. W. W. Lea and E. J. Sidebotham (Journal of Obstet. and Gynec. of the British Empire, January, 1909), review the present-day knowledge of the organisms found in the vaginal secretions and lochial discharges of pregnant and puerperal women, and give the results of their own investigations as to the bacteria present in the puerperal uterus, and especially as to whether virulent streptococci can in these cases be distinguished from non-virulent ones by the power of hemolysis which they possess. Observers of the organisms found in the vagina during a normal pregnancy have arrived at widely different results. Walthard gives the following list of organisms which have been found: (1) Facultative anaërobic streptococci of the type of *Streptococcus pyogenes puerperalis;* (2) facultative anaërobic diplo-streptococci; (3) anaërobic streptococci; (4) staphylococci of the type of *Staphylococcus albus;* (5) bacteria of the *coli group;* and in rare cases (6) *Bacillus funduliformis,* (7) pseudo-tetanus bacilli, (8) *Bacillus aërogenes capsulatus.* The vaginal portion of the cervix and even the lower part of the cervical canal contain many organisms which do not, however, appear to be able to penetrate the protective zone of the cervical secretion during pregnancy, and all observers are agreed that the cavity of the uterus during a normal pregnancy is free from organisms. During the puerperium a large number of organisms of apparently little virulence are present at the vulval orifice; the vagina is comparatively free during the first twenty-four hours, but later the organisms pre-

sent during pregnancy multiply rapidly in the alkaline secretion; and, in spite of much difference of opinion, it must be concluded that organisms closely resembling those present in puerperal infection often exist in the upper part of the vagina and in the cervical secretion shortly after delivery, and that spontaneous ascent of the organisms into the uterine cavity is not infrequent. Schottmüller, who has for several years made a large number of observations, chiefly of organisms in the blood in cases of septicemia, was the first to claim that the virulence of the organism varies with its hemolytic power, and he regards a hemolytic streptococcus as pathogenic. His conclusions have not been altogether confirmed by recent work, since many observers have shown that hemolysis may be produced by organisms of little virulence, although considerable evidence also exists to show that the organisms in severe puerperal infection always show a marked power of hemolysis. Lea and Sidebotham examined the lochial secretions in a series of 58 cases between the second and ninth day after delivery, and found that organisms were present in the cervical canal cavity of the uterus in 80 per cent. of the cases. It was worthy of note that in 5 out of the 12 sterile cases no vaginal examination had been made during labor. The organisms were mainly those which have been shown to be present in the vaginal secretion during pregnancy; the authors find, however, that there is considerable evidence to show that organisms ascend from without during the early days of the puerperium. In the great majority of the authors' series of cases the course of the puerperium was entirely uninfluenced by the presence of the organisms. In 20 per cent. of the cases streptococci were cultivated, and in 5 cases these showed marked power of hemolysis. In 4 of the cases in which hemolytic streptococci were demonstrated the puerperium was afebrile throughout; in the fifth case there was a superficial infection of the endometrium with febrile symptoms. The authors, therefore, arrive at the conclusion that the presence of hemolytic streptococci in the vaginal or uterine secretion cannot, in itself, be regarded as an indication of the existence of infection.—*British Medical Journal.*

LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF J. PRICE-BROWN.

Morphology of the Turbinals. John M. Ingersoll. *Medical Record,* November, 1908.

This writer, at the Annual Meeting of the American Laryngological Association, held in Montreal in May, 1908, gave a description of the turbinal bones in fishes, loons, reptiles, panthers, apes and man, illustrating his remarks with excellent drawings. Turbinal structures in fishes are used only for olfaction, and are simply ridges covered by olfactory mucous membrane. In reptiles, owing to the changed manner of respiration, the nasal organ functionates as well in respiration as olfaction; and both respiratory and olfactory turbinals are found. They are, however, quite simple structures. In birds the increased importance of the respiratory function was evident, and the respiratory turbinals show a high degree of development. The expanse of respiratory mucous membrane is largely increased by coil-shaped structures, while the olfactory turbinals are simply ridges.

In microsmatic mammals all of the turbinals exhibit a high degree of development. Their numerous fine branches and coils enormously increase the amount of mucous membrane exposed within a limited space, and thus increase the efficiency of the nasal organs.

In the apes examined, all of the turbinals had degenerated or reverted to some of the more primitive types.

In man the turbinals were quite similar to the turbinals of the ape, and were all rather simple structures. Rudiments of the fourth and fifth ethmoidal turbinals were sometimes found. The agger nasi was the rudiment of the nasal turbinal. Such rudiments were more frequently present in the embryo than in the adult.

Diseases of the Accessory Sinuses of the Nose in Scarlet Fever. Prof. Killian, *Journal of Laryngology,* Dec., 1908.

There are two forms of scarlatinal sinusitis—a simple and a complicated. The simple is fairly common, but often overlooked, passing off without becoming chronic.

The complicated form is much more widely known, and shows well-marked symptoms. Edema appears from the fifth day to the third week. There is marked tenderness on pres-

sure, with high fever. Occasionally there is slight exophthalmos. Usually the ethmoid labyrinth is the part mainly affected, the edema appearing at the inner part of the upper lid, varying in degree. In about half the cases an abscess occurs within the ethmoid cells. The edema and pus formation result from the spread of the inflammation to the periosteum. The bone is also rapidly infected.

The really dangerous cases are those in which the frontal sinus is involved. Three fatal cases are reported in children, aged, respectively, nine, ten, and eleven and a half years, all dying from purulent meningitis.

When edema occurs in a case of scarlatinal sinusitis, an operation is nearly always required. All diseased tissue should be thoroughly removed.

Perforation of Soft Palate following Severe Attack of Scarlet Fever. Abercrombie, *Journal Laryngology,* Dec., 1908.

This case is noteworthy on account of its unusual cause, as the old idea is still prevalent that perforation of the soft palate can only result from syphilis. The patient was a boy, aged four and a half years. The scarlet fever was exceedingly severe, almost costing him his life, and resulting in abscesses in throat and right ear, with extensive perforation of soft palate. The latter was not seen by the specialist until after adult life had been reached. The chief symptom it produced was that of defective speech. There was no history whatever of syphilis, and the conclusion arrived at was that the perforation was caused by the destruction of the tissues of the palate during the attack of scarlet fever. The parts affected were the right posterior pillar and soft palate.

Operation was not considered advisable.

Case of Thyro-Lingual Sinus in a Boy, aged Fourteen. Dundas Grant, *Journal of Laryngology.* Dec., 1908.

In this case the fistula opened about three-quarters of an inch above the sternal notch, and was surrounded by an area of cicatricial tissue. The cord could be felt extending up to the hyoid bone, behind which it disappeared. The finest probe could only be passed for the distance of three-quarters of an inch.

