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Original Contributions.

THE RELATION OF DEFORMITY OF THE PELVIS TO LATERAL CURVATURE OF THE SPINE.*

BY H. P. H. GALLOWAY, M.D.,

Surgeon to the Toronto Orthopedic Hospital; Orthopedic Surgeon, Toronto Western Hospital;
Orthopedic Surgeon, Grace General Hospital; Member of the American
Orthopedic Association.

OF the various theories which have been advanced regarding the causation of lateral curvature of the spine, that which attributes to the superincumbent weight the chief etiological importance is the one most generally accepted, and rightly so. It is probable, however, that the superincumbent weight can produce lateral curvature and rotation only when the spine has already deviated from the vertical position so that the downward pressure bears obliquely upon some portion of the spinal column. This has been shown experimentally by Bradford & Lovett, and is in harmony with what one would expect from theoretical considerations. This primary want of erectness of the vertebral column may grow out of various conditions. Unbalanced muscular development, a slight paralysis of one lower extremity, a painful or weak foot, or a difference in the length of the legs may lead unconsciously to the assumption of a faulty attitude because of its being the position of greatest ease, or of least effort. Given a faulty attitude habitually assumed, especially in a growing child of weak muscular development and imperfectly ossified bones, and the conditions

* Read before the American Orthopedic Association at Washington, D.C., May 1st, 1900.

are ripe for the superincumbent weight to become a slowly acting but irresistible mechanical force in producing lateral deviation and rotation, at first slight in amount and easily corrected, but finally altering the shape of the vertebræ and putting upon the deformity the stamp of permanence.

While accepting this explanation of the mechanics of many cases of lateral curvature, my observations have convinced me that the primary mechanical fault in certain cases is one which has received scant attention in orthopedic literature.

Several standard works on orthopedic surgery refer to deformity of the pelvis in connection with the subject of lateral curvature, but the pelvic distortion appears to be regarded as an effect rather than a cause of the spinal deformity. Thus, in the last



FIG. 1.

edition of Bradford & Lovett's work ("Orthopedic Surgery," Bradford & Lovett, 1899), we read, "In severe cases, all the bones of the trunk may be altered and also the pelvis" (page 104); and in another place, "The pelvis is not necessarily distorted in lateral curvature of the spine, but the bones of the pelvis may, if not sufficiently unyielding in their structure, become altered by abnormal pressure or strain" (page 110). Tubby says ("Deformities: a Treatise on Orthopedic Surgery," by A. H. Tubby, 1896), page 140: "The pelvis in severe cases is much deformed. In the ordinary deformity to the right in the dorsal, and to the left in the lumbar region, the shape of the pelvic cavity is abnormal. the lumbo-sacral angle pointing to the left and encroaching to a marked degree on the left half of the cavity. . . . The wings of the sacrum and ilium on the left side are thickened and the

crest of the ilium is lower." An illustration here reproduced, accompanies the description (Fig. 1). It seems clear that these writers regard the pelvic distortion as secondary to and consequent upon the spinal deformity, but it appears to me that the cause is mistaken for the effect.

Aside from *post-mortem* proof, it must be evident to every one who carefully examines many cases of lateral curvature that the pelvis often is not symmetrical. It will be observed quite frequently that one posterior iliac spine or one iliac crest occupies a lower plane than its fellow. In some cases measurement plainly shows this to be due to a difference in the length of the legs, but in not a few instances the most careful measurements can detect

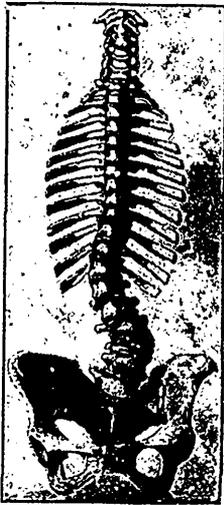


FIG. 2.



FIG. 3.

no such disparity. The plain inference is that there is some asymmetry of the pelvis itself—that its two lateral halves are of unequal size or different in shape. If one lateral half of the pelvis is smaller than the other, or if the pelvis as a whole is distorted, so that the posterior iliac spine or the iliac crest of one side is lower than that of the other, it is fair to assume that the sacrum which is grasped between the two ilia is somewhat tilted laterally, and that consequently its base is on a lower plane at one side than at the other. As the base of the sacrum is the foundation upon which the vertebral column is erected, if this be slanting the column resting upon it will also lean to one side. Being a flexible instead of a rigid column, however, and having attached to it muscles which can move it in various directions, the individual

to whom the column belongs instinctively endeavors to bring it to a more erect position so as to restore his equilibrium. And because the column is made up of various segments more or less freely movable upon one another, this effort to straighten it produces, not a sharp bend but a curvature in the lumbar region, and this necessarily leads to one or more secondary or compensatory curvatures higher up. And because the anatomical structure of the spine makes any great amount of lateral bending impossible without accompanying torsion, rotation is produced as well as curvature.

Figures 4, 5, 6 are from a paper by Dr. James Clifton Edgar, which appeared in the *New York Medical Journal* on Dec. 5th, 1896, and are intended to show various types of deformed pelves, which may give rise to dystocia during labor. These figures, used for the purpose of illustrating an entirely different subject,

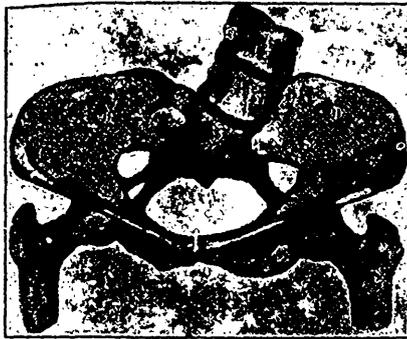


FIG. 4.

also show clearly that a tilted sacral base, with the portion of the spinal column immediately above it leaning to the same side, is by no means merely a matter of theory or imagination.

This slanting sacral base is also well shown in Figs. 1, 2, 3, reproduced from Tubby's book, illustrating specimens in Guy's Hospital Museum.

A spinal column resting upon such an inclined sacral base as that shown in several of these figures must necessarily start upward leaning to one side, and curvature and rotation are inevitable as a result of the individual's efforts to restore his equilibrium. The portion of the trunk above the pelvis is not placed squarely over the latter, and the curvature results from the patient's effort to restore the proper balance of the body. Just here it may be pointed out that the prominence of one hip in the case of an individual with a deformed pelvis is not necessarily entirely due to the altered relation of the pelvis to the portion of the trunk above

it, but is also to some extent directly dependent upon the pelvic deformity.

That deformity of the pelvis is often associated with lateral curvature is not disputed. The point under discussion is which is primary and which is secondary, which is cause and which effect? To my mind it is much more reasonable to look for the primary fault in the foundation than in the superstructure.

The pelvis is practically a solid bony basin, the component parts of which admit of little or no motion between them. In standing it is poised upon the powerful lower extremities by which it is brought into intimate relation with the supporting surface of the earth, while in all ordinary sitting postures, it is more or less perfectly balanced upon the tuberosities of the ischia. On the other hand, the vertebral column, above the sacrum, is composed of segments freely movable upon one another and separated in



FIG. 5.

front by yielding cushions. Resting upon the free upper end of this swaying column, where the leverage is greatest, is the large, heavy, overhanging head. In short, the conditions are such that the column can be held erect only by continuous muscular effort, and the moment the muscles relax sufficiently to allow some portion of the spine to deviate to one or the other side, the superincumbent weight becomes a possible deforming mechanical force, of equal efficiency whether the individual be sitting or standing.

It is unreasonable to suppose that a solid and relatively fixed foundation like the pelvis should fall prey to any distorting influence that could be exerted by such an unstable, jointed superstructure as the spine; while on the other hand, the inherent adjustability of such a superstructure must cause it to accommodate itself to a tilted foundation. This can be at once demonstrated by raising one side of the pelvis by putting an elevation of an inch or two under one foot. By this simple experiment, we artificially

raise one side of the sacral base, with the result that the spinal column instantly accommodates itself to the tilted foundation, exhibiting a lateral curvature.

The question may arise: If the pelvis be so circumstanced that it does not yield readily to the influences which gives rise to deformity in the spine, as is here contended, how does it become deformed so as to be the starting point of the curvature? Although the answer to this question does not come properly within the scope of this paper, the object of which is simply to inquire what is the true relation of lateral curvature to the pelvic deformity which it is admitted is frequently associated with it, a word may be added.

It is universally accepted that the severer forms of pelvic distortion in the vast majority of cases are traceable to rickets,

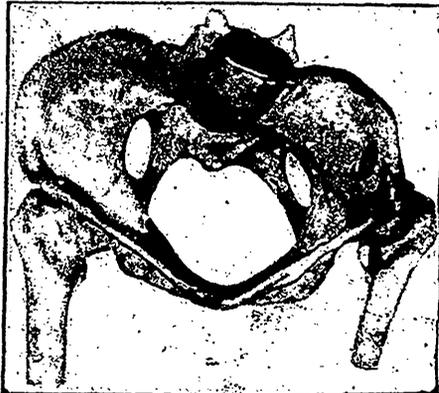


FIG. 6.

and when it is considered how frequently various other evidences, sometimes slight but none the less unmistakable, of the effects of this disease upon the skeleton are met with, it is not unreasonable to suppose that the pelvis, which is so situated that only palpable deformity is likely to attract attention, suffers from some degree of asymmetry more often than is generally supposed. At any rate many experienced obstetricians believe that slight but unrecognized degrees of pelvic deformity are responsible for numerous cases of difficult parturition. This belief, together with the fact that lateral curvature occurs much more frequently in females than in males, deserves consideration in connection with the writer's contention that pelvic deformity may stand in a causative relation to lateral curvature.

As further possible causes of pelvic deformity, it is scarcely necessary to mention osteomalacia and dislocation of the hip, or

to refer to the fact that there is no evidence to show that slight unilateral asymmetry of uncertain origin is less apt to occur in the pelvis than in other portions of the body.

Another matter calls for a word of consideration in connection with the subject of this paper. Most cases of lateral curvature present deformity in both dorsal and lumbar regions, but it has always been a disputed point, which should be regarded as the primary and which the secondary curvature. If it be admitted that pelvic deformity is the initial mechanical fault in certain cases, then in this class at least the lumbar curve is primary.

12 East Bloor St., Toronto.

CLINICAL NOTES ON THE USE OF EUDOXINE IN TYPHOID FEVER.

BY A. J. HARRINGTON, M.D., M.R.C.S. (ENG.), TORONTO.

PATIENT, male, aged 26. Tubercular history, mother and sister having died from phthisis pulmonalis. Patient the subject of chronic nasal catarrh, which had produced almost complete deafness from extension to middle ear through eustachian tube. Had been treated by several specialists without benefit.

Dec. 19th, 1899, saw patient who said he had taken cold. On examination, mucous rales were found on both sides of chest; respirations 28; temperature, 101.2; pulse, 90. Ordered to bed, with instructions to give 5 grains Dover's Powder at bedtime, and drop doses of aconite, with 15 minims of spirits of nitrous ether in water every hour, also a seidlitz powder early next morning. 20th, condition seemed easier; somewhat irritable cough, but loose and free. Pulse and temperature, 101; resp., 24; bowels had acted freely. Examined sputa, which gave negative results; ordered sedative expectorant; little change next two days. Morning of 23rd, at 3 o'clock, was hurriedly summoned; found patient in great pain; referred to spot two inches to the left and two inches above navel; gave hypodermic morphia sulph. and atropia, hot applications having failed to relieve. 24th, evening: temperature, 103.2; resp., 24; pulse, 96. Some tenderness over painful part referred to; no gurgling in right iliac region; no distension. Ordered 1-10th grain calomel tablets, to be followed by saline. Next morning his temperature was 102, pulse, 90; had a restless night. Evening temperature, 103.4; resp., 24; pulse, 96. Bowels had acted three times, and was offensive. Still considerable expectoration, with no bacilli. 26th. Some tympanitis; temperature had been irregular. Examined the blood, which responded to

Widal's test. There had been no rose-spots, no iliac gurgling, and no characteristic evening elevation of temperature. I had heretofore thought this a tubercular case. I now began, or at least continued, my mild eliminative saline treatment, and gave besides 5 grains eudoxine every two hours. Another circumstance had been progressing slowly which added another complication to my case, and that was the spot where the patient had complained of pain on the morning of the 23rd, when I had given him the hypodermic injection, began to enlarge, and in a few days assumed a bulging about the size of a saucer, and was due to forward projection of the rib cartilages by the pressure upwards of something below, which I took for thickening at the pyloric end of the stomach, probably tubercular. He had nausea on several occasions, but only vomited twice. My confrere, who saw him in consultation, was evidently of the opinion that the bulging was hepatic in origin, but was very reserved in giving an opinion. However, in a few days the tympanitic state of the abdomen has much lessened, the stools were quickly rendered antiseptic by the eudoxine tablets, and at the end of the week was thoroughly gone, but the temperature kept between 101 and 102 until the 26th day of January. On January 27th, the temperature was 99.2; the pulse at no time exceeded 102. The bowels were moved by enema every other day. The saucer-like protuberance over the lesser end of the stomach gradually passed away. The patient eventually recovered, and has no symptom of tubercular trouble other than his looks. He has had some persistent edema of left leg, due to venous obstruction, which will, I think, in time pass away. I had no intention of going into all the minor details of this interesting case when I began; what I really wanted to show was the very satisfactory way in which the 5-grain eudoxine tablets acted as a disinfectant and deodorant to the fecal discharges. After seventy-two hours the tympanitis was completely gone, the offensive discharges were corrected, and the patient, as far as his intestines were concerned, required little attention. Eudoxine, which is the bismuth salt of tetraiodophenolphthaleni (nosophen), is prescribed in powder form in 5-grain tablets, is tasteless, and may be administered for an unlimited period with absolute safety. The dose usually prescribed is 5 to 15 grains 3 to 5 times daily. The diet ordered for this case of typhoid was milk, always diluted with soda water, barley water, or plain boiled water, also peptonized milk, albumen water, ice cream, broth, milk and gruel, and peptonized jelly. A great many men are now giving more generous diet in typhoid, but there are always extremists. In the above list is everything that a patient requires if properly administered. I have never lost a case of typhoid, although I cannot say that my cases have been many, but they have certainly given me little

anxiety. My treatment has always been mildly eliminative, with thorough disinfection, and diet as above, with sponging for pyrexia. I have since used eudoxine in two cases of fermentative diarrhea, and have been thoroughly convinced that in it we have a powerful intestine antiseptic. Its further use may be more convincing.

BROAD LIGAMENT CYST.*

BY CHAS. M. SMITH, M.D., ORANGEVILLE, ONT.

Mr. President and Gentlemen,

I merely purpose to give a brief outline of some of the features with which we may have to deal in that interesting variety of cyst, known as intraligamentous or broad ligament cyst, as exemplified in the case which furnished the specimen presented. The case was more remarkable for the absence than the presence of embarrassing complications such as frequently, in fact usually, mark such cystomata.

Mrs. S., the mother of nine children, and who was now fifty-three years of age, had been slowly increasing in girth for some years, but deemed it owing to increasing corpulence, until vesical and intestinal difficulties compelled her to consult her physician.

A unilocular ovarian cyst was diagnosed, and operation was advised.