The sinus was freely dissected out, and above the impermeable spot it was slit up so that a fine galvano-cautery point could be inserted as far as its termination behind the hyoid bone. This was to destroy the secreting surface. When the dissection was finished, the removal of the sinus appeared to

be complete. The wound was then closed, but so much tissue had been removed, in order to dissect out the cicatrix, that primary union did not take place in the lower part. In the upper portion union was complete.

Amputation of the Epiglottis in Laryngeal Tuberculosis. J. Möller, *Zeitisch. f. Laryngol,* Vol. I., Part I.

This writer reports ten cases in which this measure of relief has been employed. In four of them, the laryngeal disease remained completely healed after two years, nine months, four months, and two months, respectively. In one of these, the disease before operation not only involved the epiglottis, but was very extensive in other parts of the larynx. After removal of the epiglottis, healing was rapid and uninterrupted.

In another case there remained fairly extensive laryngeal tuberculosis, but dysphagia, previously very troublesome, was absent a year after the operation.

Two patients had died. In another case there was no return of the dysphagia, but the patient died later of cerebral tuberculosis.

The operation is not a very painful one, although when there is much infiltration the effect of cocaine is only partial.

Alexander's guillotine is an ideal instrument for the purpose.

The indications for the operation are:

1. Tuberculous disease limited or almost limited to the epiglottis, the general systemic condition being good.

2. Marked dysphagia, caused by the epiglottic disease.

3. Advanced tuberculosis of the epiglottis, in cases of extensive laryngeal tuberculosis, even when there is no dysphagia, provided that lung disease is absent or slight.

The Treatment of Laryngeal Tuberculosis by Direct Sunlight. Adolf Koch, *Medic. Corresp.-Blatt, des Württemberg. ärztlich. Landesvereins,* December, 1908.

This method of treatment is taught personally to each patient, and is carried out as follows: An outline of the general anatomical construction of the pharynx and larynx is first taught to each patient. Then they are instructed in the use of the laryngeal mirror upon themselves and upon each other, with directions how to place a large reflecting mirror to the best advantage, the upper half of it being covered by some black material, to obviate the reflection of the rays into the eyes. By these means the patients are taught to throw the sun's rays directly into the larynx, the actual seances being half an hour in length, and two each day. On hot summer

days the seances were limited to two or three applications of ten minutes each. In some instances, particularly in hot weather, the treatment would cause an immediate rise of temperature of several degrees, but within half an hour this would subside to the usual one.

The report gave a history of twenty-one patients that had been treated in this way. Of these, only ten had been under treatment a sufficient length of time to make a report worthy of detail. A cure was claimed to have been obtained in six of them, two were considerably improved, and in the other two some improvement had taken place.

The lesions which were reported as cured included ulceration of the posterior wall, infection and swelling of the aryepiglottic folds, the ventricular bands and arytenoid region, and infiltration of the posterior wall. In one there was ulceration of the right ventricular band, and in one ulceration on the left vocal cord. The two cases which had considerably improved were suffering from ulceration of the posterior wall, and a somewhat similar condition prevailed in the remaining two.

The duration of treatment was from three hours on four days up to sixty hours on seventy-five days.

Although other methods were combined in the treatment of these cases, the author considers the results as encouraging, and purposes to continue the practice of this method of treatment.

Case of a Young Woman with a Baritone Voice. By F. Spicer, *Journal of Laryngology*, January, 1909.

In this case the diameter of the larynx was greater and the vocal cords broader but not longer than in the female type of larynx.

In the discussion, Prof. Chiari expressed the opinion that the larynx was male in type. Dr. Horsford disagreed with this conclusion. He looked upon the baritone voice as the result of chronic laryngitis, and forcing the deep chest tones of a contralto. The sexual organs of the patient had been examined, and they were found, both externally and internally, to be typically female.

Retrospect of Laryngology for 1908.

The *Journal of Laryngology, Rhinology and Otology*, in its January issue, draws attention to the important work that has been done during the recent year in several departments of the specialist's field. Much advancement has been made in direct methods of illuminating the larynx, trachea and

esophagus, and while the technique as first demonstrated several years ago by Killian was excellent, much advancement has been made in the perfection of instruments since then. Brüning's instruments are thoroughly practical, and give splendid illumination, rendering the whole procedure of bronchoscopy and esophagoscopy much simpler. Chevalier Jackson, of Pittsburg, also has already won for himself imperishable laurels in this field of practical science, although his means of illumination is the very opposite of that practised by the European laryngologists, his lamp being placed at the distal end of his instrument.

The laryngologist, too, owes much to the physicist. From him he receives the incandescent electric lamps without which the direct method of inspecting the air passages would be impossible.

The position of the X-ray likewise can now be defined more accurately. Improvements in technique make it possible to take instantaneous chest pictures, giving less trouble to patient as well as physician. This enables the observer to distinguish between aneurism and fixed tumors of the simple or malignant type.

Esophagoscopy. Richard H. Johnston, *Maryland Medical Journal*, February, 1909.

The writer thus describes Chevalier Jackson's use of the esophagoscope: After cocainizing the pharynx and esophagus with special cotton carriers, the patient is placed upon the table, with the shoulders about four inches over the edge. The head, in extreme tension, is supported by an assistant in such a way that mouth, pharynx and esophagus are in the same straight line. With the mouth well open, the left index finger is passed into the right glosso-epiglottic fossa, and thence if possible into the pyriform sinus. The esophagoscope is then introduced gently, using the dorsum of the finger as a guide. When one is assured that the instrument has reached the sinus, the finger is moved toward the base of the tongue, which, together with the larynx, is pulled upward. If the movement is successfully carried out, slight pressure on the external end of the instrument sends it into the esophagus. As it passes the cricoid cartilage a slight resistance is felt. Once in the esophagus, the electric fitting is attached to the light carrier, and the tube is pushed gently down under the guidance of the eye to whatever part of the canal the operator may require to examine. In Chevalier Jackson's instrument, the electric lamp is always placed at the distal end of the tube.

Editorials.

THE EFFECT OF BATHS UPON THE HEART.

The method recently introduced by Moritz, and used by Aug. Hoffmann and others for measuring the dimensions of the heart by orthodiagrams, has already shown its value. Rudolf and Beck have by this means made careful observations of the effects of hot and cold baths upon the size of the heart, and have communicated their findings to the *Munchener Medizinische. Wochenschrift.*

The size of the heart was measured immediately before entering the bath, and a remeasurement was made after bathing. The results obtained appeared almost uniform. After a hot bath the size of the heart was considerably diminished; at the same time there was a marked increase in the pulse rate; while, on the other hand, after a cold bath, the size of the heart increased, the skin became pale, and there was a diminished pulse frequency.

These observations are extremely interesting in connection with the Nauheim baths, which are held in high esteem by modern physicians. Orthodiagrams show a marked diminution in the size of the heart as a result of Nauheim baths, natural or artificial, even in water with a temperature from 87 to 95 degrees.

Dr. James McKenzie, whose work on "Diseases of the Heart" has recently been published, seems to regard as unmerited the reputation which the Nauheim baths enjoy among the medical profession. His observations, however, at Bad-Nauheim appear to have been very limited and it would not seem that he had used either the X-rays or the orthodiagrams, though he mentions that there was a slowing in the heart's action in several cases under observation. This he considers as merely a temporary effect, and he states that this conclusion was arrived at by the fact that when he returned home he found his pulse rate and that of a friend slowed in the same

manner when they laid in a bath of ordinary tap water at a temperature of 89 degrees. One is naturally not impressed by deductions made without proper scientific investigation.

Professor Jurgensen, of Tubingen, speaking of the resistance movement and of the baths, has written: "I can personally testify that the Schott method of gymnastics is capable in a short time of considerably diminishing the cardiac dullness, and at the same time strengthening the results. These results practically admit of no other interpretation than that given by Augustus Schott, the originator of the method, namely, that the over-distended heart is relieved of its burden. . . . I have had no opportunity of observing the immediate effect of the baths on the heart, but there is no reason to doubt the Schott brothers' statements, and besides they have been confirmed by prominent physicians—Grainger Stewart, Holman, Saunby"; also by Thorne, Newton Heineman, Broadbent, Baldwin, Gibson, McGregor Robertson, Satterthwaite, Lucien Heftler, Peabody, Francis, Strumpell, Lauder Brunton, and other brilliant and competent investigators.

MEDICAL MEN AND LEGACIES FROM PATIENTS.

When a grateful patient leaves a bequest by will to his medical attendant, the position of the latter is sometimes awkward. The disappointed relatives can easily bring against him the charge of undue influence, which, no matter how honorable the physician may be, is sometimes difficult to rebut. We understand that the French law treats all bequests from a patient to a doctor as null and void.

The *British Medical Journal*, in an editorial on this subject, refers to a case recently tried in England. Dr. William Dunn, now Medical Officer of Uppingham School, but formerly a practitioner in Battersea, had among his patients there a lady, who, when she first came under his care, was living apart from her family, in very poor circumstances. Besides advising her as to her health, Dr. Dunn lent her money, and

his wife, Mrs. Dunn, showed her much kindness. Later, the patient inherited a considerable sum of money from a sister, and then commenced making different wills, sometimes independently, sometimes through solicitors. The terms in these wills varied, but one feature stood out clearly in them all—the wish to benefit Dr. Dunn, who had befriended her in her evil days. It appeared from evidence at the trial that she was given to drink, but there was no proof of undue influence by Dr. Dunn or his wife. It was an important point in the case that Dr. Dunn ceased to have charge of her a considerable time before her death. The trial lasted three days, when the parties came to terms, and the doctor received his bequest. The *Journal* concludes this article by expressing the opinion that "Dr. Dunn is perfectly entitled to a legacy which was obviously intended by the poor woman to be a reward for professional and other services rendered by him to her when she was poor and friendless."

MEDICAL EXPERTS.

Nothing has brought the medical profession into greater disrepute than the conduct of physicians, called medical experts, in giving their testimony before the courts in certain classes of cases.

We learn from the *New York Medical Journal* that the efforts of the medical profession, with those of the legal profession, are likely to lessen the evils referred to in the near future. The Legislature of that State will be petitioned to pass a bill authorizing the Supreme Court to appoint not more than sixty physicians from their respective judicial departments, who should be qualified to act as medical experts, and that the expense of their services should be borne by the county in which the action was tried.

From the legal side, we find the following expression of opinion in certain daily papers of New York State: It is apparent to all that theoretically the expert is the scientist

interested solely in facts, and should retain freedom of judgment and liberty of speech, and that no one should be permitted to distort, pervert or misrepresent his testimony. Scientific open-mindedness is of most importance where the expert entirely depends for his emolument upon the good graces of contending parties, and largely is without the recognition and protection of the court. Nor is the Bar blameless. Not only do some of its members connive at the hiring of corrupt and incompetent so-called experts, but they artfully and selfishly cultivate, and are largely responsible for, the fallacy that a witness is to be discredited if he can be disconcerted. Thus the art of cross-examination, so potent for good when fairly and properly used, plays havoc with hard-earned and well-deserved reputations, in the hands of lawyers whose sole ambition is to win. The *Journal* concludes its article as follows: "The two professions of law and medicine having joined forces for the attainment of so lofty a purpose as that of purging themselves of complicity in turning judicial inquiries into farces, we may well hope and expect that there will soon be an act of legislation that will prove effective in bringing about the desired result, even if the precise measures at first recommended turn out to call for amendment as to some matters of detail."

ANCIENT MEDICINE.

The history of Ancient Medicine has not been studied as well as it deserves. Those who have written on this subject in the past have frequently laid too much stress on the mistakes and oddities of ancient physicians, instead of telling us the best that could be learned about them.

Dr. John Comrie, the first lecturer on the history of medicine in the University of Edinburgh, has recently delivered a course of eight lectures upon Ancient Medicine. He has pointed out that the commonly accepted saying that ancient medicine was a mass of false traditions and childish reme-

dies was quite erroneous. With all their faults and shortcomings, there were among physicians of even the most distant past men of skill and noble character.

With regard to Assyrian medicine, the medical procedures of the inhabitants of the Euphrates basin were closely bound up from about 1500 B.C. onward with those of Egypt. In Babylon a doctor was mentioned as early as 2700 B.C. Rule number nine in their code referred to the remuneration of physicians for the treatment of various diseases. The social position of the medical profession in ancient Egypt has given rise to considerable discussion. The physicians belonged to the priestly class, though not priests themselves. Many of the physicians of early Egypt reached a high place as the friends and counsellors of Pharaoh, and one living apparently in the time of the Third Dynasty (3500 B.C.), was, in later ages, even deified and worshipped in Memphis and other places. All these facts suffice to show that the service of a class trained in the art of healing was greatly sought in the lands where the dawn of our civilization began.

MILITARY TRAINING IN UNIVERSITIES AND PUBLIC SCHOOLS.

The question of establishing another unit is now being considered by the President, heads of colleges and a committee appointed for that purpose.

Lieut.-Col. Fotheringham, at the request of those interested, went to Ottawa, and interviewed on the 24th and 25th of February last the Honorable the Minister of Militia, the Chief of the General Staff, and other members of the Military Council.

After he returned, he prepared and presented a very interesting report, in which he said he found all in full sympathy with the project. Both Queen's and McGill Universities are moving independently in the same direction at the present time. The matter has been discussed at headquarters as part

of the plans of the Minister, looking to the general introduction of physical training and drill into the public schools and other educational institutions of the country. It is his desire that if undertaken it should be a part of the University scheme of physical training for its undergraduates, and by those supported by the authority of the University. The views of the military authorities are to some extent based upon the regulations of the Army Act of Great Britain as to officers' trained corps at the British universities. They will probably give to other university corps a status slightly different from that of ordinary militia units as to availibility in service, in rites, etc., and liabilty or readiness for sudden duty during the vacation months.