Patient's consent was not gained until three months later, when increasing dyspnea rendered her life intolerable. After a few days' preparatory treatment, and thorough flushing of the *primae viae*, an aseptic room was secured at her own home, a comfortable farm-house. The abdominal surface and vagina having been well disinfected after thorough cleansing, an incision 3 1-2 inches in length was made slightly to the left of the linea alba. The subcutaneous fat was 1 1-2 inches thick, and in order to secure retraction, two long loops of silk were passed on each side through peritoneum and posterior rectal fascia and given into an assistant's hands. This brought to view, not the pearly surface expected, but a reddish, or rather purplish vascular-looking tumor, the appearance of which rather disconcerted me. But as I had taken the precaution of having an assistant pass both a vesical and uterine sound previously, I could only conclude that I had before me an intraligamentous cyst, for the two fingers could easily map out the outlines of the uterus with the contained sound, showing that the tumor could not be either the uterus or an edematous myoma of that organ. The fingers and hand sweeping

* Read at the Ontario Medical Association Meeting, Toronto.

readily over the upper and posterior aspects of the growth proved that no adhesions existed. Crowding the cyst well up in the wound, and pressing margins of incision backwards, patient was turned somewhat over on the left side, and the trocar was introduced, giving vent to an enormous accumulation of coffee-colored fluid, somewhat thinner than the usual contents of ovarian cysts, but more syrupy than that of parovarian cystomata. On introducing the hand into the cyst, it was found to contain no secondary growths, but when, after removing the hand and again sterilizing it, I attempted to extract the collapsed cyst, I was unable to bring more than about two-thirds of the neoplasm through the incision, which had already been extended to five inches. I then ligated left infundibulo-pelvic ligament with silk, and tied the uterine-extremity in two sections, in which manœuvre I was much aided by the assistant with the sound in uterus, which organ by the way admitted the sound to a depth of 3 1-2 inches. A portion of the cyst-wall which was more loosely attached and less vascular than that presenting at upper extremity of wound was snipped with the scissors, the fingers introduced, and aided by moderately strong traction with the other hand, the cyst was shelled out of its bed with the exception of a strip along the upper and posterior aspect of the growth—apparently the expanded tube and remains of mesosalpinx. In order to avoid having a number of ragged peritoneal ribbons I again used the scissors, cutting between two pairs of hemostatic forceps with jaws protected by rubber tubing. A very fair pedicle was drawn out, and secured with figure-of-eight ligature. The raw surface of stump was touched with thermo-cautery. The condition of patient being excellent, I carried the ends of ligatures grasped in the extremity of a long pair of forceps, drawn down into the cul-de-sac, and with assistant's help the ends were drawn through an opening into the vagina, and secured around a pledget of iodoform gauze. The anterior and posterior raw peritoneal edges were whipped together with a button-hole stitch. Two quarts of hot saline solution were used to flush out the blood, and the wound was brought together with five retentive sutures of silk-worm gut, a double row of continuous catgut uniting first the peritoneum and posterior rectal fascia, then the muscle and anterior fascia, upon which a small roll of iodoform gauze was laid, reaching from upper to lower end of wound, and protruding from lower extremity. Edges of skin were united by continuous suture of silk.

Uninterrupted recovery took place without any subsequent ventral hernia, ligatures came away on eighteenth day, and patient enjoyed good health until her death from apoplexy five years subsequently.

Selected Articles.

THE DIAGNOSIS OF PERFORATION IN TYPHOID FEVER.

BY ALEXANDER M'PHEDRAN, M.D.,
of Toronto, Ontario.

THE symptoms of perforation in typhoid fever are generally considered to be so marked as to render recognition of the complication easy and certain. The symptoms looked for are those of perforative peritonitis, viz.: sudden onset of severe pain in the right iliac fossa, soon becoming general over the abdomen; early and recurrent vomiting; rigidity of the wall of the abdomen, which may be retracted but is usually distended; costal breathing; and such signs of collapse as a fall of temperature, pale and pinched features, and a rapid small pulse. As reaction sets in the temperature rises, the pulse increases in frequency, the general surface becomes livid, and covered with cold clammy perspiration, and with the escape of gas into the peritoneal cavity, the area of liver-dulness in front and at the side becomes tympanitic.

Such are the symptoms usually regarded as essential to a diagnosis of acute perforative peritonitis in an ordinary case of typhoid fever. In cases of great severity with marked delirium and great distention of the abdomen, the symptoms may be masked, as they may also in cases characterized by much debility. In these cases reaction is slight, and only a subacute peritonitis results.

It should not be forgotten that symptoms identical with the most severe cases resulting from perforation of the intestine may be due to perforation or rupture of the gall-bladder, to sloughing of a mesenteric gland or to rupture of an acute splenic abscess.

In not a few instances, however, of perforation of the bowel in ordinarily robust persons in whom the disease is pursuing a mild course, there may be none of the striking symptoms characteristic of this grave complication. In these cases the diagnosis is difficult and the treatment to be advised uncertain. These difficulties are well illustrated by the following cases:

A bookkeeper, aged 48, came under treatment in the autumn of 1890, for extreme dyspnea which proved to be caused by pressure on the bronchus by a syphiloma in the apex of the

right lung. Potassium iodid was given freely with complete relief to his dyspnea and restoration of good health. In the following January he felt indisposed and his appetite failed. The temperature and pulse were normal, and his indisposition was attributed to disturbance of digestion by the iodid. I was requested to see him a week later and found that he had been suffering from pain in the abdomen for two days. He had not considered it severe enough to be of much moment. The peritoneal cavity contained some fluid, which was evidently due to subacute inflammation. Two days later he died, and on *post-mortem* examination two small typhoid ulcers were found in the lower part of the ileum, one of which was perforated and a considerable quantity of intestinal contents had escaped into the peritoneal cavity.

This was a case of apyrexial typhoid in a man in fair physical condition, and yet perforation without any localizing adhesions caused symptoms of only moderate severity, not sufficient to alarm him or his friends.

A second case was that of a young farmer who was admitted to the Toronto General Hospital in October, 1897. His afternoon temperature was about 102 degrees F., and his general condition was good. At the end of the third week, in the afternoon, he complained of pain in the hypogastric zone. Being in the hospital at the time, I examined him. The pain was not severe. There was no disturbance of temperature, pulse, or respiration. The abdominal wall was not rigid, but pressure in the lower part caused some increase of the pain. Rectal examination revealed nothing abnormal. The house-physician was directed to watch the condition closely and to report later in the evening if the pain persisted. By some misconception, instead of reporting he gave morphin sulfatis gr. 1-4th hypodermically. This masked the symptom and gave him a good night's rest. On the following afternoon the pulse, temperature and respiration, and the appearance of the abdomen were not altered, but the facial expression was more anxious, and the abdomen somewhat more tender. As the patient's condition was good and a perforation very probable, an operation was done by my colleague, Professor Cameron. On opening the abdomen, the peritoneum was found somewhat congested. A large perforation was found in the ileum, two feet above the ileo-cecal valve, and this portion of the intestine lay in the pelvis, being incompletely walled off from the general peritoneal cavity. The inflammation of the peritoneum had been confined to the pelvic cavity, and was only beginning to extend to the general cavity. It was on account of these conditions that the symptoms were so mild.

The perforation was closed and the pelvic cavity cleansed. For two days the progress was satisfactory; then symptoms of

septic peritonitis set in and death followed on the fourth day. An immediate operation would very probably have been successful.

The object in writing this is to emphasize the fact already known but too often forgotten, that perforation in typhoid fever may, and often does, occur without the fulminant symptoms that we are accustomed to associate with this grave complication. Of the symptoms, persistent pain is probably the most constant. The symptoms are often masked by the prostration and delirium in grave cases, but they may be so mild and unobtrusive as to escape observation in patients who consider themselves scarcely ill enough to be in bed.—*Philadelphia Medical Journal*.

TREATMENT OF EROSIONS OF THE ANUS.

THE treatment of fissures at the anus should, in the first place, be preventive in those persons in whom the skin of the part is sensitive and liable to cracks and small sores; and for such there is nothing better than the daily washing of the part with cold water and a soft sponge, and the avoidance of anything which may tend to irritate it, such as the use of printed or rough paper after defecation. When fissures really exist, they may often be cured by a nightly application of Goulard's liniment on a pledget of lint, or by gently touching the surface with a solution of nitrate of silver to coat the sore (gr. v. or x. — oz.). It is surprising the remarkable results that can be obtained in the treatment of simple fissures by local applications without operation. The treatment must be carried out with great attention to detail, and by the surgeon himself, and not the patient. It will fail in many, but in many others it will succeed. In children, the fact that fissures and erosions may be due to the scratching caused by the irritations of pin-worms must always be borne in mind. In fissures complicated with polypi, the polypus must always be removed at the time of the operation; and in women suffering from the union of uterine and vesical trouble with painful ulcer, the uterus must be treated as well as the ulcer, or the operation on the latter will be apt to fail. In cases where the treatment by local applications has failed, the operation of drawing a sharp knife through the ulcer and muscular fibres directly beneath it is the one which should be given, preferring it to stretching, because it can be done in the most satisfactory way with cocaine, while stretching cannot, and because it can be done without any fear of subsequent incontinence, while stretching cannot. The cocaine (five minims of a four per cent. solution) should be injected beneath the ulcer. It is customary to use a fenestrated speculum in such an operation; but it may easily be dispensed with when a straight, blunt-pointed knife is used. The knife should be very sharp, and the operation must be

skilfully done, but when properly done it is usually successful. It is not necessary to cut entirely through the sphincter, and yet those fibres of it that form the base of the ulcer should be fairly divided, for it is by putting an end to the contractions of these fibres that the operation works its cure. The incision should always be extensive enough to produce a certain amount of relaxation of the muscle, and should begin in healthy mucous membrane above the ulcer and end in the skin below. The treatment of ulceration within the rectum is a much more difficult matter than the treatment of that at the anus, and yet in principle they are the same. In both we give the ulcer rest, and try to assist nature in her own methods by avoiding anything which shall interfere with the process of repair. The general treatment of ulcer of the rectum may therefore be summed up in a few words—rest, diet, and local applications. No treatment is likely to be of much avail without them. The rest in bed must in some cases be absolute. This point being carried to the surgeon's satisfaction, milk diet need not be absolute, but may be varied with soups and easily digested solids, as bread and crackers, care being taken to secure soft and unirritating passages. With such diet as this it will sometimes happen that a movement of the bowels every two or three days will be all that nature requires, and as long as such a condition causes no uneasiness, it is not necessary to interfere with it by laxatives. In cases where it is well borne, cod-liver oil may be administered both as food and laxative, often with excellent effect upon the general condition and the local trouble. In the way of local applications, suppositories may answer a good purpose in disease low down.

The menstruum should be of some substance which may be easily dissolved at the temperature of the body, and in the way of drugs, a suppository made up with some salt of bismuth will be found exceedingly grateful and relieving to the patient. A suppository which experience proves to be very soothing in ulceration of the rectum is one of Anusol, a combination of bismuth with iodo-resorcin sulphuric acid. Each suppository contains about ten grains of the drug, with balsam of Peru, oxide of zinc, and the excipient; one should be inserted into the bowel once or twice a day. Anusol seems to be undoubtedly an astringent in action and a thorough disinfectant. It allays the burning and soothes the pruritus so common, for instance, in cases of rectal inflammation. Not only that, but it softens fecal matter when impacted, and by that means relieves constipation. Anusol has no unpleasant after-effects, contains no narcotic substances, and has the advantage that "it can be used in both sexes, at all ages, and at any time." Dr. R. Timmerman, of Hanover, expresses himself as follows about this preparation:

"The preparation of the drug into suppositories is an advantage

to the patient, the physician, and the apothecary. For Anusol is spoiled by moisture and vivid light, and loses part of its efficacy; whilst combined with fats it keeps indefinitely. The combination with oxide of zinc as an adjuvant, and the other ingredients, has been shown by the experience of years to be the simplest and most efficacious. It would be a pity if the positively specific action of Anusol, and the reputation which it has obtained in all civilized countries should be endangered and diminished by improper preparation, or by combination with substances which interfere with its efficacy and impair its results. Furthermore, this method saves the physician trouble in prescribing and dosage, and the apothecary the nuisance of preparing the suppositories."

It may also be stated that, besides being a most successful method of treating erosions of the anus, Anusol suppositories are now recognized by a great number of surgeons as almost a specific for the treatment of hemorrhoids. They dispense with the necessity of using any of the salves known to the profession, so many of which contain narcotics or irritants of some kind. With rest in the recumbent position, and the use of one Anusol suppository night and morning, or even three times in the twenty-four hours, the physician will almost always get speedy results.

It will be found well occasionally to mix a tenth of a grain of morphine in a suppository, and administer this at night and morning. It certainly ministers to the local rest of the part, and it renders rest in bed much more endurable in persons of a nervous tendency. Certain good results may be gained by applications to the ulcerated spot by means of enemata or with a brush, and when the former are used, in cases where the disease is situated high up, the amount of fluid injected should be large. Three pints of water may be thrown into the upper part of the rectum, the sigmoid flexure, and the lower part of the colon, if the proper means be adopted, without causing any uneasiness at the time or any subsequent desire for an evacuation. Long, flexible, soft rubber tubes may now be obtained from any surgical instrument maker which are suitable for this purpose. The tube should be small and the opening in it just large enough to hold securely the smallest end-piece of an ordinary Davidson syringe. The injection should be given with the patient on the side and given slowly. The drug from which the best results may be expected, when used in this way, is the nitrate of silver, and the solution should vary in strength from twenty to forty grains to three pints of water. This plan of treatment has been very successfully employed in cases of dysenteric ulceration. There are, however, few means of treatment in cases of localized ulceration high up the bowel at all, comparable in results to the application of nitrate of silver on a uterine applicator through a long speculum. Every strength may be used from the weakest to the strongest, and no rules as to

strength or frequency of applications can be laid down, for here will appear the skill and experience of the surgeon.

The careful, patient employment of this method cured several cases of severe chronic ulceration in the upper part of the rectum, beyond the field of ordinary vision by the usual forms of specula, which seem at first sight to be amenable to colostomy. The use of the instruments necessary requires special skill and practice, and often some training on the part of the patient; and the treatment is often protracted, but the results are exceedingly satisfactory. The knife may serve a good purpose under several circumstances. Where the sore is of small dimensions and well limited in outline, even though it be above the external sphincter, it is sometimes of advantage to make an incision across the muscular fibres which form its base, and secure rest for it in this way. The operation is one of delicacy, but it is also one which may assist greatly in the cure. The application of strong nitric acid to a circumscribed ulcer of the rectum is often attended by the happiest results. In treating these cases by local applications, the surgeon must be prepared to ring all the changes, between a two-grained solution of nitrate of silver and fuming nitric acid, or pure carbolic acid. They are cases which require the utmost care, both as to the diagnosis in the first place, and the treatment; and many of them will end unhappily in spite of what can be done. And yet, when they present themselves in their earliest stages, before irreparable injury has been done, they are capable of being cured by the treatment which has been outlined. No case of simple ulceration, where the disease was seen at all early, failed to be cured by one method or another, but it has often been by several combined and only after months of treatment and the heartiest co-operation of the patient. In many cases the cure has been easy, especially in those where circumscribed ulcers within the bowel, which have long resisted treatment, have been found to depend upon blind internal fistulæ.

The practitioner should be very cautious in his prognosis as to the time required for treatment, remembering that it will of necessity be long. To accomplish anything with either tubercular or lupoid ulceration the treatment must be begun early. If a tubercular ulcer be completely excised or destroyed with the cautery before general symptoms of tuberculosis have shown themselves, there is a chance that it may be cured; and if lupoid ulceration be attacked before it has done irreparable injury, and thoroughly excised, it may also be induced to heal. By thorough excision, fully as wide of the disease as would be done were it known to be malignant, is meant—at least an inch in every direction. In old and advanced cases, beyond the benefits of local treatment, there are only two methods to be followed: one is complete resection of the diseased part, the other is colostomy.

Proceedings of Societies.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

FIFTH TRIENNIAL SESSION HELD AT WASHINGTON, D.C.,
MAY 1ST, 2ND AND 3RD, 1900.

THE fifth triennial session of the Congress of American Physicians and Surgeons opened on the morning of May 1st under the most auspicious circumstances, and with a very full attendance. Throughout the meeting the mornings were devoted to work of the individual component associations and societies of the Congress, the sessions of the Congress occupying the afternoon. At 5, Tuesday afternoon, the Congress was opened by Dr. Landon Carter Gray, of New York City, Chairman of the Executive Committee, with a few remarks that were well received by the large and representative gathering. The Congress then proceeded to the consideration of the general subject of the meeting: *Bacteriology in Health and Disease*.

The first paper on the programme, *Adaptation of Pathogenic Bacteria to Different Species of Animals*, was delivered by Prof. Theobald Smith, of Boston, Mass. Dr. Samuel J. Meltzer, of New York City, then considered *The Physiological Resources of the Body in its Defence against Bacteria and their Toxic Products*. Dr. Harold C. Ernst, of Boston, Mass., had as his subject *Flagella and Serum-Reactions*.

The able paper of Dr. Richard C. Cabot, of Boston, Mass., on *The Relation of Bacteriology to Clinical Medicine*, was then delivered; and this was followed by Dr. Edward R. Baldwin, on *Bacterio-Therapeutics, with Especial Reference to Tuberculosis*—a scholarly paper. Prof. William S. Thayer, of Baltimore, then discussed *The Etiology of Malarial Fevers*. The next paper, by Prof. Simon Flexner, of Philadelphia, on *Bacteriology of Dysentery*, was delivered as an extemporaneous talk.

The first paper on the programme for Wednesday, May 2nd, was by Prof. William Osler, of Baltimore, Md., on *Modern Therapeutics*. This was not delivered, as Dr. Osler was unexpectedly and unavoidably prevented from attending the Congress. The

essay on *The Sociological Status of the Physician*, by Dr. Clarence J. Blake, of Boston, Mass., was then delivered; and then the poem, *The Evolution of the Physician*, Dr. S. Weir Mitchell's noteworthy production, was read.

The event of the evening session was the address by the President of the Congress, Prof. Henry P. Bowditch, who took as his subject, *The Medical School of the Future*. Following the delivery of this paper, a reception was given at the Arlington Hotel.

AMERICAN SURGICAL ASSOCIATION.

TWENTY-FIRST ANNUAL MEETING, HELD AT WASHINGTON, D.C.,
MAY 1ST, 2ND AND 3RD, 1900.

AFTER the announcements of the Committee of Arrangements and Executive Session, Dr. Robert F. Weir, of New York, gave the presidential address on:

Perforated Ulcer of the Duodenum.—The perforation is usually located within 1 1-2 inches of the pylorus, more commonly on the anterior wall; in 80 per cent. of the cases the ulcer is single, in 8 per cent. of the cases double, while in the remaining cases more numerous perforations occur. The causes of ulceration are difficult to determine; it has been attributed to habits of life, to circulatory disturbances, to the naturally delicate condition of the mucous membrane, to sepsis, burns, etc. The patients are of all ages, but it is more common between 20 and 50. In many cases healing occurs without serious results, but in some cases cicatricial contraction results. The symptoms are often vague and may be entirely wanting. The patient's previous history is of great importance; there is usually pain, and tenderness, and vomiting; hematemesis, blood in the stools, and jaundice may be present. Pain usually follows some time after eating; hematemesis is less frequent than with gastric ulcer; vomiting is of importance if combined with other symptoms; jaundice rarely follows cicatricial contraction. Blood in the stools generally gives them a tarry appearance, but in some cases the blood may be bright red. Great advances have been made in the diagnosis of such conditions of late, and Weir believes that the differentiation from gastric ulcer is not impossible. The symptoms of perforation are sudden acute pain, vomiting and shock.

Gastric Ulcer, Non-Perforating Hemorrhage.—Dr. William L. Rodman, of Philadelphia. The paper was based upon an exhaustive study of the statistics, and Dr. Rodman devoted his attention mainly to the treatment.

Perforating Ulcer of the Stomach.—Dr. J. M. T. Finney, of Baltimore, mentioned the great interest which had been taken in this subject of late, the increased number of operations, and the many exhaustive papers which have recently been published. The affection is most frequently met in young women of the lower walks of life; in men it usually occurs after 40. The site of the ulcer is more commonly the anterior wall of the cardia, next, most frequently the pylorus, then along the lesser curvature, and finally the posterior wall. In about 20 per cent. of the cases there is more than one perforation. The severity of the symptoms arising depends on the size of the perforation, the amount and character of gastric contents, the variety and number of bacteria present. If the stomach is empty, the chances for recovery are much more favorable. The stomach is capable of sterilizing itself, as the acid gastric kills many bacteria, but many may persist buried deeply in the mucosa.

Malignant Disease of the Stomach and Pylorus.—William J. Mayo, of Rochester, Minn., considers carcinoma of the stomach a strictly surgical disease. Early diagnosis is of the highest importance, and the surgeon should not wait to have the physician make it for him. Exploratory incision is as justifiable as in the case of the breast and uterus. The curability of malignant disease depends upon the histologic structure of the growth, its location, extension to neighboring tissues, glandular involvement, and the general condition of the patient. If the tumor has a large amount of stroma its growth will be slow, and the reverse is true if there is but a small amount. Disease of the cardia is generally easily diagnosed, but radical intervention is likely to be impossible, and while diagnosis of disease of the pylorus is difficult the prognosis is much better.

Benign Obstruction of the Pylorus.—Dr. Frederick Kammerer, of New York. Obstruction of the pylorus may be either congenital or acquired; there may be acute stenosis at birth as the result of fetal peritonitis, or congenital hypertrophy may exist. Acquired stenosis most commonly is an after-result of gastric ulcer, it may result from occlusion by benign tumors, from syphilitic gumma, from gallstones obstructing the pylorus, from spastic contraction, from hyperchlorhydria. If medical treatment fails, daily lavage, rest, and careful diet, surgical treatment is indicated. Kammerer mentioned surgical treatment by dilation of the stricture, simple division of adhesions, and resection of the pylorus, but he devoted most of his paper to the discussion of *pyloroplasty* and *gastroenterostomy*.

Gastric Dilation—Gastroptosis.—B. F. Curtis, of New York. In a discussion of the anatomy of the stomach, Curtis called attention to the fact that under normal conditions the pylorus can

scarcely be palpated and the lesser curvature not at all. Dilation may arise from obstruction to the outlet of the stomach from benign or malignant tumors, or from atony of the stomach walls, or from a combination of these causes. Atony of the stomach walls in its turn may result from some constitutional disease or from repeated overloading. The prognosis in atonic dilation under medical treatment is unfavorable, and operation is indicated when the patient is losing ground under systematic lavage and dietetic and medical treatment.

Hour-Glass Contraction of the Stomach.—F. S. Watson, of Boston. Hour-glass contraction of the stomach has existed as a surgical affection for over ten years, and during that time thirty-five cases have been operated upon. The methods employed have been: Gastroenterostomy, plastic operation, and gastroanastomosis by Wolfier's and Watson's own method. Watson first folds the stomach with the constricted part as a hinge, the sac nearest the pylorus is then fastened to the cardiac portion by four stay-sutures, and then the two sacs are securely sutured before opening the stomach; a longitudinal opening is then made in the stomach wall and the double partition between the two sacs is excised. The first patient, upon whom Watson operated, gained forty-two pounds in the year after the operation; she remains well, and is doing her work five years after the operation. In a second case a woman who had a long history of gastric ulcer was taken with symptoms of perforation. Operation was performed, and the perforation was sutured. The abdominal cavity and pelvis were infected at the time of operation, and the patient died four days later. At the necropsy the stomach was found to have an hour-glass shape, a fact that was not recognized at the time of operation because of adhesions. The pyloric end was also pulled up and attached to the lesser curvature by adhesions.

Diagnosis of Cancer of the Stomach.—John C. Hemmeter, of Baltimore. The only diagnosis of carcinoma that is of interest to the surgeon is the early diagnosis, and as there is a period of three months before any definite signs appear, this is very difficult. The first symptoms resemble those of nervous dyspepsia or chronic gastritis. The methods necessary for chemical and microscopical investigation are time-robbing and not generally suited for general practice. Such symptoms as pain, dyspepsia and the appearance of blood are of little value because found in other conditions.

Adhesions of the Stomach.—A. T. Cabot, of Boston. Ulcer of the stomach or duodenum and inflammatory conditions of the gallbladder most frequently give rise to adhesions. The symptoms, if mild, often remain unrecognized and may simulate biliary colic. Pain may be a marked symptom or it may be moderate and pass unnoticed; it does not radiate to the shoulder and is not

spasmodic. In cases in which there is a history of ulcer, or the symptoms of stone in the gallbladder, Cabot believes that operation for the freeing of adhesions is often advisable even if the pain be not severe. His results after such operations have been very favorable.

Observations on the Gastric Functions Before and After Gastroenterostomy.—Fisher, of New York, believes that the results of German investigators who have studied this subject are of little value, because of the short time that their patients were under observation.

Stricture of the Esophagus Following Typhoid Fever—Gastrostomy.—Frederick S. Dennis, of New York. A man of thirty-five was presented before the society, and in Dr. Denis' absence his paper was read by the Secretary.

Dislocations of the Hip; Demonstrations on the Cadaver Illustrative of their Mechanism.—Oscar H. Allis, of Philadelphia. Allis called special attention to the value of this method of producing different dislocations, their signs and the method of reduction, verifying his statements by incisions.

Discussion on Surgery of the Stomach, opened by W. W. Keen, of Philadelphia. Malignant disease of the stomach is of more importance at present than non-malignant disease, because of its greater frequency, and because of the great difficulties in diagnosis. During the past few years the specialist on gastric diseases has given the surgeon great aid in the diagnosis. Hemmeter has called attention to the fact that if operation is to be successful it must be performed within the first three months of the disease, and if the specialist finds any probability or even a possibility of this disease, exploratory operation is indicated. There is little danger in exploratory incision, but there is danger in late operation that we shall be able to accomplish nothing. If a palpable tumor is present recurrence is almost inevitable. M. H. Richardson, of Boston, believes that all methods of diagnosis should be exhausted before we resort to exploratory operation, but in case of doubt open the abdomen as soon as possible in all surgical affections of the stomach. In case of hemorrhage operation is not advisable unless medical means have failed. Perforation demands immediate operation, but the diagnosis is sometimes difficult. In case of carcinoma, the time for operation is before the tumor is felt, but not one case in fifty is suitable for operation at the time it comes to the surgeon. Total extirpation probably has a more limited field than was at first believed.

The Methods of Closing Abdominal Incisions.—M. H. Richardson, of Boston. Richardson advocates through-and-through suture, as quicker, more convenient, less likely to leave dead spaces, which fill with blood and tend to produce infection, and he believes that

there is no more tendency to hernia. After using various materials for suture, he has adopted silkwormgut for closing the abdominal wall and silk for all other ligatures and sutures. It is questionable whether union is any more secure after suturing like tissues than if the peritoneum is sutured to the fascia and fascia to muscles. The number of hernias through the scars of abdominal incisions is insignificant.

Strangulated Hernia Through a Traumatic Rupture of the Diaphragm—Laparotomy, Recovery.—E. W. Walker, of Cincinnati. A man of twenty-nine was struck by a falling tree, and was only prevented from being completely crushed by one of the branches. Pain in the chest, nausea and vomiting, constipation and extreme shock resulted. After a time, the vomiting became stercoraceous. A median abdominal incision was made, and it was found the bowel had pushed into the thorax, and become strangulated. The bowel was pulled down, relieving the obstruction, and an attempt was made to suture the diaphragm. Rapid recovery followed, and the patient has been in good condition since the injury.

A Case of Subpubic Hernia of the Bladder Through the Pelvic Floor—Operation.—F. B. Harrington, of Boston. A woman of forty-six, who had a large tumor of the labium majus, was taken suddenly with retention of urine. Several years previously she had been operated upon for a large edematous fibroid of this region; the fibroid had recurred and pulled down the bladder. Catheterization reduced the size of the tumor considerably, but all efforts at reduction were unavailing. Operation was performed, reducing the hernia, and recovery followed.

ASSOCIATION OF AMERICAN SURGEONS.

FIFTEENTH ANNUAL MEETING, HELD AT WASHINGTON, D.C.,
MAY 1ST, 2ND AND 3RD, 1900.

THE President, Dr. Janeway, welcomed the members. He said that a number of the members were engaged in work that was designed to throw new light on new phases of disease, and were engaged in working on the various phases of new diseases. The pathologists were also present to continue the good work thus begun by the clinicians, and some of the members had devoted attention to the phases of disease that could be elucidated by the science of chemistry. He expressed the hope that the younger members would so arrange their time that they might add to the general

amount of information that these meetings bring forth. He made a plea for truth in medicine, truth in statistics, truth in diagnosis, truth in pathology, and truth in therapeutics. He reminded the members of the Association that during the past year Dr. J. E. Graham, of Toronto, and Dr. D. W. Prentiss, of Washington, had been removed by death.

Dr. James B. Herrick, of Chicago, read a paper entitled: *Notes on Diabetes*.

Dr. James J. Putnam, of Boston, read in behalf of himself and Dr. F. Pfaff, a *Communication on the Relation of Uric Acid Secretion to Epileptic Attacks*. They think that the toxin theory of the neuroses and psychoses is not well proved, and that further search for anatomic changes should be made. They made twenty-four examinations of urine from three patients in the Massachusetts State Hospital for Epileptics. The results of these examinations do not bear out the statements that have been made that uric acid is below the normal for two or three days before the attack, then normal just before the attack, and above normal just after the attack.

Dr. Charles G. Stockton, of Buffalo, read the *Report of a case of Acute Ascending Paralysis, Showing Hematoporphyria*.

Dr. A. C. Abbott, of Philadelphia, read a paper on *The Relative Infrequency of Acute Transmissible Diseases During the first Year of Childhood*, with a discussion of the probable reasons for the same. He presented charts showing the mortality from measles, scarlet fever and diphtheria in children under one year old, in children between one and five years, and in children between five and ten years of age. The tables show that the death-rate is greatest between the ages of one and five years; that from measles being 64.8 per cent., from scarlet fever, 63.9 per cent., and from diphtheria, 63.6 per cent.

In the discussion, Dr. E. L. Trudeau referred to the fact of the possibility of the inoculation of young animals with tuberculosis in spite of the assertion by some authorities that young animals could not be infected. Dr. George Shattuck thought that the number of mothers that had had diphtheria were few, and that, therefore, the extensive transmission of an immunizing substance for this disease in the majority of cases would not be possible.

Dr. J. P. C. Griffith, of Philadelphia, read a paper on *Recurrent Vomiting in Children*. He had seen four cases. The attacks were characterized by severe vomiting, which was grave and continuous, and by which everything was ejected from the stomach, and which frequently continued when nothing was put into the stomach. The bowels were obstinately constipated, but even after relief the vomiting continued. The patient was restless, the respiration was of a sighing character, the urine was diminished in

quantity. Two of the cases died. In one, autopsy showed an extensive degeneration of the epithelium of the stomach and of the intestine, parenchymatous changes in the pancreas, and the lesions of glomerulonephritis. The condition usually begins suddenly, without gastrointestinal disturbance, and the vomiting is continuous. Constipation is present, the relief of which does not stop the vomiting. Sighing respiration, which is noted, may be due to toxic action on the medulla or to weakness. Recovery begins for no apparent reason, and convalescence is rapid. The attacks occur in from one to eleven days, but there is no distinct periodicity.

In discussion, Dr. W. W. Johnston had seen a patient suffering from the disease who had vomited blood. The blood was usually altered, although it was at times bright red. He had noted the rapid development of great prostration with cyanosis. All the children he had seen were the offspring of nervous parents, and were precocious and the victims of child-neurasthenia themselves.

Dr. E. L. Trudeau, of Saranac Lake, read a paper on *Sanatorium Treatment of Pulmonary Tuberculosis, and its Results*. For him the pretuberculous stage of pulmonary tuberculosis is the first stage of the disease, before the physical signs have developed. He uses the X-ray apparatus and the tuberculin test before the physical signs have appeared in suspected cases. By the X-ray apparatus the diaphragm may be seen to be higher or to be limited in its excursions on the affected side. The tuberculin test had not resulted in injury to any of his patients. In the treatment, rest is essential, especially when taken in the open air. The patients at rest digest well, although taking no exercise. Tuberculin as treatment is injurious whenever the process is progressing. It should be used only in apyretic cases and should be given in small and frequently repeated doses, watching carefully the nutrition and the temperature. The remedy probably stimulates the formation of fibrous tissue. During the past fifteen years, of the 1,176 patients discharged alive, one-half are living, and one-half of these are perfectly well.

In discussion, Dr. Bridge thinks that when we begin to use sera we are apt to neglect the sanitary and hygienic measures that are so useful. He is an advocate of absolute quiet, full and free feeding, and fresh air. It may at times be necessary to wash the stomach and the large intestine. Dr. S. S. Cohen asked Dr. Trudeau what method of diagnosis he employed before the disease was far enough advanced to give results by X-ray examination, and whether, under the term rest, he included local rest of the lung as well as general rest of the body? Dr. Trudeau said that he made the diagnosis in early stages of tuberculosis by the temperature record. If the evening temperature is between 99.5 de-

grees and 100 degrees, and there is a slight disturbance of health, he makes the diagnosis. Tuberculin should be used only when necessary. Experiments with corneal lesions in rabbits, artificially produced, show that tuberculin does not cause the spread of the lesion. He procures rest of the lung by rest of the individual.

Dr. Kinnicutt, of New York, showed the specimen from a case of *Acute Phlegmonous Gastritis*. The patient was a male, aged forty-one years. There was no history of syphilis, but the patient was an alcoholic. The disease followed a drinking spell, and was ushered in by vomiting, first of food and later of a brownish fluid. There was abdominal pain, constipation, dry tongue, shallow respiration, 48 per minute, regular pulse, 108 per minute, restlessness, and an anxious expression. The temperature was 101 degrees by rectum. The physical examination was negative except for a slight hypertrophy of the left ventricle. The abdominal walls were rigid and deep palpation was sensitive in the epigastric and left hypochondriac regions. There was crepitation beneath the left costal cartilages. The urine contained casts. The patient grew progressively worse and surgical intervention was deemed inadvisable. At the necropsy the organs were normal except for the hypertrophy of the left ventricle of the heart, before alluded to. The peritoneum presented a slight serofibrinous exudate. The stomach wall was thick, especially at the pyloric end. The thickening was due to a purulent infiltration of the submucous coat with a yellowish exudate. There was a linear cicatrix on the posterior wall of the stomach, near the pylorus, on which was a necrotic area. The endothelium was desquamated on the serous coat. The muscle was invaded by mononuclear leucocytes. The submucosa was swelled to four or five times its normal thickness and contained leucocytes and micro-organisms. The lymphatics contained bacteria. The necrotic area in the scar had nearly exposed the submucosa, and was possibly the point of infection. The streptococcus was found throughout the stomach. The bacilli in the lymphatics were possibly of *post-mortem* origin.