NOTE.

Dr. W. C. Usher was recently fined in Colborne $25 for practising in the office of Dr. W. A. Sargent without a license. The Colborne *Express* expresses the opinion that this action was taken against Dr. Usher on the ground that he was a foreigner. We may say that we believe the *Express* is not correct in this statement, but we think it fair to Dr. Usher to repeat certain statements made in that newspaper. Dr. Usher is a native of Northumberland County, having been born at Codrington, and is a son of Mr. and Mrs. William Usher, now of Colborne. He attended high school at Brighton, where he won a gold medal and a scholarship of $130. He entered Queen's University, Kingston, when 16 years of age, and after his fourth session graduated M.A., winning a gold medal. When a little over 21, he graduated in medicine, and passed the General Council examination the same year. After this he took post-graduate work at Harvard, and then in competition with twenty-five graduates he headed the list in the competition for the position of House Surgeon at the Rhode Island Hospital, at Providence.

It may be added that Dr. Usher, in taking charge of Dr. Sargent's practice for a few days, without any hope of reward, had no idea that he was doing an unlawful act. We understand that the representatives of the Council, when they learned the circumstances, made the fine as light as possible.

ASSOCIATION OF MEDICAL OFFICERS OF THE MILITIA OF CANADA.

The Annual Meeting was held at Ottawa, on the 25th and 26th February. President, Colonel Ryerson, M.R.O., Knight of Grace of St. John of Jerusalem.

The programme was as follows:

THURSDAY, FEBRUARY 25TH.

1. President's Address.
2. Address by Major-General Sir Percy Lake, K.C.M.G., Inspector-General.
3. Election of Officers.
4. General Business.
5. "Impressions of a Month at the Royal Army Medical College, London."—Lieut.-Col. Fotheringham, P.M.O., M.D. No. 2.
6. Notes from Reports on the Russo-Japanese War.—Lieut.-Col. Jones, D.G.M.S.

The annual dinner was held at the Laurentian Club, and was a success from every point of view.

FRIDAY, FEBRUARY 26TH.

11 A.M.

1. "The Regimental Medical Officers."—Lieut.-Col. King, 5th R. G.
2. Report of a case from the Dominion Arsenal, Quebec—"Importance of Conservative Surgery in Minor Cases." Major G. G. Turcott, A.M.C.
3. The New Field Water Analysis Case.—Major Drum, P.A.M.C.

3 P.M.

1. "Interior Economy of a Field Ambulance."—Lieut.-Col. Fenton, A.M.C., O.C. No. X. Field Ambulance.
2. "Military Instruction as a Factor of the Educational System."—Major C. A. Hodgetts, A.M.C.
3. "The Routine Work of the Sanitary Officer at Camps of Instruction."—Captain Clark, P.A.M.C.
4. "Military Gymnastics."—Captain Ashton-Fletcher, 2nd Q.O.R.
5. "The Trek of a Field Ambulance."—Major T. B. Richardson, A.M.C.

Notice of motion given by Lieut.-Col. Jones, P.A.M.C., at the last Annual Meeting:

"That this Association of Medical Officers of the Militia of Canada expresses its approval of the scheme of forming, in Canada, an association having for its object the development of Ambulance and Red Cross Work in the Dominion."

This was adopted.

The next annual meeting will be held at Ottawa, February 24th and 25th, 1910.

The following officers were elected for the ensuing year: President, Lieut.-Col. H. S. Birkett, Montreal; Vice-Presidents, Major Rankin, M.P.; Lieut.-Col. G. S. Rennie; Major Kilborn; Major A. T. Shillington; Major E. R. Brown; Captain Williams; Major E. A. LeBel; Lieut.-Col. Murray MacLaren; Lieut.-Col. Blanchard; Captain McTavish; Lieut.-Col. Jenkins; Captain S. W. Hewetson; Secretary-Treasurer, Lieut. T. H. Leggett, Ottawa.

PROVISIONAL PROGRAMME FOR THE ANNUAL MEETING OF THE ONTARIO MEDICAL ASSOCIATION.

TUESDAY, JUNE 1ST, 1909.—MORNING SESSION.

Medical Section.—10 a.m.

1. Paper—A. Sangster, Stouffville.
2. "Grave's Disease"—H. B. Anderson, Toronto.
3. Paper—E. Ryan, Kingston.
4. "Differential Diagnosis of Cerebellar Tumors—Ernest Jones, Toronto.
5. "A Case of Opium Poisoning"—A. Taylor, Goderich.
6. Paper—R. J. Dwyer, Toronto.

Surgical Section.—10 a.m.

1. "Hodgkin's Disease"—W. J. O. Malloch, Toronto.
2. Paper—H. E. Hayd, Buffalo.
3. "Surgical Treatment of Gall Stones"—C. F. Moore, Toronto.
4. Paper—J. W. S. McCullough, Alliston.
5. "A Case of Appendicitis"—Everett Hicks, Port Dover.

Section of Preventive Medicine.—10 a.m.

1. Paper—J. C. Connell, Kingston.
2. Paper—W. R. Hall, Chatham.

Section of Gynecology, Obstetrics, and Diseases of Children.

1. "Pernicious Vomiting of Pregnancy"—J. M. Slemons, Baltimore.
2. "Use of Hyoscine and Morphine in Obstetrical Work"—C. H. Vrooman, Winnipeg.
3. "Case in Practice"—W. Spankie, Wolf Island.
4. Paper—S. A. Lockhart, Montreal.

General Session.—2.30 p.m.

1. President's Address—H. J. Hamilton.
2. "Acute Septic Peritonitis"—J. B. Deaver, Philadelphia.

TUESDAY EVENING, 8.30 P.M.

1. Paper—L. Emmett Holt, New York.
2. Paper—J. Alder, New York.

WEDNESDAY, JUNE 2ND, 1909.—MORNING SESSION.

Medical Section.—9.30 a.m.

1. "Symposium, Present Day Therapeutics."
   (a) "Nihilism in Therapeutics"—J. T. Fotheringham, Toronto.
   (b) "Nostrum Evil"—J. Ferguson, Toronto.
   (c) "Tuberculin Therapy"—J. H. Elliott, Toronto.
   (d) "Bier's Hyperæmic Treatment"—S. H. Westman, Toronto.
   (e) "Recent Advances in X-Ray and Radium Therapeutics"—C. R. Dickson, Toronto.
2. "Therapeutics of Digitalis"—V. E. Henderson, Toronto.
3. Paper—W. B. Thistle, Toronto.

Surgical Section.—9.30 a.m.

1. Paper—C. B. Shuttleworth, Toronto.
2. "Repair of 3 cm. Defect of the Median Nerve, due to old Injury. Almost Complete Restoration of Function"—Ingersoll Olmstead, Hamilton.
3. Paper—J. S. Wardlaw, Galt.
4. Paper—R. R. Wallace, Hamilton.

Section on Diseases of Eye, Ear, Throat and Nose.—9.30 a.m.

1. Exhibition of Cases.
   Exhibition of Specimens, Instruments, etc.
   Demonstration of New Methods.
2. Papers—
   (a) "Influence of Light Rays on the Retina"—J. N. MacCallum, Toronto.
   (b) Paper—W. F. Chappell, New York.
   (c) "Bronchoscopy," etc.—D. J. G. Wishart, Toronto.

Section of Gynecology, Obstetrics and Diseases of Children.—9.00 a.m.

1. "Diagnosis of Genito-Urinary Diseases of Women"—Ellice McDonald, New York.
2. "Toxemia of Pregnancy"—H. M. Little, Montreal.
3. Paper—A. E. McColl, Belleville.
4. "Ultimate End of Surgery, with Special Reference to the Surgery of the Pelvic Organs in Women"—W. P. Manton, Detroit.

WEDNESDAY AFTERNOON.—GENERAL SESSION, 2.30 p.m.

1. "Copious Water Drinking in the Treatment of Typhoid Fever"—E. F. Cushing, Cleveland.

THURSDAY, JUNE 3RD, 1909.—MORNING SESSION.

Medical Section.—9.30 a.m.

1. Paper—J. Fisher, Stratford.
2. Paper—J. A. Bauer, Hamilton.
3. "Gastrogenous Diarrhœas"—Graham Chambers, Toronto.
4. "Landry's Paralysis"—R. G. Kelly, Watford.
5. "Results in Vaccine Treatment of Certain Bacterial Diseases"—G. W. Ross, Toronto.

Surgical Section.—9.30 a.m.

1. "Moveable Kidney"—W. McKeown, Toronto.
2. "Intussception"—J. M. Elder, Montreal.
3. Paper—J. M. Rogers, Ingersoll.
4. Paper—Hadley Williams, London.

Section of Gynecology, Obstetrics and Diseases of Children.

1. Symposium—Slightly Contracted Pelvis in Pregnancy and Labor.

2. Paper—K. C. McIlwraith, Toronto.
3. Paper—A. Jackson, Bolton.
4. Paper—Allen Baines, Toronto.
5. Paper—F. Fenton, Toronto.

General Session.—2.30 p.m.

Address in Medicine—Prof. Wm. Osler, Oxford, Eng.

Personals.

Dr. W. P. Caven returned from Atlantic City, March 14th.

Dr. Weir Mitchell, of Philadelphia, celebrated his 80th birthday on February 15th.

Dr. E. M. Gideon (Tor., '07), has passed the necessary examination for L.R.C.P. (Eng.).

Dr. J. T. Wright (Tor., '01), who was formerly at Plevna, is now practising at Manitou, Man.

Dr. J. M. Piper, of Toronto, has left for a Mediterranean trip. He expects to return early in August.

Dr. D. G. McIlwraith (Tor., '01), of Binbrook, has been appointed Associate Coroner for the County of Wentworth.

Dr. C. E. Hill (Tor., '08), has been appointed House Surgeon of the New York Hospital for a term of two years.

Dr. Margaret S. Wallace (Trin., '98), has been appointed Professor of Medicine in the College of Medicine for Women, North India.

Drs. Gibb Wishart and Perry Goldsmith attended a meeting of the Laryngological Association, held in Chicago the last week in February.

Dr. and Mrs. Wm. Sloan celebrated the fiftieth anniversary of their wedding, March 4th, at their residence, 191 Dunn Avenue, Toronto.

Dr. J. F. Hazlewood (Tor., '07), after spending fifteen months in the Erie County and Buffalo State Hospital, is now working in certain hospitals in New York.

Dr. Robert Y. Parry, Hamilton, has been appointed Associate Coroner for the County of Wentworth, and Dr. Ransom H. Green, of Embro, Associate Coroner for the County of Oxford.

Dr. Wakley, editor of the *Lancet* (English), was seriously indisposed during the months of January and February. The *B. M. J.* says that his condition, March 6th, caused his friends much anxiety.

Dr. G. D. Porter (Tor., '94), has been appointed travelling secretary to the Canadian Association for the Prevention of Tuberculosis, and is delivering a series of lectures in the towns of Ontario.

Dr. A. T. Hobbs, Superintendent, Homewood Sanitarium, Guelph, is in Europe taking up the study of mental and nervous diseases. He will spend some time in Berne, Munich, Vienna, Berlin and London, returning to Canada early in July.

Dr. A. D. Blackader delivered an address on "The Respiratory Spasm of Infancy" before the Philadelphia Pediatric Society, Tuesday evening, February 9th. At the close of the meeting the members tendered Dr. Blackader a reception in the Hotel Walton.

Dr. Herbert J. Hamilton, of Toronto, was the victim of a serious accident on the night of March 11th. A little after ten o'clock he stepped into a cab, in front of his own door, intending to visit a patient. The driver turned somewhat suddenly on to the street car track, and a trolley car collided with the cab. Dr. Hamilton received a severe shock together with a fracture of two ribs. He left this city March 26th for Old Point Comfort, where he will remain for a few days.

Dr. T. G. Roddick, formerly Dean of the Medical Faculty of McGill University, at a recent banquet of the medical students, referred to his efforts to secure Dominion Registration. The law still remains on the statute books, and six of the Provinces have stated that they are ready to avail themselves of the privileges of the Act. The other three have not yet done so, and appear to be watching each other. He hoped the day would soon arrive when all the Provinces would signify their willingness to have the Act go into operation.

Obituary.

PETER HORRACKS, M.D., F.R.C.P. (Lond.)

Dr. P. Horracks, Senior Obstetric Physician to Guy's Hospital, London, died February 28th, aged 56.

DUNCAN A. STEWART, M.B.

Dr. Stewart, of Ailsa Craig, died December 1st, 1908. He graduated from the University of Toronto in 1877.

DAVID JAMES HAMILTON, LL.D., M.B., F.R.S.

Dr. D. J. Hamilton, formerly Professor of Pathology in Aberdeen University, died February 19th, aged 60.

DANIEL YOUNG, M.D.

Dr. Young, formerly a practitioner of Adolphustown, died at 96 Simpson Avenue, Toronto, February 22nd, aged 77.

CHAS. H. McKENNA, M.B.

Dr. McKenna died in Dublin, Ont., January 1st. He graduated M.B. from the University of Toronto in 1899, and was for some time house surgeon at St. Michael's Hospital, Toronto.

THOMAS W. CARLAW, M.D.