Dr. J. H. Wright, of Boston, read a paper on *The Organism and Lesion of Actinomycosis*. The author believes that the disease is frequently unrecognized and that it is much more common than is ordinarily supposed. He gave a lantern demonstration of the lesions produced by the organism.

Dr. L. Hektoen, of Chicago, read a paper on *A New Pathogenic Fungus (Sporothrix Schenck)*.

Dr. Richard C. Cabot, of Boston, read a paper on *Some of the Conclusions Reached after a Study of 110 Cases of Pernicious Anemia*. Of the 110 cases reported, 57 were males and 53 were females. Of the cases occurring in the female subject 4 followed

parturition, and in 1 of these, in which an autopsy was had, there was leucocytosis and diphtheritic endometritis. The disease is one of late middle life. He had seen all the cases within seven years, and thinks that the disease must be common in the vicinity of Boston. Many of the cases in the series were originally diagnosed general tuberculosis. Fourteen cases occurred at about the time of the menopause. Hemorrhage is probably a symptom and not a cause of the disease; it has been observed from the bowels, the nose, the gums, the stomach, and the ear. The symptoms are constant, in certain cases they are very mild; there is a lack of relation between the severity of the blood-lesions and the severity of the symptoms, and it is not the lack of the corpuscles only that cause the symptoms. Muscular weakness, dyspnea, gastrointestinal symptoms, such as vomiting and diarrhea, are seen. The latter train of symptoms is often paroxysmal. This fact is evidence against the hypothesis that atrophy of the gastric tubules is a cause of the disease. Hemic murmurs are always heard and occasionally a true regurgitant murmur is to be made out. The liver was enlarged in 30 cases, the spleen was enlarged in 13 cases.

Dr. Frank Billings, of Chicago, showed charts to illustrate *A Report of Cases of Pernicious Anemia with a Special Reference to the Blood-Findings*. In all, 19 cases were reported; 11 in males and 8 in females. The average age of the patient was 46 years. No existing cause could be determined except syphilis in one case. The symptoms were muscular weakness, dyspnea, palpitation, gastro-intestinal symptoms, and diarrhea as a rule. Nervous symptoms were frequent, particularly paresthesia of the lower extremities. The lemon-yellow tint was constant, the body-weight was preserved, cardiovascular symptoms were common, the spleen was enlarged in 4 and the liver in 3 cases. The stools were negative in all cases except one, and in that one infusoria were present. The disease, as a rule, progressed rapidly. Hemorrhages were frequent, retinal in 3 cases.

Dr. Frederick P. Henry, of Philadelphia, reported 5 cases of pernicious anemia in a paper entitled, *Clinical Notes on Cases of Pernicious Anemia*. In one of the cases, the transfusion of blood from an epileptic patient was followed in ten days by convulsions. One case had been under observation six years, and was completely restored to health. In this patient, naphthalin, bismuth salicylate, Fowler's solution, codliver oil, and calomer were the drugs used. The author thinks that patients suffering from pernicious anemia often present peripheral neuritis. He also thinks that the disease is likely to be complicated by erysipelas. In a case of gastric carcinoma, he has never seen a case in which the red blood-corpuscles were reduced below 30 per cent., and therefore he thinks that a reduction in the number of red cells below this figure is a

diagnostic feature in pernicious anemia. He is of the impression that the muscular system preserves its power. He believes that the corpuscles seen in the blood in this disease are reversions to the type of those seen in the cold-blooded animals. Dr. Richard C. Cabot said that he did not consider the case that Dr. Henry reported as having recovered to be a case of pernicious anemia; he should consider it a case of grave secondary anemia of unknown cause. Dr. A. McPhedran reported two cases of permanent recovery from pernicious anemia. He believes in saline infusion as a method of treatment. In one case he administered anti-diphtheritic serum because there was no other serum obtainable. The patient so treated remained well for one and a half years, but then died. Other patients have received blood-serum. He has looked for diseased teeth and gums in many of his patients, and all have healthy gums except one. In the excepted case the gum-condition gets worse with the exacerbations of the disease. Dr. S. Weir Mitchell said that all blood-counts were relative and not absolute. He called attention to the work of Dr. J. K. Mitchell on the influence of massage on the blood-count. After one-half or one hour of massage, the red cells increase 500,000. He thinks that the stagnation of the red blood-corpuscles in various parts of the body is greater in disease than in health, and he is of the opinion that disturbing these reserve corpuscles by massage would greatly change the blood-count. Dr. Charles G. Stockton said that he had always found that the gastric secretion in pernicious anemia was different from that obtained from cases suffering from secondary anemia. In the former disease, the hydrochloric acid always disappears during the exacerbations of the disease, and it returns during the remissions.

Dr. F. B. Mallory, of Boston, read a paper on *Proliferation and Phagocytosis*.

Dr. W. S. Thayer, of Baltimore, read a report of *Cases of Diarrhea, Associated with the Presence of Strongylides Intestinalis in the Stools*. He reported two cases.

Dr. W. T. Councilman, of Boston, reported for Drs. Lothrop and Pratt *A Case of Filaria with Specimens of the Adult Parasite*. The patient was a male, aged twenty-two years, who had resided for some time in the Barbadoes.

Dr. F. F. Westbrook read a paper for himself and Drs. Wilson and McDaniel, entitled, *Varieties of the Diphtheria-Bacillus*. The classification of the diphtheria-bacillus is based on the morphology of the individual bacilli. Three classes are recognized: 1. Granular forms, with granules in the body of the organism that are metachromatic. 2. Barred forms. 3. Solid color forms, including those that look like diplobacilli. In pure cultures all three forms may be found.

Dr. Wm. H. Park, of New York, read a paper on *The Elimination of Deleterious Substances from Antitoxic Sera*. That the antidiphtheritic sera contain some deleterious substance is shown by the development of rash, fever, and joint symptoms, after its use in certain cases. Filtering and antitoxin serum has no effect on these substances. Heat has no effect upon them. Bleedings from some horses have given rise to sera that produce far less complications than bleeding from other horses, and bleeding from the same animal gives rise to sera of varying deleterious contents at different times.

Dr. W. W. Johnston, of Washington, presented a *Case of Addison's Disease under Treatment with Supra-renal Extract*. The patient was a male, a farmer, in whom the symptoms had appeared suddenly with loss of flesh, weakness, and gastrointestinal symptoms. Pigmentation appeared later and was accompanied by exhaustion, vomiting, purgation, and was progressive. The blood was apparently normal. The symptoms became worse in the summer and improvement was noted in the winter. The patient is being treated with suprarenal extract with rapid improvement.

Dr. William H. Welch, of Baltimore, read a paper, entitled, *Venous Thrombosis as a Complication of Cardiac Disease*. Distinct venous thrombosis is not usually recognized as a complication of cardiac disease. He recorded four personal observations. In the first the patient was a woman, aged seventeen years. She had aortic and mitral insufficiency. During the course of the disease hard edema of the left arm developed, and at autopsy adherent pericardium was noted and thrombosis of the innominate, the internal jugular, the exterior jugular, the subclavian, and the axillary veins of the left side. The oldest part of the thrombus was in the lower part of the internal jugular vein and in the innominate vein. Cultures from the body of this patient were sterile, except those made from the lung and the thrombus; these gave the streptococcus pyogenes. The second case was in the person of a woman, aged thirty-five years, who was suffering from mitral stenosis. The left side of the neck became swollen in the line of the internal and the external jugular veins; later the left arm became swollen and a thrombosed axillary vein could be felt. The collateral circulation was established and the symptoms disappeared. Later the patient had an embolus lodge in the popliteal artery, from which she also recovered. The third case was that of a boy, aged sixteen years, who had mitral and aortic insufficiency. The left arm became markedly edematous and worse than the right, which was also swollen. The left axillary vein was thrombosed, as well as the lower part of the internal jugular vein. The boy died, but there was no autopsy. In the fourth case the patient was a man, aged seventy-eight years. He had

mitral insufficiency with thrombosis of the left femoral vein, and recovered.

Dr. Simon Flexner, of Philadelphia, read a paper on *The Nature of the New Tissue in Cirrhosis of the Liver, and its Distribution*.

Dr. R. H. Fits, of Boston, reported a case of *Cystoma of the Pancreas*. The tumor was a multilocular cyst of the pancreas.

Dr. Charles Cary, of Buffalo, reported a case of *Degenerated Echinococcosis Cyst of the Pleura*. The patient had what seemed to be chronic pleuritis. He had always lived with dogs until the age of twenty-one years, but he had never been out of the United States.

Dr. Alfred Stengel, of Philadelphia, reported a case of *Aneurysm of the Aorta with Rupture into the Superior Vena Cava, recognized During Life*. The patient was a man, aged thirty years, who developed a murmur similar to that already reported in a similar case. The patient lived for twenty-four days, and finally died in a convulsion.

Dr. Beverly Robinson, of New York, read a paper, entitled, *Minor Forms of Cardiac Dilatation*. Two classes of patients, particularly, are likely to present mild attacks of cardiac dilatation: (1) anemic girls just past the age of puberty, and (2) obese women, married or unmarried, between forty and fifty years of age.

Dr. W. H. Thomson, of New York, read a paper, entitled, *Graves' Disease Without Exophthalmic Goitre*.

Dr. M. Howard Fussell, of Philadelphia, read a paper on *Perichondritis of the Larynx in Typhoid Fever, with Exhibition of a Patient and a Specimen*. He showed the specimen from a fatal case and exhibited a patient who recovered after tracheotomy. This patient wore the tube for six months. The cricoarytenoid joint in this patient is ankylosed. The complication is rare.

Dr. H. A. Hare, of Philadelphia, read a paper on the *Attitude of the Physician and Surgeon to Appendicular Symptoms Complicating Typhoid Fever*. There is great difficulty, in the early stages of acute disease, in which there are symptoms that refer to the appendicular region in diagnosing between appendicitis and typhoid fever. The author thinks that the absence of leucocytosis is an indication that a given case is not one of appendicitis. The absence of leucocytosis, however, is not pathognomonic.

Dr. Ira Van Gieson, of New York, read a paper, entitled, *Observations on Appendicitis*. He thinks that the tortuous blood-supply of the appendix predisposes it to undergo retrograde and obliterative changes. He thinks that the attacks of appendicitis are the result of the evolution of the species, providing for a race in which the appendix will be absent. Attacks of appendicitis

are predisposed to by these obliterative changes. Acute appendicitis is not an accident, but is a factor in natural selection. If the appendix was to be removed as soon after birth as is safe, the individual would probably be benefited, but the process of natural selection would be delayed.

Dr. Norman Bridge, of Los Angeles, read a paper, entitled, *Some Observations on Human Temperature in Disease*. He thinks that a temperature of 102 degrees is not dangerous. Free catharsis at the beginning of a fever may relieve the gut of ptomaines and thus benefit the condition; but it is doubtful that it reduces fever. He does not believe in the use of antipyretics or of aconite to reduce temperature, but thinks that the secret of treatment is pointed to by the results of the injection of antidiphtheritic serums.

Dr. J. K. Mitchell read a *Story of a Mummy Affected with Infantile Paralysis*. The mummy had one leg shorter than the other, with no sign of fracture. The pelvis was perfectly formed, and the vertebral column presented no sign of compensatory scoliosis. The author thinks that this indicates the wearing of a high-soled sandal. He thought that the defect in the development was due to a poliomyelitis that might have been intrauterine.

Dr. Robert T. Edes, of Jamaica Plain, showed a *New Modified Sphymograph*.

AMERICAN GYNECOLOGICAL SOCIETY.

TWENTY-FIFTH ANNUAL MEETING, HELD AT WASHINGTON, D.C.,
MAY 1ST, 2ND AND 3RD, 1900.

The Society was called to order by the President, Dr. George J. Engelmann, of Boston, Mass., and the address of welcome was delivered by Dr. Joseph Taber Johnson, of Washington, D.C.

The first paper read was by Dr. William P. Pryor, of New York, on *An Operation for Primary Vaginal Carcinoma, Applicable also to Cancer of the Rectum in Women*. Primary cancer of the vagina is a rare form of malignant disease. It is usually situated on the posterior vaginal wall and extends rapidly towards the rectum and perivaginal tissues. The cancer is prone to spread by invasion of the tissues having common sources of blood, and any successful operation must seek the removal of all the organs belonging to the vascular group in which the affected organ is placed. It also recurs locally. In Lowenstein's case recurrence took place after three and a half years. In both of Pryor's cases, it recurred within one year. The operation of Olshausen con-

sisted in a blunt dissection of the vagina from the rectum, which usually resulted in failure and early recurrence. Pryor reported two cases, the first, cancer of the rectum and vagina, ulcerated and infiltrated, involving the posterior vaginal wall one and a half inches. The second, cancer of the vagina, occurring one inch below the cervix on the posterior vaginal wall. The operation employed by Pryor has the distinct advantage of removing as thoroughly as possible all the diseased area. After the usual preparation of the patient an incision from the pubis to the umbilicus is made and the internal iliac arteries and the obturator vessels are ligated with kangaroo tendon, the bladder is dissected from the anterior uterine wall and the vagina opened anteriorly. The uterus and appendages with the entire rectum are later removed after the actual cautery has been used to char the cancerous mass. After the excision of the rectum and periproctal tissue, an artificial anus is formed near the normal site. This radical operation has a surgical basis in the following principles: (a) The preliminary and preventive hemostasis renders the field of operation comparatively dry, and there is less danger of transplantation of cancer cells during the subsequent manipulations; (b) avoidance of injury to the cancerous field until hemostasis is secured and the cancer charred; (c) there is removal of all organs in which recurrence is apt to take place from above downward; (d) establishment of an artificial anus near the normal site.

Dr. I. S. Stone, of Washington, read a paper on *Fecal Fistulas*. Small fistulas in healthy bowel heal spontaneously. If persistent they are usually due to diseases of the bowel, or obstruction. The various operative procedures for the relief of this annoying condition were considered. Lateral anastomosis is applicable in some cases. The sigmoid flexure and rectum are frequently injured in the enucleation of the tubo-ovarian abscesses, etc. Stone reported two cases successfully operated upon, and detailed the method used.

Dr. W. L. Burrage, of Boston, read a paper on *The Remote Results of Conservative Operations on the Ovaries and Tubes*. He had had 137 operations, which were performed on diseased uterine appendages, with the object of preserving one or both ovaries, with their tubes, or as much of the tubes as were reasonably normal in appearance. In 85 of these, reliable information as to the present condition could be obtained at least a year after operation, and the results included in the tables accompanying the paper, the cases being divided into the more severe and the less severe. In comparing the two it was found that gonorrhoea and syphilis were more prevalent, and that the symptoms had resulted more frequently from difficult labors or abortions among the more severe, and that the tubes were closed in a majority of the more severe, whereas they were open in all but four of the less severe.

Pregnancy followed operation in four of the more severe, and in eleven of the less severe. In none of the cases when the closed tubes had been opened and new ostia formed did pregnancy follow operation. All of the cases of subsequent pregnancy in both classes, except two of the less severe, had had previous pregnancies. Anatomical cure was recorded in 33 out of 57 cases who came under observation, and symptomatic cure in 60 out of 85. The writer's conclusions were that it is advisable to do conservative operations in all cases when the ovaries and tubes are not hopelessly diseased in all parts of their structure, except on patients who are near the menopause; on patients who have pronounced gonorrhoea of long standing; and on cases of malignant disease.

Dr. A. W. Johnston read a paper on the *Internal Secretion of the Ovary*. There is no proof that the ovary has any function other than the manufacture of eggs. It is in no sense a gland. It is incorrect to compare it in any way with the thymus, thyroid, or other glands. He considers that if the cause of nervous phenomena in a woman was the lack of internal secretion, the girl prior to puberty or the woman with delayed menstruation would have similar phenomena.

Dr. Hiram N. Vineberg, of New York, read a paper on the *Technic, Indications, and Ultimate Results of Suturing the Round Ligaments to the Vaginal Wall for Retroversions and Flexions of the Uterus*.

A paper on *A Comparison of Vaginal and Abdominal Operations*, by Dr. G. Richelot, of Paris, was read by title.

Dr. J. Clarence Webster, of Chicago, presented a series of *Casts, Illustrating the Anatomy of Pregnancy and Labor, also Models used in Gynecologic Teaching*. The older textbooks on obstetrics are full of fallacies and errors on this subject, and these casts are prepared in exact reproduction of nature, made directly from frozen sections of the cadaver. The method of their preparation was described and attention called to their value scientifically and as teaching adjuncts. Dr. Buckmaster has employed paraffin to secure representations of the pelvic organs, and has illustrated the steps of perineal laceration operation by this method.