Dr. Carlaw, of Campbellford, died November 5, 1908, aged 45. He graduated from Trinity University in 1893, then went to Campbellford, and continued in practice in that town until a short time before his death.

W. T. BULL, M.D.

Dr. W. T. Bull, one of the most distinguished surgeons of New York, died of cancer, February 22nd, aged 60. He was Professor of Surgery at the College of Physicians and Surgeons of Columbia about 20 years.

DENISON DeLOSS CARDER, M.D.

Dr. DeLoss Carder died at his home in Blyth, February 18. After receiving his license to practise in Ontario, in 1870, he practised for a short time at Delhi, and then removed to Listowel, and about twenty years ago moved from Listowel to Blyth.

WILLIAM EDMUND BURGAR, M.D.

Dr. W. E. Burgar, after an illness of about seven months from heart disease, died at his home in Welland, March 14th. He received his medical education in Kingston, and graduated from Queen's University in 1868. He was highly respected by all classes in the Niagara Peninsula.

LIEUT.-COL. SINCLAIR H. GLASGOW, M.D.

We have to announce with deep regret the death of Dr. Glasgow, of Welland, which occurred March 13th. As announced in the March issue, he underwent a minor operation on his foot in February last. Nothing further was heard about his illness by his friends outside of his own neighborhood until the announcement of his death, caused by diabetes, appeared in the press. In addition to laborious work in his profession, he for many years took an active interest in public matters. He was a Reformer in politics, and took a very great interest in military affairs. At the time of his death he occupied the following positions: President of the Ontario Medical Council, Lieut.-Colonel of the 2nd Dragoons, and Division Surgeon of the Grand Trunk R.R. He received his medical education in the Toronto School of Medicine, and graduated M.B. from the University of Toronto, and M.D. from Victoria University, in 1878. He was born in Stamford Township on March 20th, 1855, and had, therefore, nearly completed his fifty-fourth year.

Book Reviews.

THE CHANGING VALUES OF ENGLISH SPEECH. By Percy Husted Bell. Hinds, Noble and Eldredge, Publishers, 31-33-35 West 15th Street, New York.

This work is the second of the kind from the pen of Dr. Bell, and will be found interesting to any one interested in etymology. Unfortunately the title does not give a fair impression of the contents, for the author wanders all over the field of language study.

NOSE, THROAT AND EAR. Text-book of Diseases of the Nose, Throat and Ear. By Francis R. Packard, M.D., Professor of Diseases of the Nose and Throat in the Philadelphia Polyclinic Hospital and College for Graduates in Medicine; Aurist to the out-patient department of the Pennsylvania Hospital. Pages, 369; plates, 3; illustrations, 135. Philadelphia and London: J. B. Lippincott Company.

As announced by the author, this volume is intended to present the essentials upon diseases of the nose, throat and ear to students and general practitioners, in such a manner as will be acceptable to them. During recent years many books of a similar character have been placed upon the market, but probably none have received a warmer welcome than will be extended to this of Dr. Packard.

In so far as is consistent with the space to which he has confined his book, the author has dealt very fully with his subject, giving due weight to each division; bringing the etiology, diagnosis and treatment of each disease down to the present time.

The subject-matter is clearly and succinctly arranged; in some cases, briefly, almost to a fault; while the illustrations are satisfactory, very many of them being original.

On one point the author has departed from the usual run of text-books. He has recognized the intimate relationship which so frequently exists between diseases of the eye and the nose; and has briefly outlined their connection. This is a laudable feature, and it is hoped that future authors upon laryngology will not ignore this fact.

While the work will be a creditable addition to the special-

ist's library, it should prove of inestimable value to the general practitioner.

The clearness and finish of the type and illustrations, together with the excellence of the binding, are highly creditable to the publishers of the work.

SOURED MILK AND PURE CULTURES OF LACTIC ACID BACILLI IN THE TREATMENT OF DISEASE. By George Herschell, M.D., London, Fellow of the Royal Society of Medicine; *late Senior Physician to the National Hospital for Diseases* of the Heart; Physician to the West End Hospital for Diseases of the Nervous System, and Physician to the Farringdon General Dispensary. Second impression; ninth thousand. London: Henry J. Glaisher, 57 Wigmore Street West. Chicago: W. T. Keener & Co., 90 Wabash Avenue. 1909.

This monograph appeared in *The Lancet*, of August, 1908. It has been enlarged and is given to the PRACTITIONER as a guide for the use of Lactic Acid Ferments in Disease. Dr. *Herschell states that the book is not exhaustive of the subject*, but to us it appears very complete and useful. It is divided into three chapters. The first deals with auto-intoxication and intestinal putrefaction. The second on the selection and preparation of Lactic Acid Ferments for use in practice, and the third on the administration of Lactic Acid and Ferments in disease.

BACTERIAL FOOD POISONING. A Concise Exposition of the Etiology, Bacteriology, Pathology, Symptomatology, Prophylaxis, and Treatment of So-called Ptomaine Poisoning. By Prof. Dr. A. Dieudonné, Munich. Authorized translation, edited, with additions, by Dr. Charles Frederick Bolduan, Bacteriologist, Research Laboratory, Department of Health, City of New York. 8vo, 128 pages. Cloth. Prepaid, $1 net. New York: E. B. Treat & Co., Medical Publishers, 241-243 West 23rd Street.

Published less than a year ago, Prof. Dieudonné's manual on "Bacterial Food Poisoning" has already become favorably known as one of the best presentations of the subject. In the present translation, the editor has incorporated descriptions of

a number of recent outbreaks of food poisoning, elaborating upon the prophylaxis applicable to American conditions, and also going more fully into detail on the subject of treatment. He has slightly rearranged the material, so that paragraph headings could be inserted and the subject of all chapters discussed in the same sequence. An index has also been added to facilitate reference, and this, with the other changes and additions, greatly enhances the value of the volume.

Diathesis and Ocular Diseases. By A. Maitland Ramsay, M.D., Ophthalmic Surgeon, Glasgow Royal Infirmary; Lecturer on Eye Diseases, etc., University of Glasgow; author of "Atlas of External Diseases of the Eye," etc. London: Bailliere, Tindall and Cox, 8 Henrietta Street, Covent Garden. 1909.

This is a most suggestive book. It is clinical in character, therefore of especial value to the busy practitioner, whether he be the family physician or the specialist. To the family physician who may be unable to call for an expert opinion on his eye cases, this book will prove most useful. He will read and reread it, getting information upon the diseases touched upon, which he might find it difficult to obtain in the larger treatises. And the specialist will enjoy it, and benefit by its perusal, for the "point of view" renders the author's remarks both interesting and instructive. The table of contents shows the scope of the book: The Neurotic Diathesis, Ocular Headache, Asthenopia; The Arthritic Diatheses, Rheumatic Form, Gouty Form, Inflammation of the Conjunctiva and of the Sclerotic; Inflammation of the Uveal Tract, Iritis, Choroiditis, Irido-Choroiditis; Inflammation of the Retina and Optic Nerve; Hemorrhagic Retinitis, Albuminuric Form, Glycosuric Form; Toxic Amblyopia and Retro-bulbar Neuritis: Glaucoma.