Dr. Reuben Peterson, of Chicago, presented a paper on *Anastomosis of the Ureters with the Intestines; An Historical and Experimental Research*. The paper was illustrated by numerous drawings and photo-micrographs.

The subject of the next paper, by Dr. Howard A. Kelly, of Baltimore, was *The Evolution of my Technic in the Treatment of Fibroid Uterine Growths*. Dr. Kelly, with the aid of drawings and photographs, detailed his method, particularly in dealing with very difficult cases, such as large adherent tumors or intraligamen-

tous fibroids. There are three ways of dealing with these tumors and meeting the complications: (1) By a median sagittal bisection of the uterus with the tumor. (2) By a coronal bisection of the uterus in the cervical portion. (3) By a bisection of the tumor alone. The situation and anatomic relation of the tumor should be thoroughly studied after the abdomen is opened, before beginning operation. The dangers to be avoided are brought about by atypical cases; the hemorrhage may be excessive and uncontrollable, prolonged operation and injuries to the intestines and ureters may jeopardize the patient. In all these cases the principle of the operation is the same, and the best method of enucleation is to seek out first, isolate and ligate the ovarian vessels of *one* side, then to expose and tie the uterine vessels of the *same* side, then to cut across the cervix and clamp the opposite uterine artery, then the round ligament, and lastly the ovarian vessels.

Dr. George J. Engelmann, of Boston, read the annual President's address. The subject of the paper by Dr. A. Lapthorn Smith, of Montreal, was *An Appreciation of Kelly's Method of Removing Fibroids of the Uterus*. Smith had formerly been strongly opposed to operative treatment for fibroids, because of the high mortality then prevailing among best operators, but the ideal method perfected by Kelly had led him to adopt this as the method of preference. He detailed the salient features of this procedure and considers that the great advantage is that there is much less danger of injuring the ureters. He laid great stress upon the importance of feeling for each individual artery and tying it before cutting it, and then putting a second ligature on it, as the first may be loosened after the tension of the tumor has been removed. Chromicized catgut is employed. He opposes leaving the tubes and ovaries remaining after hysterectomy, and he believes that sooner or later they will cause trouble. Hysterectomy is far more preferable than myomectomy, except in case of a single polypus. All fibroid uteri should be removed as soon as discovered, because the woman with a fibroid is liable not only to hemorrhage, but to suffer from reflex disturbance of digestion and circulation. Besides, every day its removal is becoming more dangerous and the chances of its becoming malignant greater. The writer strongly condemned the vaginal morcelment, as the operation is carried on in the dark, and the ureters frequently wounded, while complications such as adhesions of the vermiform appendix and tears of the intestine, which are easily dealt with by the abdomen and with the patient in the Trendelenburg position, are almost impossible to manage upon working from the vagina.

Dr. F. H. Davenport, of Boston, described an *Intra-abdominal Amputation of the Uterus; a Modification of Hysterectomy*. In

cases of cancer of the cervix or body of the uterus he employs the vaginal hysterectomy, but in non-malignant conditions, even in small growths, particularly in young married women, he prefers supravaginal hysterectomy, permitting the cervix to remain. After careful study of the technic he thinks that not only the cervix but even part of the lower uterine segment may be left without ligating or disturbing the uterine artery, by doing a high amputation of the uterus. He first clamps the broad ligaments and divides them, then divides the uterus high up, having a curved needle armed with silk, introducing a continuous suture, controlling the bleeding as he cuts; later the clamps are removed and the ovarian vessels are ligated. The organ being removed above the vesicouterine peritoneal fold, there is practically no danger of injury to the ureters or bladder.

Dr. Thaddeus A. Reamy, of Cincinnati, contributed a paper on *Bronchial Disease not Invariably a Contraindication for Ether-Anesthesia in Abdominal Surgery*. His personal experience with surgical anesthesia covers 8,000 cases. For surgical work he considers ether in every way preferable as an anesthetic. He has, however, never lost a patient under either ether or chloroform. The prejudice against the use of ether in the presence of acute, subacute, or even chronic bronchitis, is largely unfounded, provided proper conditions are observed in its administration.

Dr. Archibald McLaren, of St. Paul, read a paper on *The Relationship Between Dysmenorrhea and Appendicitis*. He spoke of the unsatisfactory results usually obtained in the treatment of dysmenorrhea and the necessity for prolonged general treatment. Pelvic inflammation is frequently the cause of dysmenorrhea, and appendicitis causes disease of the appendages, and the appendix is frequently found adherent to the right appendage. In many cases appendicial colic is caused by the pelvic congestion at the menstrual period. The pain is principally on the right side and the symptoms are relieved by removal of the appendix.

Dr. Philander A. Harris, of Paterson, N.J., demonstrated the utility of a certain *Chart for the Determination of Pelvic Asymmetry from a very Simple Method of External Pelvimetry*. He exhibited the instrument employed and urged the more frequent use of the pelvimeter.

Dr. Malcolm McLean, of Detroit, read *A Contribution to the Management of Face Presentations, with Report of Two Cases*. He reviewed the methods of dealing with the head thus faultily placed. Schatz had advised converting the face presentation into a vertex while the head is free above the superior strait and the membranes are unruptured; but there are usually two difficulties to contend with: (1) The diagnosis of the malposition is not so easy as the textbooks indicate, and if descent is far advanced it is

too late to employ Schatz's method; (2) it is difficult to secure the normal position, and relapse to the abnormal is apt to occur.—Digest from *The Philadelphia Medical Journal*.

THE SECOND QUARTERLY MEETING OF THE PROVINCIAL BOARD OF HEALTH.

THE Second Quarterly Meeting of the Ontario Provincial Board of Health began at 2 p.m., May 8th, at Dr. Bryce's office in the Parliament Buildings. The new chairman, Dr. Vaux, occupied the chair. The other members present were: Dr. Cassidy, Dr. Kitchen, Dr. McCullough, Dr. Oldright and Dr. Bryce, the Secretary of the Board.

In addition to some business of minor importance, the quarterly report of the Committee on Epidemics dealt specially with the Essex epidemic of smallpox, and a federal quarantine at Windsor was recommended.

This section of the report reads:

From October, 1898, smallpox has been brought into this province from Michigan, directly or indirectly, as follows:

1898—Kent, Camden, 1; Chatham, 1.

1899—Essex, Colechester Township, 1; Walkerville, 1; Sandwich, 1.

1900—Essex, Amherstburg town, 1; Malden township, 1; Mersea township, 1; Sandwich East, 1; Walkerville, 1.

1900—Middlesex, Caradoc township, 1; Sarnia, 1; Mosa township, 1; Lobo township, 1.

It thus appears that within a period of eighteen months fourteen (14) distinct introductions of the disease into Ontario from Michigan have taken place, occasioning outbreaks in twenty municipalities. What some of these outbreaks have cost is illustrated by figures obtained from returns made by the local boards of several municipalities. A rough estimate would place the expenditure of these several municipalities at \$10,000.

While it is satisfactory, indeed, to know that the disease has, with so many opportunities to spread, been stamped out in so many outbreaks, and that with the exception of cases introduced from the west coast, causing outbreaks, there is no smallpox at present in the Province, it is apparent that inasmuch as our border municipalities must always bear the brunt of such outbreaks, and their consequent expense, the question of what part the quarantine authorities might perform in preventing such outbreaks, or if not preventing, at any rate supplying hospital facilities as at the seaports for caring for them, is a pertinent one. The seaports

quarantined are fully organized and equipped, while Customs' officers are charged with nominal powers as quarantine officers at various ports of entry.

It is understood that a quarantine medical inspector is quartered at Emerson, the entrance to Manitoba, for dealing with cases of smallpox; but so far Ontario receives no assistance, although the danger from the number of travellers is manifestly much greater than in the West.

It would seem proper that the matter should receive further attention through the proper official channels, should the Board so recommend.

The Board adopted these clauses of the report, and the matter will be urged upon the Director of Public Health at Ottawa.

The report on tuberculosis showed that while there was a slight decrease on the total for the same quarter in 1899, nevertheless 558 deaths from pulmonary consumption occurred, as compared with 254 from all other contagious diseases. It was found to be especially prevalent in persons working at certain trades, such as stone-cutting and tool-grinding.

Pursuant to the report, the Board adopted the following new regulations for the guidance of the physicians and the public generally:

Moved by Dr. Cassidy, and seconded by Dr. Bryce,

"That as tuberculosis is a contagious and infectious disease, all inmates of provincial institutions, and of those receiving Government aid, should be isolated in rooms or wards set aside for such patients, and be not permitted to associate with other inmates.

"That when rooms or wards which have been occupied by consumptive patients become vacant they should be disinfected according to the prescribed regulations.

"That an individual affected with tuberculosis who is living in a private family should be isolated as much as possible from the other members of the household, especial care being taken in the destruction of his expectoration.

"That when the room occupied by such a patient becomes vacant it should be thoroughly disinfected, and as a matter of precaution the whole dwelling should be disinfected, according to the regulations of the Public Health Act.

"That local Boards of Health be urged to establish rules for notification of tuberculosis to the Medical Health Officer of the municipality."

It was further moved by Dr. Oldright, and seconded by Dr. Cassidy, that a circular prepared by the Committee on Epidemics containing the Act relating to the establishing of sanatoria be sent out to physicians, clergymen, and municipal councillors. This was also carried.

The Board reassembled at 10.30 a.m., May 9th. The question of lump jaw in Canadian cattle, principally in animals intended for export, came up through the presentation of correspondence in connection with the Montreal officials in sending back to the consignor at Prescott, Ont., a number of animals so diseased. Instructions were given that the animals in which disease was discernible should be killed, and, if necessary, the whole herd destroyed. The Board proposes that a greater stringency shall be exercised hereafter in the interest of Canada's export trade.

The Health Officer at Fort William asked for advice on the regulation of tuberculosis. He recently ordered that a child afflicted with tubercular glands should remain away from school, and his action was opposed. The Board decided to uphold the physician, and it was pointed out that the courts had already decided that persons suffering from tubercular affections could be subjected to regulations in the public interest.

The following Committees were appointed: Epidemics, Dr. Cassidy, Dr. Bryce, Dr. Oldright. Water Supplies, Dr. Vaux, Dr. Bryce, and Dr. McCullough. Sewerage, Dr. Kitchen, Dr. Bryce, and Dr. Vaux. School Hygiene and Ventilation, Dr. Cassidy, Dr. Oldright, and Dr. Bryce. Legislation and Publication, Dr. McCullough, Dr. Cassidy, and Dr. Bryce. Foods, Drinks and Poisons, Dr. Kitchen, Dr. Bryce, and Dr. Oldright.

The Board also discussed a communication from Mr. Davis, of Berlin, stating that the Council of that town had approved of the method of constructing septic tanks for decomposing sewage, as an addition to the sewage farm works. The Board passed a resolution endorsing the principle of thus treating the sewage, and granted permission to the Council to proceed with the additional works necessary, the Board's final approval to be dependent upon the results of the experiment.

It was announced that the next quarterly meeting would be held in Kingston. The Board then adjourned.

Canadian Medical Association.—As the time draws nearer the prospects for the Canadian Medical Meeting in Ottawa, on Sept. 12th, 13th and 14th, grow brighter every day. The fact of there having been a large fire in that city recently has spurred the profession of Ottawa to even greater deeds than they at first thought of. Every little while we hear of some more prominent men who will attend and contribute to the programme. It is now certain that, in addition to Mr. Edmund Owen, of London, Eng., Dr. F. Shattuck, Professor of Clinical Medicine in Harvard, will address the meeting. It is also expected that Drs. Nicholas Senn, of Chicago, Allen McLane Hamilton, of New York, and Gerster, of New York, will be present. The address on Gynecology will be delivered by Dr. Wm. Gardner, of Montreal.

REPORT OF DEATHS FROM ALL CAUSES AND FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF FEBRUARY AND MARCH, 1900.

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

FEBRUARY, 1900.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Reported.	Rate per 1000 per annum from all causes.	Scarlatina.	Rate per 1,000 per Annum.	Diphtheria.	Rate per 1,000 per Annum.	Measles.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
2,205,200 97%	720 93%	1,902	10.0	14	0.07	39	0.2	7	0.04	3	0.01	13	0.07	186	1.0

MARCH, 1900.

2,153,830 96%	727 93%	2,320	12.4	23	0.1	34	0.2	22	0.1	7	0.04	16	0.06	183	1.0
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Population of Province 2,253,182
Registration Divisions of Province..... 777

The Canadian Journal of Medicine and Surgery

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Oral Surgery—E. H. ADAMS, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Visiting Surgeon to Harlem Hospital, Professor of Surgery, New York School of Clinical Medicine, New York, etc., etc.

Gynecology and Obstetrics—GEO. T. MCKEUGH, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, M.D., Newmarket, Ont.

Medical Jurisprudence and Toxicology—N. A. POWELL, M.D., Toronto, and W. A. YOUNG, M.D., L.R.C.P. Lond., Toronto.

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Clinical Medicine—ALEXANDER MCPHEDRAN, M.D., Professor of Medicine and Clinical Medicine Toronto University; Physician, Toronto General Hospital, St. Michael's Hospital, and Victoria Hospital for Sick Children.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S. Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., C.M., Trinity University; Pathologist Hospital for Sick Children, Toronto; Demonstrator of Pathology Trinity Medical College; Physician to Outdoor Department Toronto General Hospital; Surgeon Canadian Pacific R.R., Toronto; and J. J. MACKENZIE, B.A., M.B., Bacteriologist to Ontario Provincial Board of Health.

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. VII.

TORONTO, JUNE, 1900.

NO. 6.

Editorials.

SANATORIA FOR INEBRIATES.

Now that the Ontario Government has passed an Act, providing for the establishment of sanatoria for consumptives, it would be in order to advocate asylums for inebriates, which might be established and maintained in a similar manner. To explain this remark, we may say that the Council of any county in Ontario might take the initiative, or a group of municipalities or counties

can unite for the purpose of erecting sanatoria for consumptives. The management and control of the institutions is to be in the hands of trustees elected by the municipalities. The Lieutenant-Governor in Council can grant one-fifth of the sum expended on the site, buildings and equipment, the sum for such a purpose not exceeding \$4,000. The municipality would be obliged to pay \$1.50 per week for each patient whose admission was approved, and a similar sum might be paid by the Lieutenant-Governor in Council out of any moneys set apart by the Legislature for the purpose. We think that a greater measure of success could be obtained in reclaiming inebriates, if selected cases were submitted to treatment rather than if an attempt were made to cure all kinds of such patients. The term "selected cases" is used advisedly, because we think that such persons only should be treated as wish to be cured of their infirmity. Many persons of this class, when cured of their craving for alcohol, stay cured.

There is another class of inebriates, however, who appreciate the process of cure, but who lack the desire to remain cured. To treat such patients for the effects of a drunken bout is easy enough; to prevent them from relapsing into inebriety is scarcely possible.

Apart from their dietetic errors and the inevitable results, many inebriates require prolonged medical treatment to help break up the vicious habits upon which alcoholic indulgence is often engrafted, and such treatment requires isolation, dieting, hygiene, and the use of medicinal preparations, in fact, a programme which can be put into operation in a special asylum with the greatest chance of success. Besides, it is now conceded by the best medical authorities that inebriates should be treated in special asylums. Speaking from personal experience, we would say, that in a general hospital the treatment of a selected class of inebriates would be difficult, as all classes of inebriates in such an institution only receive treatment for their immediate necessities, or until convalescence may have appeared.

Nowadays, however, the treatment of inebriates is more carefully systematized. Those who wish to co-operate with the physician are treated for a considerable time, while inebriates who delight in their relapses, are not expected to remain sober, and do not by their subsequent escapades cause very serious disappointment to their friends or the attending physician.

A well-to-do inebriate can, of course, resort to a private asylum at his own expense; but the poor inebriate, who is often sent to gaol, is made to herd with criminals, so that he sinks lower and lower in his own respect, as well as in that of his neighbors.

Would it not be well, therefore, if an asylum were provided for him, where physicians and nurses could look after him instead of gaolers and turnkeys, and would there not be a greater chance of his regaining the power of controlling himself if his self-respect were appealed to in a hospital rather than in a prison? The starvation diet of a gaol may suit the acute stage of alcoholism; but nutritive and easily-digested food is required to repair the damages to injured organs at a later stage of the disease. Such a diet, together with appropriate tonic and reconstructive treatment, can be best administered in a special asylum for inebriates.

The educative effect of a more or less prolonged stay in such an institution, under the moral influence of a kind and scientific superintendent, must also be looked upon as one of the most potent agents in the question of cure.

In North Dakota, a magistrate is empowered to commit an inebriate to a Keeley Institute instead of sending him to gaol, and the prisoner has the option of repaying the money spent in his behalf at the institute, a privilege of which seventy-five per cent. of these persons avail themselves. Reasoning by analogy, therefore, there is strong reason to think that if selected inebriates were committed to sanatoria for inebriates by our magistrates, the experiment would not be costly and the proportion of lasting cures considerable.

For people who take drink to excess, simply because they love it, and who repeat the offence, reformation is generally out of the question, and after they become dangerous to society, and perhaps criminal, the question of restraining their personal liberty becomes urgent.

A government, although paternal in its dealings with inebriates, should not hesitate to restrain a man's liberty when it is done in the interests of society, the family and the individual. When liberty is abused it degenerates into license, and the offending individual must be governed, until he is capable of exercising self-control. Whatever view may be held on the question of restricting the liberty of the inebriates, all will agree that an effort should be

made to assist poor inebriates, who, if medically treated in special asylums, would be placed in the best possible position to regain their health, and particularly their lost power of self-control.

Looking at the question of inebriety from the standpoint of medicine, we think, therefore, that the Provincial Government should be urged to do as much for the curable inebriate as they have shown themselves willing to do for the consumptive.

J. J. O.

SOME ERRATA IN AN ARTICLE ENTITLED "ARABIC MEDICINE."

AN article by J. S. Tunison, entitled "Arabic Medicine," appeared in the *Lancet-Clinic* of Cincinnati, and, by request, in the *Indian Lancet*, Calcutta. It contains many references to the scanty sources of instruction available to students during the middle ages, particularly the manuscript writings of Greek physicians and philosophers. We propose to criticise some of the statements made by the author, which are incorrect. Alluding to lack of scholarship among the Arabs, he says: "They had no original turn for science;" and again, "The Arabs were in touch with Greek science from the time when Justinian banished the last of the pagan Athenian sages to Persia. If there had been any growth and continuity of scholarship among them, they would have improved steadily, and there would have been among them everywhere men who knew Greek. During one of the most brilliant periods of the Moorish rule in Spain, there was not a man in the whole kingdom who could translate a treatise of Dioscorides. This was about the middle of the tenth century, when the Moors became important enough in the international politics to require an exchange of embassies with Constantinople. Among other gifts, the Greek Emperor sent a manuscript of Dioscorides. When it was found that nobody in Cordova could read the work, the Emperor sent a Greek monk, who understood Latin, and the Cordovans having found a Jew who understood Latin also, these two translated the book, with the aid of a crowd of Moorish doctors, who supplied the Arabic names of the medicines which Dioscorides had described."

The inference to be drawn from this ludicrous narrative is that

the Moors of Cordova were at that period ignorant of Greek literature, and yet in the history of Cordova under Abderahman III. (A.D. 912-961), we read the following ("History of All Nations," Vol. II., page 834, by S. G. Goodrich): "The opulence of this flourishing kingdom was so great that the governors of the provinces and the judges vied with the king himself in the magnificence of their palaces and gardens; like him, they were surrounded by artists, poets, philosophers, and others, who were distinguished by their superior talents; and these they entertained in the most sumptuous manner. Many public libraries and academies for science and literature were established in all the great towns. At this period, also, when the practice of medicine was almost unknown elsewhere, the physicians of Cordova were held in such high estimation that princes came to the Court of the khalif to be cured of disease."

Even if there were not any Greek scholars in Cordova "about the middle of the tenth century," Goodrich says in the chapter of his work devoted to the Moorish Kings of Cordova, "Alhakem, the next King (A.D. 961), was averse to war, fond of tranquillity, and immoderately attracted to literature. His agents were constantly employed throughout the East in purchasing scarce and curious books; he himself wrote to every author of reputation for a copy of his works, for which he paid royally; and whenever he could not purchase a book he caused it to be transcribed. His reign is the Augustan age of Arabic literature in Spain."

But even admitting that the Cordovan Moors of the middle of the tenth century had no man among them learned enough to translate a Greek manuscript, what was the educational status of the Oriental branch of the race? In *Cours Elementaire de Philosophie* par M. L'Abbe E. Barbe, p. 634, we read: "The study of philosophy among the Arabs dates chiefly from the end of the eighth century, or during the reign of the khalif Al-Mansur, who was the founder of Bagdad. This prince, and two of his successors, Haroun-al-Raschid and Al-Mamoun, were protectors of literature, caused the writings of several Greek writers to be translated into Arabic, and founded libraries and public schools, among which the school of Bagdad held the highest rank. Later on, the school of Cordova was founded, which flourished up to the thirteenth century. It was from the school of Cordova that the works of Aris-

tote, and some other writings of antiquity, found their way into France and other parts of Europe."

Among the Western Arabs, or in the school of Cordova, the following distinguished men are mentioned: Avempaece, who strove to reconcile Islamism with philosophy; Thophail, of Cordova, who died at Seville in 1190, and Averrhoes, his disciple, who was born at Cordova and died in Morocco about the beginning of the thirteenth century. Averrhoes translated the works of Aristotle into Arabic, and wrote commentaries on them."

Here is another excerpt from Mr. Tunison's article: "About a century earlier, John Erigena, a Scotchman, at the court of Charles the Bold, got hold of the suppositious writings of Dionysius the Areopagite, and translated them without any help from Constantinople or elsewhere."

Now, admitting that by "Charles the Bold" is meant Charles the Bald, a grandson of Charlemagne, it is not fair to say that Erigena "got hold" of the suppositious writings of the Areopagite, just as though he were a Norman freebooter robbing a monastery. On the contrary, Barbe says of him: "Skilled in the knowledge of Greek, something extraordinarily rare in these ages of ignorance, Erigena translated into Latin for Charles the Bald the writings of Dionysius the Areopagite, which had been sent to Louis the Mild by the Emperor of the East."

Moreover, Erigena was not a Scotchman. As his name implies, he was a native of Erin, which was also called Scotia, whence he probably acquired the name "Scot." He was summoned as a distinguished scholar to the court of Charles the Bald, king of France, and in his subsequent writings constructed a system of philosophy, which was really astonishing for the epoch in which he lived.

J. J. C.

THE MEDICAL SCHOOL OF THE FUTURE.

An editorial under this caption appears in a recent issue of the *Philadelphia Medical Journal*. Strange! but can it be possible that at a point so distant from Toronto even as the City of Brotherly Love, it got noised about that a little "difference" had arisen recently between the two principal teaching bodies in medicine in the Province of Ontario? The sentence, which we have italicised, would

seem rather to lead one to think so. The editorial goes on to say: "The present progress of medicine is so rapid that new points of view are constantly being secured, and such new suggestions should be carefully noted. One of the most healthful signs of the times is the growing tendency of the better schools to ally themselves to universities and of universities to establish medical departments. *It is difficult to see how a private medical school of the joint-stock-company type can ever in the future rise to the first rank, for such a school is not more likely to attract endowments than a cotton mill, and without endowments the enormous expenses of a modern first-class medical school can not possibly be met.* This change, we may reasonably hope, will be associated with a diminution of the total number of medical schools now so greatly in excess of the needs of the country. Professor Bowditch believes in the desirability of a literary college course as a preparation for medical study, and to avoid the student's getting into practical life too late, when such a literary course is taken, three methods have been devised: the reduction of the academic course to three years; the provision in the academic department of courses which partly anticipate professional work; and the permission of counting the first year of a professional course as the fourth year for the bachelor's degree. President Eliot, of Harvard, believes that in a short time the majority of men will complete their academic courses in three years. Another matter which is essential to any important advance in medical education is a distinction between those studies which should be absolutely demanded and those studies which it is desirable that certain students should know; that is to say, the introduction of elective studies in the medical courses. In the future the laboratory method of instruction will be greatly extended and students will be trained to get their knowledge as far as possible by the direct study of natural phenomena, but the didactic lecture, though reduced in importance, will not be displaced from its position as an educational agency. The work of the students will probably be so arranged that their attention will be concentrated upon one principal subject at a time, and these subjects will follow each other in the natural order. Examinations will be so conducted as to afford a test of both the faithfulness with which a student performs his daily work and of his permanent acquisition of medical knowledge, fitting him to practise his profession."

These suggestions are of the greatest importance for the future of American medicine; the introduction of the university idea, the laboratory method of instruction, the practical examination to test the student's real fitness for practice; and even the Harvard arrangement of courses in due sequence, are all apparently past the experimental stage. Every member of the profession should use his influence to support such schools as are working for these ideals, and the entire profession, through its societies, should organize to support such schools and to use the profession's best influence to crush the inefficient diploma-mills which exist in such numbers in almost all parts of our country. Aside from the more ideal motive of striving for that which is best in medical progress, there is the very practical motive which must appeal to every practitioner, that the profession is daily becoming more and more crowded with inefficient men. According to the Bulletin on Professional Education of the University of New York, there is already one doctor to about six hundred inhabitants in most sections of the country, and if this increase continues, an honorable living in the medical profession will be almost impossible.

ALAS! HOW SWIFTLY THE YEARS GLIDE BY.

NATURE has a great influence over our feelings. On a bright summer morning how beautiful the world seems; how blue the sky, how sweet the song of the birds, how fresh and green the grass, with the dew-drops, the stars of morning, shining on every blade. The flowers—the blushing rose, the timid violet, the sweet-scented mignonette, all nod their graceful heads to attract the mellow sunbeams, and contrast prettily with the tall dark-foliaged trees. We go about gaily on a day like this, with full hearts, praising God and thanking Him for placing us in such a lovely world. But the memory of bleak December winds, of leaden skies, of faded flowers, of naked trees and barren plains, comes like a blight upon the present beauty. Death is the end of all—all that is lovely in nature must wither and crumble into nothingness. And so it is with man. Even he must die. It is his fate, he cannot escape it. Let him fly to the uttermost bounds of the earth

and Death, nimble-footed, swift-winged, will follow close upon him. Let him pierce the depths of the ocean or hide in the bowels of the earth, yet Death, impassible and omnipresent, is awaiting him. There is something relentless and inevitable about this enemy of man. No treasure can bribe him, no beauty charm him, no strength conquer him. He feels no sympathy for human suffering, no tenderness for human passion. He is impartial in his choice of victims; the mighty ones of earth—men of genius, patriarchs and seers, the poor and abject, all mingle in one mighty sepulchre. Truly it has been said, "Death is a black camel, which kneels at the gates of all."

A. D. C.

EDITORIAL NOTES.

Hemostatic Properties of Peroxide of Hydrogen in Metrorrhagia.—Dr. Platon, in *Marseille Medical*, January, 1900, recommends the use of peroxide of hydrogen in metrorrhagia, the injections being made by means of Braun's syringe. He injected 4 c.c. (1 drachm) of peroxide of hydrogen, and used subsequently a tampon of salol gauze.

"Humanum est errare."—We learn through a letter sent to our contemporary, the *Dominion Medical Monthly*, that two of the members of the Victoria (B.C.) Medical Society, after signing an agreement to refuse lodge work at the usual rates, have violated it, and are now doing the combined lodge work of Victoria. They have in consequence been expelled from membership in the Victoria Medical Society.

An Absent-Minded Beggar.—Sir William MacCormac, the President of the Royal College of Surgeons, who is now with our soldiers at the front, is an indefatigable worker. Often to save time when studying in his laboratory, he used to have a light lunch served there. Once his assistant heard him sigh heavily, and looking up, saw the doctor glaring at two glass receptacles on his table. "What is the matter, doctor?" asked one of the youngsters. "Nothing in particular," was the reply; "only I am uncertain whether I drank the beef tea or that compound I have been working on."

Dangers of Potassium Chlorate.—Dr. Henry Ashby reports in the *Edinburgh Medical Journal* several grave cases of poisoning consecutive to the administration of potassium chlorate. Physicians are well informed of the hurtful influence of this salt on the elements of the blood, and do not prescribe it as much as formerly. It is very popular with the laity, however, and is used in cases of sore throat very freely, although the results are in many cases, to put it mildly, highly problematical. In one disease, however, ulcerative stomatitis, potassium chlorate administered internally in small doses, soon produces a manifest improvement. In the other varieties of stomatitis its action is doubtful, and its use cannot be recommended.

Etiology of Malaria.—Dr. Laveran, at a recent meeting of the Paris Academy of Medicine, made some remarks on the importance attached to mosquitoes, as carriers of the parasite of malaria, by the Sierra Leone Commission. Instructions as to the means to prevent the development of malarial fever have been issued, showing how to get rid of mosquitoes and their larvæ, which live in stagnant water. Ponds or puddles must be dried, or else a small quantity of coal oil or fresh tar, poured on, drop by drop, must be spread over the surface of the water. Exposed persons are advised to use mosquito nets even during the day; the punka, a large fan intended to chase away these insects, is also recommended. Inunctions with oil of lavender or camphorated vaseline are of little value.

Spermatic Neuralgia.—To Sir Astley Cooper belongs the honor of having described irritable testicle. Drs. J. Donath and F. Hultl report a case of this disease, which they treated by resection of the lumbo-inguinal and external spermatic nerves (*Wiener klin. W.*, 1899, No. 11). They based their treatment on the fact that, in other forms of neuralgia, resections of nerves had often given good results; that, on the other hand, castration had not proved invariably successful in curing the neuralgic pains, and that a subsequent intervention might cure the neuralgia. After discussing and establishing these propositions by facts, the authors give the history of their patient, and the details of the operation performed on him. This procedure caused the neuralgic pains to disappear, and they had not reappeared three months afterwards.

Fecundity of French Families.—Using the census of 1891 as a basis for computation, M. Arsene Dumont shows that out of a total number of 10,750,000 families in France, 2,522,210 families, say 20 per cent., or a fifth of the total, are very fruitful. These may be subdivided into different classes. For instance, 251,658 families have at least seven living children: 322,651 have six children; 972,285 have five children; 975,616 have four children respectively. Continuing the enumerator shows that 15 per cent. of the total families have three living children, a sufficient fecundity; 22 per cent. have two; 24 per cent. have one, and 19 per cent. none at all. These statistics refer, of course, to living children, and not mere births. It thus appears, that about 38 per cent. of the families of France have at least three living children, and 65 per cent. have either one or two children, or none. There are communes in France, in Lot and Garonne, Tarn and Gers, where there is a birth-rate of only 12 or 13 per 1,000 living persons, instead of a mean birth-rate of from 22 to 23 per 1,000; but the birth-rate is lower still in Orne, where the decennial mean rate is 10.9 and even 8.7 per 1,000 inhabitants.

PERSONALS.

DR. N. A. POWELL was in Atlantic City in May.

DR. ALEX. MCPHEDRAN will move into his new residence this month.

DR. EZRA STAFFORD is at present visiting friends at Lincoln, Nebraska.

DR. ANDREW HARRINGTON has quite recovered from a severe indisposition.

DR. C. E. STACEY moved into his new house, 161 College Street, last month.

DR. E. M. COOK, of College Street, is making extensive alterations to his residence.

DR. C. F. MOORE, of Bellevue Ave., returned from his honeymoon two weeks ago.

DR. J. CAVEN has resigned his professorship in Toronto University Medical Faculty.

DR. ARTHUR JUKES JOHNSON has recovered from his recent illness, we are glad to say.

DR. W. P. THOMPSON has returned to Toronto and taken up practice at 6 Carlton Street.

DR. F. N. G. STARR left the city on the 24th ultimo, and had a few days' successful fishing.

DR. H. H. OLDRIGHT has been appointed a member of the Ontario Provincial Board of Health.

DRS. FRANCIS J. QUINLAN and R. C. Myles have been elected Professors of Laryngology and Rhinology at the New York Polyclinic.

DR. HARRY VAUX, late of Brockville, and now of Hamilton, Ont., has been appointed Chairman of the Ontario Provincial Board of Health.

DR. W. A. YOUNG left on the 28th ult. for New York and Atlantic City. Before he returns he will attend the American Medical Association at the latter place.

DRS. ALEX. MCPHEDRAN, J. J. Mackenzie, W. J. Greig, E. E. King and H. P. H. Galloway were in Washington, D.C., last month attending the Congress of American Physicians and Surgeons.

DR. I. D. ARCHIBALD, who for the last year has been on the house staff of the Hospital for Sick Children, left the city recently to accept the appointment of Surgeon-Lieutenant in the Royal Medical Corps, Bermuda. Dr. Archibald, whose home is in Halifax, is a graduate of Toronto Medical School, and is a very popular and promising physician.

THE Ontario Medical Association will open its Twentieth Annual Meeting on the 6th inst., in the Normal School Buildings. We bespeak for it the heartiest possible support from the Toronto profession.