Facility of reference is secured by a good index. The book contains 184 pages and 17 plates.

Diseases of the Digestive Canal (Esophagus, Stomach and Intestines). By Dr. Paul Cohnheim, specialist in diseases of the stomach and intestines in Berlin. From the second German edition. Edited and translated by Dudley Fulton, M.D., Lecturer on Medicine, University of South-

ern California, Los Angeles. Illustrated. Published by J. B. Lippincott & Co., Philadelphia and London. Dedicated to Dr. I. Boas, of Berlin.

This volume contains about 375 pages of subject matter, and is illustrated by a number of diagrams and illustrations, a number of the latter being reproduced from original photographs.

The manner in which the subjects are treated is distinctive, the discussions being approached from the view of the clinician solely, each point described being as far as practicable illustrated by a short clinical account of a case or cases occurring in the practice of the author, who throughout emphasizes the anamnesis, which in his opinion is the most important part of the examination of a gastro-intestinal case.

We can heartily recommend this work especially to the general practitioner. It is concise, clear, and eminently practical throughout, laboratory methods being treated more as a means of confirming than of reaching a diagnosis, its range of usefulness being, in our opinion, thus greatly widened.

The Principles and Practice of Dermatology. Designed for Students and Practitioners. By William Allen Pusey, A.M., M.D., Professor of Dermatology in the University of Illinois; Dermatologist to St. Luke's and Cook County Hospitals, Chicago; Member of the Dermatological Association. With one colored plate and three hundred and sixty-seven text illustrations. New York and London: D. Appleton & Company.

It is divided into sixteen sections, as follows: 1. The Principles of Dermatology; 2. Practices of Dermatology; 3. Angioneurotic Dermatoses; 4. Inflammations; 5. Dry Scaly Inflammatory Dermatoses; 6. Hemorrages; 7. Infectious Diseases of the Skin. 8. Dermatoses due to Animal Parasites; 9. Hypertrophies; 10. Atrophies; 11. Anomalies of Pigmentation; 12. Neuroses; 13. New Growths; 14. Diseases of the Appendages of the Skin; 15. Diseases of the Mucous Membranes.

This able work, a volume of one thousand pages, is replete with excellent illustrations, and represents the present status of Dermatology. It is comprehensively and practically written, and shows that the author has made a deep study of the subject, and has a thorough knowledge of all affections of the skin.

GREEN'S ENCYCLOPEDIA AND DICTIONARY OF MEDICINE AND SURGERY. Edited by J. W. Ballantyne, M.D., F.R.C.P.E. Vol. X. Thiersch-Zymotic. Published by William Green & Sons, Edinburgh and London.

This, the tenth, is the last volume of this excellent work. Its general arrangement is in concordance with those which preceded it, and among its editors such names as Fowler, Bland-Sutton, Edward Owen, speak for the standard which was set and has been maintained throughout the Encyclopedia.

The sections which are outstanding are those on the Thyroid, Tuberculosis, Toxicology, Urinalysis, the Uterus, Vision, etc. The same system of cross-references has been preserved, greatly facilitating search after special points and subjects.

We again beg to congratulate Messrs. Green & Sons on their excellent production, and on its satisfactory completion.

Sanitarium Chart.

We have received from Messrs. Bale, Sons and Danielsson, 83 Gt. Titchfield St., London, W., England a very convenient chart; designed by the superintendent of a large sanitarium, so that particulars of each case may be kept uniformly from day to day for three months, and be available at any moment for reference. They can be obtained singly for 1s. 3d. per dozen, or in books of twenty-five at 2s. 3d.

Correspondence.

1424 E. Ravenswood Park, Chicago, Ill.

Editor Canadian Practitioner and Review,
Toronto, Canada.

Sir,—I am collecting material for a paper on atropine as a hemostatic, and would be obliged to any of your readers who would send me notes of their experience with this remedy. I am particularly anxious to receive adverse reports, as well as those favoring the remedy.

Yours truly,
F. WAUGH.

Selections.

Surgical Suggestions.

Strong antiseptic solutions should be avoided in dressing scalp wounds. For "wet dressings" Thiersch's (boro-salicylic), or Burow's (aluminum acetate) solution is sufficiently antiseptic.

Sudden one-sided diminution of hearing after bathing may indicate nothing more serious than water in the ear, or a plug of wax which has swelled up and obstructed the canal. If no means of syringing is at hand, the instillation of ether and alcohol, equal parts, will dry up the plug and often cause it to disintegrate, with a corresponding improvement in hearing. Swollen seeds, peas or beans in the external canal can be treated similarly.

Three or four drops of peroxide of hydrogen in the ear, followed five minutes later by thorough syringing with a solution of boracic acid or bicarbonate of soda, will readily remove impacted cerumen.

A hypodermic injection of morphine, gr. 1-6, about a half hour before a major eye operation, such as cataract or iridectomy, will keep the patient quiet, and make the extraction calm and free from pain. There is no danger of sudden motion of the head, and the technic is more exact and rapid.

A large dose of antipyrine or quinine will often clear up a frontal headache due to acute catarrh of an accessory sinus, by its astringent action on the mucous membrane, and the consequent improvement of drainage.

Always examine a child suffering from chorea for the presence of adenoids. The removal of the growths in the pharynx may cure a mild case.

Repeated attacks of "indigestion," not obviously due to some other condition, should awaken the suspicion of gallstones. Most of the patients operated upon for cholelithiasis give a history of having been treated for a long time for "dyspepsia," and in many of these cases the correct diagnosis might earlier have been established.

A moderately hard, palpable mass in the right iliac region is often diagnosed as acute appendicitis, with inflamed omen-

tum around the appendix. But ileocecal tuberculosis, with inflammatory exudate, should be kept in mind.

The location of the head zone will often decide whether a case is one of acute appendicitis, with inflammation of the serosa, or acute salpingitis. If the head zone commences at the level of the umbilicus, extends over the right lumbar region and to just below Poupart's ligament, it is probably acute appendicitis. If the head zone begins two or three inches below the umbilicus, with a broad base on the abdomen, and extends to a single point midway between the hip-joint and the knee, the case is probably one of acute salpingitis.

The sudden acute onset of abdominal pain, with tenderness over the appendix region, but with rigidity of the right rectus low down, is very suggestive of acute salpingitis. The diagnosis is further confirmed if there is high temperature and extremely high leucocyte count (20,000-40,000; polynuclears, 80-90 per cent.), even though vaginal examination be negative.

The palpation of a pulsating vessel in the vaginal fornix of a woman who has skipped a menstrual period, will often give the clue to a possible ectopic gestation.