THE Canadian Medical Association meeting at Ottawa in September is, under the direction of President Dr. Powell, and General Secretary Dr. F. N. G. Starr, going to be a perfect "howler" of a success. No wonder the attendance has increased every year recently, considering the amount of work the energetic General Secretary alone has put into his end of it.

Correspondence. 

The Editor cannot hold himself responsible for any views expressed in this Department.

COMPULSORY VACCINATION.

TORONTO, May 8th, 1900.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY :

DEAR SIR,—In the May JOURNAL an article appeared criticising those opposed to compulsory vaccination, and making statements not quite in accord with facts. For instance, it was stated that "There is no more question that vaccination has been the means of saving hundreds of thousands of valuable lives," etc. How vaccination has saved these lives would be very difficult to demonstrate, as the *general death rate* changes little even during a severe epidemic of smallpox, as is evidenced by the following figures: The deaths by smallpox in London, 1796 (highest of that decade) numbered 3,548, and the whole number of deaths was 19,288. In 1792 the smallpox deaths were 1,568, total mortality, 20,213. Again, taking England, 1841-1880, we find that during the three lowest years, 1841, '51, '55, the smallpox deaths averaged 1,057, and general death-rate 23.9 per thousand, while in the three highest years, 1863, '71, '77, the smallpox deaths averaged 4,153 and general death-rate was 23.6 per thousand.

Some of the "doubting Thomases" have read the article that appeared in the *British Medical Journal*, but what does it prove in favor of vaccination? Nothing! The writer states that 800,000 Porto Ricans were vaccinated, and that in nine months no cases of smallpox were to be found on the island. Was this result due to vaccination alone? Did the officials do nothing else to help stamp out the disease? Were not isolation and sanitation introduced and carried out rigorously and systematically? If vaccination only had been enforced, is there any one bold enough to say that the disease would have disappeared? Have the staunchest advocates of vaccination ever depended upon that process alone to stop the spread of smallpox in any epidemic that has visited Canada?

Then if, besides vaccination, isolation and sanitation are depended upon, how can any one logically give all the credit to vaccination alone? "The plague, typhus, and surgical erysipelas have been almost removed from our hospitals by isolation and

sanitation, and so why not give the same means credit for removing smallpox?

In England one death results directly from 14,159 cases of vaccination, and yet only one person is killed of the 56,963,307 persons who travel by railroad. The British army and navy were thoroughly *re-vaccinated* in 1871-72, yet the death-rate was, from smallpox:

Army (1873-94)	37 per million.
Navy (1873-94)	36.8 "
Leicester (1873-94) ages 15-45	14.4 "

and yet Leicester had almost abandoned vaccination in 1871 for isolation and sanitation.

One of the delegates pointed out to the Premier that vaccination is the only operation made compulsory, and for which certain persons are paid out of the public funds. Take away the State monetary support, and how many professional men would be supporters of an operation opposed to every idea and theory of modern aseptic surgery? Dr. E. M. Crookshank, Professor of Pathology and Bacteriology, Kings College, London, says: "I maintain that there is no scientific support for vaccination, and the practice is destined to fall into desuetude." Hoping that the profession will treat this question on its merits, and not take anything for granted,

I remain,

Yours truly,

E. A. P. HARDY, M.D.

605 Spadina Avenue.

COLLEGE OF DOMESTIC SCIENCE.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY:

DEAR SIR,—Your reference, in a recent issue, to this new addition to our educational institutions was sufficient to induce me to visit it when in Hamilton.

The Collège is a very handsome structure, centrally situated, The President, Mrs. Hoodless, and staff, showed the company through the building and explained its workings.

The basement contains a well-equipped gymnasium. The ground floor has its artistic reception-room, reading rooms and offices. A broad, winding stairs leads up to the domestic art department. Here are taught sewing, designing, millinery work, everything from darning a stocking to decking out an Easter bonnet, or elaborating a bridal trousseau. The character of the mate-

rial, its manufacture, cost, etc., are all included in the course of study.

The next department is the one of most interest to physicians, viz., the cooking department. Here are taught the chemistry of foods, their habitat, methods of production, transportation, preservation, and preparation for dietetic use. Special attention is given to food values as nutritives, force and caloric power, infant and childhood dietetics, and invalid foods. The science of bacteriology is also taught, especially in its bearing upon food, infection, washing, infected dishes, care of food, and dishes about a sick-room, etc.

The whole course is a most attractive and practical one. Every young woman going through such a college is equipped for life in a manner she could not possibly be without such a training. The teachers are all specialists.

There are two features in the College work of special interest to physicians. First, the intelligent selection, preparation and care of foods. What physician has not been paralyzed by having an attendant hurry off to the bath-room, and take a cup that has been standing for hours or days a few inches from the w. c., fill it with water or milk, and bring it to the patient. With such a cup, infected with virulent germs, is it any wonder there are unsuspected (?) relapses? The same with foods exposed to infection. Again, see the extra leisure these healthful, aseptic foods and dishes would enable the physician to enjoy. Instead of having to hustle out and prescribe emetics to dislodge or pepsines to coax on the promiscuous delicacies our mothers, wives, daughters or sweet-hearts regale us on, we would have our palates bewitched, our stomachs enchanted, and the remaining digestive contingents delighted, at the approach of the scientifically prepared viands of the "sweet girl graduate" of domestic science. Under this new and happy change in our environments, we would—instead of casting aside as unworthy of notice the great questions dividing our statesmen and medical professors—have leisure to solve these, and discern those grandly sublime principles of eternal justice and right on which these notables stand. Now we simply look upon them as "scraps" between rival factions, which view surely cannot be the correct one.

However, the second feature is probably the most practical one that the College of Domestic Science teaches us, viz., the disposal of the question of overcrowding. The law is that each student has to eat her own cooking. If the breakfast-table is overcrowded there is always room at dinner and supper, for the ignorant, the indolent and incompetent have discomfited themselves. If the founders of our medical colleges had only instituted this plan, and compelled each member of the graduating class to prescribe, dis-

pense and take his own medicines, what a legion of professors, editors and contributors—not to speak of the innumerable hosts from the “rank and file”—would have thus transported themselves in the embryonic stage to the “happy hunting grounds”? However, though it be “the saddest thought of life to think of what might have been,” yet this reform could never have been more effectively introduced than now. Mrs. Hoodless, in insisting upon this condition being faithfully carried out, has given us a very practical solution of the Darwinian theory of “The survival of the fittest.”

J. HUNTER.

O'Hara Ave., Toronto.

ANOTHER of Miss Helen Gould's charities is a home for crippled children.

THE Woman's Medical College of Pennsylvania celebrated its semi-centennial in May.

THE International Tuberculosis Congress was held at Naples from April 25th to 28th.

A PERMANENT bureau for American trained nurses is to be established in Paris in June.

THE Sixth Annual Dinner of the Alumnae Association of the Ontario Woman's Medical College was held in Webb's Parlors, Toronto, on the 18th ult. The address of welcome was delivered by Dr. Dymond, the President.

SIR DOUGLAS MACLAGAN died on April 5th. He was President of the College of Physicians of Edinburgh in 1864, also the leading toxicologist for many years. He made his chair of forensic medicine famous, and was consulted by the Crown in many a *cause celebre*.

DR. ABRAHAM JACOBI, upon his seventieth birthday, was presented by the students of the College of Physicians and Surgeons with a silver cup. A prominent medical journal adds the sentence, “He intends going to Paris to read a paper on ‘Infant Feeding’ at the International Congress.”

AT the recent meeting of the Medical Association of Georgia, it was resolved to establish a Pasteur Institute in Atlanta for the treatment of hydrophobia. The resolution was unanimously carried, “That the profession endeavor to secure, through legislation, 50 per cent. of the dog tax to support said institution when established.”

The Physician's Library.

BOOK REVIEWS.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science by leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. Twenty volumes. Vol. XIX. New York: William Wood & Co. 1900.

The closing volume but one of the "Twentieth Century Practice" is devoted to malaria and micro-organisms. The contributors comprise Dr. Amico Bignami, of Rome; Dr. Simon Flexner, of Philadelphia; Dr. Ettore Marchiafava, of Rome, and Dr. Eugene L. Opie, of Baltimore, Md. The first part of the volume is devoted to a series of very fine plates, by Dr. Marchiafava and Bignami, illustrating malaria. Among the illustrations are the Hematozoa of Quartan Fever, Tertian Fever and Quotidian Fever, Quartan Parasites, Tertian Parasites, Estivoautumnal Parasites, Acute Enlargement of the Spleen in Malaria, the Liver in Pernicious Fever, Mucosa of the Stomach from a case of Choleraic Pernicious Fever, Extremity of an Intestinal Villus from a case of Choleraic Pernicious Fever, Section of the Brain in a case of Comatose Pernicious Fever, and many others. The plates are beautifully illustrated, and render the reading of the book much more intelligible and enjoyable. The four contributors divide up the work in three sections, Drs. Marchiafava and Bignami devoting over five hundred pages to the study of Malaria; Dr. Simon Flexner, of Philadelphia, contributing between two and three hundred pages on Micro-Organisms, the last chapter of one hundred and fifty pages on Protozoa coming from the pen of Dr. E. L. Opie. In referring to the action of quinine as a specific in the treatment of malarial fever, and discussing the way in which it causes the cessation of this disease, the authors admit that the most complete researches upon this subject are those of Golgi. According to his researches, in cases of Quartan Fever the administration of quinine in ordinary therapeutic doses does not arrest the development of the parasites when the modifications preceding segmentation have begun. The febrile attack is not prevented, yet the young generation of parasites resulting from fissure is destroyed, and this accounts for the permanent cure obtained with only one dose of the remedy three to four hours before the attack. If quinine is given six to eight hours before the attack, when the parasites are mature, but before the process of segmentation has begun, the attack is delayed and attenuated. But if the quinine is given on the first day of apyrexia, when there are only young endoglobular bodies present, its action is not constant. Sometimes the expected attack does not come on because the parasites have been destroyed; sometimes it is delayed and weakened so that the series of attacks suffer interruption, but a relapse occurs. Sometimes the attack is postponed and attenuated, and then we have a series of light and irregular attacks, after which comes the relapse. In the last two cases the effect of the quinine upon the parasites in the young stage is that of destruction of a part, with a disturbance in the life cycle of the surviving parasites, which renders their development very irregular. In multiple infections we may gradually succeed in simplifying the attack by small doses of quinine administered two or three hours before the attack. Thus in a triplicate quartan we may reduce the disease to a duplicate quartan, and finally to a simple fever. The following are the results of the authors on the effect of quinine upon this disease when given at different stages: (1) If administered during the crisis of an attack and continued during the apyrexia

which follows, in the majority of cases the next expected attack is inhibited or there is merely a slight elevation of temperature with little discomfort. (2) If quinine in the usual dose is administered within the six hours preceding the expected attack it may have no influence at all upon the temperature of the succeeding paroxysm. (3) If the remedy is administered at the onset of the attack in the majority of cases the attack will come on in the usual way, and may even be grave and prolonged. (4) When the quinine is given during the febrile attack, beginning shortly after the onset and continuing throughout the course of the fever, in a series of cases the characteristic curve of the tertian is not appreciably modified, while in another series there are various modifications—attenuation or disappearance of the precritical elevation or exaggeration of the pseudo crisis, or it may sometimes happen that the attack is prolonged and lasts longer than did the preceding one. In a whole series of cases, when the quinine has been given in large amount during the attack, there are apt to be no subsequent attacks, or on the following day or days there are only slight elevations of temperature.

W. A. Y.

The Medical Diseases of Childhood. By NATHAN OPPENHEIM, A.B. (Harv.), M.D. (Coll. P. and S. N.Y.), author of "The Development of the Child," attending Physician to the Children's Department of Mount Sinai Hospital Dispensary. With 101 original illustrations in half-tone and 19 charts. New York: The Macmillan Co. London: Macmillan & Co., Limited. 1900. Obtainable at Tyrell's Book Shop, 8 King Street West, Toronto. Price, \$5.00.

One of the many good points about this book is the abundance of photo micrographs of pathological sections. This we like very much, as too little attention has in the past been paid to this method of impressing upon the reader of any work upon diseases of childhood the difference between healthy and diseased tissues, giving him a clearer conception of what should be the foundation to all profitable reading. The book consists of twenty-five chapters, the first ones taking up the development and general hygiene of the new-born child, congenital malformations and deformities, injuries and diseases of the new-born, and feeding. The author then writes of the various diseases of the infant, those of the mouth, esophagus, stomach, small intestine, pancreas, liver and spleen, diseases of the large intestine and peritoneum. He devotes two chapters to diseases of the genito-urinary system, and two to the specific infectious diseases, finishing up with diseases of the skin. In the chapter on Diphtheria, the photo micrographs showing diphtheritic inflammation of the pharynx, diphtheritic inflammation of the trachea, and lymphadenitis of diphtheria are exceptionally clear and beautifully reproduced in half-tone. Dr. Oppenheim is strongly in favor of the use of antitoxin in the treatment of this disease. He advises at the outbreak of the sickness that all the other members of the family be given an immunizing dose (150-300 units, Behring standard, according to age). He thinks that the routine practice of cleaning the patient's gastro-intestinal tract by small and repeated doses of calomel must not be omitted. Without delay the child should be given a full dose of antitoxic serum (1000-3000 units, Behring standard). If good results do not follow, the injection should be repeated the following day. The author points out further on, that in some cases a discrete maculo-papular rash may appear about one week after the infection, which some practitioners have claimed as being due to deficient purity of the serum. It is not dangerous, and requires but symptomatic treatment. The author does not hold the same extravagant views held by others who declare that, with antitoxic serum at hand, such a thing as intubation is entirely out of the question, and never now required. Dr. Oppenheim says, on the other hand, that though the need of intubation is not as frequent as it formerly was, nevertheless there are occasional cases where it must be practised, especially in infants. We are pleased that the usual surplus of statistics is left out of this work altogether, such always proving tiresome and in the end of little value to any reader.

Anesthetics: Their Uses and Administration. By DUDLEY WILMOT BUXTON, M.D., B.S., Member of the Royal College of Physicians; ex-President of the Society of Anesthetists; Member of University College; Administrator of Anesthetics and Lecturer in University College Hospital; Consulting Anesthetist to the National Hospital for Paralysis and Epilepsy, Queen's Square, and Senior Anesthetist to the Dental Hospital of London. Third edition. London, W.C.: H. K. Lewis, 136 Gower Street.

As this manual had been for some time out of print, it was found necessary to issue the present edition. As the field of anesthetic literature had expanded greatly, it was found necessary to recast the whole book, the less important literature being omitted and more useful matter put in its place. Owing to the present differences which are still under debate regarding the uses of anesthetics and their actions, the author has simply stated his ideas without giving any dogmatic opinion as to the views held by the different authorities on anesthetics. The main additions are descriptions of methods of giving nitrous oxide in combination with oxygen, Dr. Flux's open method of giving nitrous oxide, Schleich's solutions for general anesthesia, the infiltration method for producing local anesthesia, and Bier's method of intrathecal cocainisation, and the methods recently introduced for prolonging anesthesia under nitrous oxide. There is one thing that, in our opinion, should be more thoroughly investigated by anesthetists, and that is, suggestion as an aid to anesthesia. What a common thing it is to hear an anesthetist say to his patient: "Now, you may feel a little suffocation at first, but that will soon pass off," or "If you feel any suffocation why just blow out and it will help you." It is wonderful the effect of suggestion on neurotic patients if you merely suggest to them: "Now, this will put you to sleep very quickly. You must put all your ideas on sleep, and you must not speak or move under any consideration until I tell you to wake up." Impress this firmly and quietly on the mind of the patient when you begin giving your anesthetic; suggest occasionally the grand effect of your anesthetic, and how nicely and quietly she is going to sleep, and by thus quietly suggesting sleep your patient soon goes off into a quiet sleep with no struggling, no talking, no vomiting, and with a minimum of anesthetic which is often truly remarkable. We know a great many are sceptical about a matter of this kind, but just try it and you will have another leaf to put in your manual of anesthesia. This book is very nicely bound in the "Practical Series."

A. J. H.

Diseases of the Genito-Urinary System. A thorough treatise on Urinary and Sexual Surgery. By EUGENE FULLER, M.D., Professor of Genito-Urinary and Venereal Diseases in the New York Post-Graduate Medical School; visiting Genito-Urinary Surgeon to the New York Post-Graduate Hospital; visiting Surgeon on the Genito-Urinary Division of the New York City (charity) Hospital; Professor of Genito-Urinary and Venereal Diseases in the University of Vermont, etc. New York: The Macmillan Co. London: Macmillan & Co., Limited. 1900. For sale at Tyrell's Book Shop, 8 King Street West, Toronto. Price, \$5.00.