An abscess of the right ovary may give the same signs and symptoms as acute fulminating appendicitis. If an incision for appendicectomy is made, it should be of sufficient length and low enough down to allow of careful examination of the right adnexa.

A tumor on either side of the vertebral column, with a slight bulging in this region and scoliosis, is often a perinephric abscess. But if cord symptoms are present, a sacromatous growth of the vertebrae should be kept in mind.

A synovitis that persists, despite careful treatment, should arouse suspicion of tuberculosis.

One should inquire carefully for the history of the application of carbolic acid to a wound, especially of the finger or toe, when a gangrene with a distinct line of demarcation has developed.

When exploring for a needle or other foreign body, the finger-tip is often far more useful than a probe. It must be remembered, too, that strands of fascia often impart to a probe "the feel" of a foreign body. Cutting and picking at these deceptive strands of tissue soon distort the field of operation, and destroy important relations. It is extremely desirable to

conduct a systematic and cleanly dissection when seeking a foreign body.

Nurses should be instructed not to massage the limbs of patients who complain of pain after operation or confinement, without the order of the attending surgeon. If phlebitis and thrombosis are present, the manipulation may loosen a clot and cause instant death.

If a patient complains of sharp pain in the big toe, examine the urine for albumin or sugar, in order to exclude a diabetic or nephritic condition.

—*"Seven Hundred Surgical Suggestions."*

Euresol in Seborrhea.

Charles J. White, Boston, Mass., referring in the course of an article on modern dermatological pathology, to new external drugs, writes that in seborrhea, euresol (resorcin monoacetate) replaces resorcin to great advantage, is far less irritating, and discolors gray hair but little. Combined with corrosive sublimate, formic acid, and alcohol, he says that euresol constitutes the best hair wash that he has ever found for curing dandruff.—*Journal Cutaneous Diseases.*

Digipuratum: a New Preparation of Digitalis.

Digitalis is one of the most valuable drugs we possess, yet unfortunately its action is very unreliable, owing to varying age of the leaves and uncertain percentage of active ingredients. Recently a purified extract has been placed upon the market under the name "digipuratum." It is standardized to a definite strength; is free from digitonin, but contains both digitoxin and digitalin. The active ingredients in this extract are insoluble in cold water and acids, but very easily soluble in dilute alkalies, so that a uniform absorption can be expected from the intestines. The strength of the preparation is such that 0.1 Gm. corresponds to 0.1 Gm. of active leaves.

According to the extensive investigations of C. Hoepffner and A. Fraenkel, digipuratum always shows a prompt and reliable action. The action upon pulse and diuresis appears rapidly, (after 0.4. Gm. in twenty-four hours). There is reported to be much less disturbance of the stomach than with other preparations possessing the same strength. Other bad after-effects were not seen, so that the authors only have the highest words of praise for the drug.—*Muench. med. Woch.*

Miscellaneous.

The Medical Fee.

Who shall say what a man may do in gratitude for a life saved? The value of the service rendered, if measured in dollars, would depend upon the commercial value of the life, or its value in other respects to the community or country or even the world.

The fee of the general practitioner is inevitably determined by the financial standing of the community in which he practises, and the law of nature and economics will, as a rule, put the right man in the right place. It naturally follows that the best equipped men gravitate to the centres which appreciate and demand high standards, and expect to pay commensurately for them. Among these able-to-pay people, however, there is an occasional protest, and insinuation that the doctor is commercial and mercenary, exacting fees beyond the value of his professional service. A pertinent case of this kind is cited by Dr. John L. Hildreth, of Massachusetts, in the Annual Discourse before the Massachusetts Medical Society, in June, 1906, as follows: "A New York surgeon asked $1,000 for an operation for removing an appendix. The mother of the patient offered $600; but the surgeon protested, cited testimony of brother physicians to prove that the fee was not excessive, and finally received the balance. The letter which enclosed the last check was as follows: 'My discussion with you has been a friendly one, and so you will not, I am sure, suspect me of acrimony when I say that my feeling about the present excessive charge of surgeons is a general one, and the reflection of a sentiment that is everywhere one of surprise and dissatisfaction. We do not question your ability, but we feel you make us pay too dear for it.'"

This lady wrote under sincere conviction that she had been grossly overcharged, and she gave the impression that the surgeon used his professional skill as a mercenary lever to extort unearned dollars from his patient's purse. She did not plead financial inability to pay the bill, which was simply at the rate current in her locality and sphere; and she seemed oblivious to the fact that the surgeon who operated had unquestionably performed many difficult operations upon charitable subjects, aggregating thousands of dollars in value, to render himself proficient, gain prominence in his profession, and thus prove his qualifications to meet the demands of just such people.

The surgeon is not the kind of man this complaint would make the world believe him. He is the hardest-worked and most unselfish of men; ever ready to do charity, night and day, and bestowing the same devoted skill and attention upon the suffering poor as upon the rich. A quotation from "The Making of a Man" well illustrates this: "The great French surgeon, M. Bourdon, was sent for one day to perform a critical operation upon Cardinal Du Bois, the Prime Minister under the old monarchy. 'You must not expect, sir,' remarked the Cardinal upon the surgeon's entrance, 'to treat me in the same rough manner in which you treat the poor miserable wretches at your hospital of the Hôtel Dieu.' 'My lord,' replied Bourdon, proudly, 'every one of those miserable wretches, as Your Eminence is pleased to call them, is a Prime Minister in my eyes.'"

The possession of great wealth undoubtedly carries with it heavy obligations, and every man should expect to pay according to his ability. The legal fee is graded according to the sum involved, or the value of the liberty or life jeopardized. Why should not the same principle obtain in medicine?

One of our foremost American surgeons has said: "The fixing of a fee correctly is a talent which is either born in a man, or only learned after long experience. The doctor should endeavor to ascertain the patient's circumstances. He can thus be in a position, knowing as he does the gravity of the operation or its triviality, to say what the operation is worth to the patient. The doctor is necessarily the better judge of the two, as he can tell fairly well the value of both these factors, while the patient cannot be well trusted to estimate the severity of an operation about which he is, and must remain, more or less ignorant. When we see what the prices are in other callings, such as law and business, I think we can safely conclude that the profession as a whole is not overpaid. I think there are in every city men who take a purely commercial view of their work, who make work, and do other unprofessional acts, but they get found out sooner or later, and get their pay in kind."

There is practically little difference in the size of the fees asked by the same class of men in England and America. The usual chamber consultation fee in London is two guineas, and capital operations cost from twenty guineas to the thousands, according to the gravity of the case and the circumstances of the patient. Consultation on the Riviera, which necessitates several days of absence, is usually four hundred guineas.

Office consultation in our large cities ranges from five to twenty dollars. Consultations out of the cities involving an absence of half a day, range from one hundred to two hundred