Some little time has now elapsed since any book has been published dealing with diseases of the genito-urinary system, so that this work, by Dr. Fuller, a gentleman in every way able to do justice to his specialty, will be quite a welcome addition to such literature. Dr. Fuller makes his a surgical rather than a dermatological treatise of the subject, the author holding that there is so wide a range between genito-urinary diseases proper and dermatology that it is impossible for any one mind to completely grasp, as well as expatiate upon, both subjects. There is little doubt about it that when a work is written by a series of writers, one is bound often to more or less encroach upon the other, and on the other hand, in many instances, certain topics will be left entirely out, one contributor taking it for granted that the other will deal with it, thinking it comes more within his province to do so. Not so with a book such as this, where the entire subject is dealt with by one person, and

especially so by one as talented as Dr. Fuller. The book is divided into twenty-three chapters, the first considering "The Bacteriological and Surgical Considerations as regards the Urine," after which animal parasites affecting the genito-urinary system, diseases of the penis, scrotum, testicle, epididymis and cord, disease in connection with the inguinal glands, the urethra, stricture, hypertrophy of the prostate, the bladder, vesical calculus, the ureters and diseases of the kidney are considered seriatim. The book is a very complete treatise of the subject in hand, and it was with pleasure and satisfaction that we read over especially the chapter on Vesical Calculus. The author throws light upon some points which have been subject to discussion and doubt in past years. We congratulate him upon the result of his labors.

A Manual of Gynecological Practice for Students and Practitioners. By Dr. A. DUMASSEZ, Professor in Midwifery and Gynecology in the University of Berlin. This manual is the second English edition translated and edited from the sixth German edition, by JOHN W. TAYLOR, F.R.C.S., Professor of Gynecology, Mason's College, Birmingham; Surgeon to the Birmingham and Midland Hospital for Women, and FREDERICK EDGE, M.D., London, M.R.C.P., F.R.C.S., Surgeon to the Wolverhampton and District Hospital for Women; Surgeon to Out-patients Birmingham and Midland Hospital for Women. London, W.C.: H. K. Lewis, 136 Gower Street. Price, 6s.

We are exceedingly indebted to these surgeons for opportunity of having this profusely illustrated, concise and complete little manual before us. One of the most valuable additions to this little work is the anatomical preface which, we think, should appear in every surgical work. It only takes a moment to skim over such a preface, and the surgeon has again his anatomical pictures in his mind's eye, so to speak. One would not think it possible to condense so much real information in a manual of this size, but every gynecological ailment has its place and treatment here. Another feature of this little book is the clear description of the technique in the examination of patients for the purpose of diagnosis. This is especially useful to students, and points out the proper way for them to begin their examinations, and so gives them more confidence in themselves and their patients more confidence in them.

The directions for the technique of vaginal fixation have been somewhat altered, and the method of intra-uterine steam medication is described and recommended for uterine hemorrhage due to endometritis or submucous myomata.

A. J. H.

Diseases of the Tongue. By HENRY T. BUTLIN, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital; formerly Erasmus Wilson Professor of Pathology and Hunterian Professor of Surgery at the Royal College of Surgeons; and WALTER G. SPENCER, M.S., M.B. (Lond.), F.R.C.S., Surgeon to the Westminster Hospital, and in charge of the Department for Diseases of the Nose and Throat; formerly Erasmus Wilson Professor of Pathology at the Royal College of Surgeons. Revised and enlarged edition. Eight chromo plates and numerous engravings, 488 pages, size 5 ½ x 9. Cloth, \$3.25 net. New York: Cassell & Company, Limited.

The author in his preface to this revised edition says: "Various additions have been made, such as the chapter on the Anatomy of the Tongue. On many points relating to clinical occurrences, particularly on the manner in which cancer first appears on the tongue, and on questions of operative surgery for malignant disease, the experience I have acquired during the last fifteen years enables me to speak with far greater authority than I ventured to do in 1885."

The *British Medical Journal* says of the previous edition: "Mr. Butlin may be congratulated upon having written an excellent manual, scientific in tone, practical in aim and elegant in literary form. The colored plates rival, if not excel, some of the most careful specimens of art to be found in the pages of European medical publications."

Elements of Clinical Bacteriology for Physicians and Students. By LEVY AND KLEMPERER. Second edition, enlarged and revised. Translated by AUGUSTUS A. ESHNER, M.D. Philadelphia: Saunders. Canadian Agents: J. A. Carveth & Co. Price, \$2.50 net.

In placing Levy and Klemperer's text-book within the reach of English-speaking students, Eshner has conferred a distinct benefit. We cannot claim that there is any dearth of text-books of bacteriology in English, but the deservedly high place which this work has obtained in Germany fully warrants the publishers in producing it in English. The work has not lost in the translating, as Dr. Eshner has added material which brings it thoroughly up to date, and it has been enriched by the addition of illustrations.

Although devoted to the clinical side of bacteriology, and therefore eminently practical, it contains seventy-four pages devoted to the biology of bacteria and questions of infection and immunity, which will repay perusal. In the chapter upon Immunity the reader will find the question carefully treated and a very fair critical discussion of the various theories. The chapter upon Diphtheria is very full, containing, as it does, the recent work of Ehrlich's upon the constitution of the diphtheria toxin and his recommendations as to standardizing the antitoxin. We think it rather superfluous, however, to introduce this in a text-book of clinical bacteriology, but it is certainly important that clinicians and students should understand the meaning of an antitoxic unit, so that they may appreciate the dosage in serum therapy. We can thoroughly recommend this work.

J. J. M.

Tuberculosis: Its Nature, Prevention and Treatment. With special reference to the Open-Air Treatment of Phthisis. By ALFRED HILLER, B.A., M.D., C.M., Fellow of the Royal Medico-Chirurgical Society, London; Member of the Council of the Medical Graduates' College; Member of the Council of the National Association for the Prevention of Consumption and other forms of Tuberculosis; Hon. Sec. to the London Open-Air Sanatorium. With thirty-one illustrations and three colored plates, 256 pages, sizes 5x7½. Cloth, \$1.25 net. New York: Cassell & Company, Limited.

The author in his preface says: "Tuberculosis offers many aspects for study. These have been considered under different headings and in many different volumes; but no one book in English, so far as I am aware, is devoted to the subject as a whole. For this reason I venture to believe that a concise manual, dealing with all the hydra heads of Tuberculosis in one volume, will form a work of reference of some interest and value to practitioners of medicine and medical students. It is for them that this work is primarily intended. Tuberculosis is the Nemesis of overcrowding, of squalor, of departure from the conditions of a healthy animal life. Immunity from tuberculosis is a large portion of the reward which a community may hope to derive from good sanitation, from light, from air, from all that is sound in the progress of civilization, and all that is conducive to the material and moral welfare of the masses. It is thus a social as well as a medical problem."

The Anatomy of the Brain. A Text-Book for Medical Students. By RICHARD H. WHITEHEAD, M.D., Professor of Anatomy in the University of North Carolina. Illustrated with forty-one engravings. 6½ x 9½ inches. Pages v.-96. Extra vellum cloth, \$1.00 net. Philadelphia, Pa.: The F. A. Davis Co., Publishers, 1914-16 Cherry Street.

This little book has been written for the purpose of giving the student a concise account of the anatomy of the brain. The author has succeeded in producing a guide which will prove of value to the student in his dissection. We are glad to observe that the author begins his description with a reference to the development of the central nervous system. In our opinion the student is wholly unable to get an intelligent conception of the structure of the brain without having constantly before his mind the explanation of the various

relations obtaining between the different parts of the nervous system, which is obtained by a study of the development of these structures. We would have appreciated the work more had the author made more frequent reference to development in the body of the book. This method of dealing with brain anatomy simplifies the subject for the student, and he takes more interest in his work because he is enabled to thoroughly understand his subject. The author has made an excellent selection of diagrams to illustrate the text. We can recommend the volume as an accurate and useful guide to those who wish to study the anatomy of the brain.

A. P.

A Manual of Medicine. Edited by W. H. ALLCORN, M.D. (Lond.), F.R.C.P., F.R.S. (Edin.), Senior Physician and Lecturer on Clinical Medicine in the Westminster Hospital; Examiner in Medicine University of London and Med. Department Royal Navy. London and New York: Macmillan & Co., Limited.

This is a work of five volumes, and is dedicated to Sir Wm. Jenner, Bart., G.C.B., M.D., F.R.C.P., F.R.S. Vol. I., which is just issued, is devoted to General Diseases, and Diseases Excited by Atmospheric Influences and Infections. It contains 435 pages, 49 short chapters, a table of contents and a good index. Facing the title-page are two plates, each containing six beautiful colored figures of the more important micro-organisms. There are twenty-two contributors, all men of note and holding positions in the various London hospitals. The work is devoted to clinical manifestations, diagnosis and treatment. Etiology and morbid anatomy are very briefly summarized. Bacteriology is given a prominent place in the work, and in this connection the chapter on Infections, by G. Sims Woodhead, is especially interesting. The work is thoroughly up-to-date, and from the clear and concise manner in which the various subjects are dealt with, will prove very useful to students and the busy general practitioner.

W. J. W.

Paralytic Deformities of the Lower Extremities. The Principles of their Surgical Treatment. By E. NOBLE SMITH, F.R.C.S. (Edin.), etc. London: Smith, Elder & Co.

Mr. Smith has produced for the profession a valuable brochure dealing with the eminently practical subject of the orthopedic treatment of paralytic deformities. There has grown up through the persistence of the makers of mechanical instruments, a real abuse of such appliances as are being employed to aid in the treatment of this difficult class of cases. Mr. Smith not only calls attention to this fact, but lays down, in a very concise and clear manner, the principles of treatment. The book does not make any claim to marked originality. He has, however, a chapter on "A New Method of Restoring the Absent Function of Muscles in Infantile Paralysis," which propounds a theory which, so far as we know, has not hitherto been advanced and to which, it seems highly probable, considerable importance may yet be attached. In this little book the general practitioner will find a safe and useful guide to aid him in advising patients of this class.

B. E. M.

Encyclopædia Medica. Under the general editorship of CHALMERS WATSON, M.B., M.R.C.P.E. Volume II., Brachial Plexus to Digestion. Volume III., Diphtheria to Food. Edinburgh: William Green & Sons. 1899. Price, 20s. net per volume.

These volumes maintain the good standard of the first, to which attention was drawn some months ago. The articles have been written by the younger men of the profession chiefly, and reflect great credit on them. If the standard is maintained to the end, the work will form a valuable addition to any library, especially of such as do not have access to moderately well-equipped medical libraries. The articles are so numerous that it is not possible in the limits of this notice to refer specially to any of them. They all appear to be eminently

practical and, for the space available, very comprehensive. We have but to reiterate the hope already expressed that in future such works will be so arranged that single volumes, or even parts of a volume may be obtainable by those desiring them, without the necessity of purchasing the whole work.

A. M'P.

Home Nursing. Modern Scientific Methods for the care of the Sick. By EVELEEN HARRISON. New York: The Macmillan Co. London: Macmillan & Co., Limited. 1900.

This small book, of course, is quite elementary. It is composed of hints as to the best means for rendering the life of the sick and invalid as comfortable and cheerful as possible. It contains some very practical points as to the various kinds of nourishment to be administered under different conditions, especially during convalescence. The authoress devotes several pages to recipes for invalid cooking, which are grouped, and that wisely, under the headings of the various diseases in which they are found most useful.

Lessons in Elementary Physiology. By THOMAS H. HUXLEY, LL.D., F.R.S. Enlarged and revised edition. London: Macmillan & Co., Limited. 1900.

This excellent work has for many years enjoyed the reputation of being one of our very best elementary text-books on physiology. Sir Michael Foster has revised the work, and has made several important changes and additions so as to bring it into harmony with recent advances in physiology. A. E.

LITERARY NOTE.

Mr. W. B. Saunders wishes to announce the final accomplishment of a step that he has long had in mind. Feeling that the growth of the business to its present large proportions has been due, not alone to his own exertions, but quite as much to the efficient co-operation of a number of his employees, he has decided to give recognition to such service by associating with himself in business, under the firm name of W. B. Saunders & Company, Mr. F. L. Hopkins, Manager of the Subscription Department, and Mr. T. F. Dagney, Manager of the Publication Department. These gentlemen have been connected with the establishment almost from its inception, and to their capable management of their respective departments Mr. Saunders attributes much of the success that has attended his efforts. Mr. Saunders believes that this action will strengthen the position of the house in the eyes of the medical profession, as it will secure a permanence of organization that will ensure the perpetuation of the business. Besides this, it will obviate the disadvantages incident to a large business that rests entirely upon the shoulders of one person, by permanently attaching to the house those whose ability and experience have contributed in bringing the business to its present state of prosperity. The Subscription and Publication Departments will be conducted as heretofore. The Trade Book Department will be under the management of Mr. W. D. Watson, whose connection with the house has extended over the past eight years, and who has demonstrated his ability to manage that department with efficiency and success.

MAGAZINES RECEIVED.

Scribner's Magazine for May contained four illustrated articles that were unusually informing in regard to events and questions of contemporary importance. The leading article on "Some Picturesque Sides of the Exposition" is both written and illustrated by the artist, E. C. Peixotto. He has spent a

number of months in Paris recently, and these drawings give an artist's impressions of the very picturesque group of buildings which will be soon crowded with visitors from all portions of the world. Mr. Peixotto's skill as a draftsman, shown in the Cromwell and the Revolutionary series, in this magazine, has enabled him to make the best possible pictorial presentation of the great French Exposition. A great deal of information about "Rapid Transit in New York" has appeared in the daily press, but the first presentation of exactly what it means and how it will be carried out, and how the tunnel and its stations will actually appear, is contributed to this number by William Barclay Parsons, chief engineer of the Rapid Transit Commission. The illustrations, drawn under Mr. Parsons' supervision, show precisely what this great engineering work will be like. The paper is an authoritative account of the whole project. Nothing has been more remarkable in the history of the West than the entire change in Colorado in a few years from a silver-producing to a gold-producing State. Just a little while ago the gold output of Colorado was \$3,000,000 a year; it is now more than \$30,000,000, the greater part of it coming from Cripple Creek. Francis Lynde, the well-known writer, describes this tremendous industrial development in an article on "Cripple Creek," prepared after a special investigation undertaken for *Scribner's Magazine*. It is an astounding and dramatic story, and it is fully illustrated by drawings made from photographs. The narrative of the Boer War is continued with another brilliant article from H. J. Whigham, who reviews the alleged mistakes of the British generals in strategy and tactics, and discusses many much-disputed points in the campaign.

PAMPHLETS RECEIVED.

"Hemaboloids: Its Composition, Physiologico-Chemical Basis, and Therapeutic Sphere of Action." Toronto: The Palisade Manufacturing Co., 88 Wellington Street West. A very interesting pamphlet has reached us from the Palisade Manufacturing Company, Yonkers, N.Y., giving composition and intent of their new preparation "Hemaboloids." The preparation is described as being a combination of the various iron-bearing nucleo-albumens of the vegetable kingdom, reinforced by bone-marrow extract and beef peptones. The essay undertakes to prove that inorganic iron-bearing preparations ingested into the stomach are not absorbed, while absorption of iron organically combined is constant and certain. The subject is interestingly treated and the line of reasoning worthy of careful consideration. We are advised by the P. M. Co. that the pamphlet will be sent to any physician making application for same, as also sample of the preparation where desired.

Tubercular Gummata.—Dr. Fournier presented to the Society of Dermatology and Syphilography patients suffering from this disease. The differential diagnosis between syphilitic gummata and this disease is made as follows: Tubercular gummata are surrounded by an inflammatory areola of about half an inch in diameter; in syphilis there is no areola. In syphilitic gummata there is an induration underlying the lesion, which does not exist in tubercular gummata. In syphilis there is a well-marked pigmentation, encircling the cicatrised gummata, but there is no pigmentation in the cicatrices of cutaneous tuberculosis.

Medical Miscellany.

Julia's Incubator.—*Lyon Médical* for March 19th remarks upon the habit among women of using the bosom—the space between the mammary glands—as a repository for various articles, letters, the watch, the purse, and the like. Our contemporary goes on to say that Julia, daughter of Augustus Cæsar, being pregnant, was desirous of giving birth to a son. In order to ascertain the sex of her unborn child, she carried an egg in her bosom. The augury was auspicious; a cock was hatched from the egg, and she bore her husband a son.

Meat Extracts.—Of what are meat extracts made? This is a rather delicate question, which it would be imprudent to sound to the bottom. To suppose that the flesh of old horses, dead from exhaustion or disease, forms a large percentage of the raw material of these products is a permissible hypothesis, but it is rather too indulgent. A judgment recently given by an English police court justifies the worst suspicions. This judgment ordered the destruction of fifty tons of decomposed livers, which were intended for use in making “the delicious meat extracts” for the use of convalescents.—*Med. Mod.*

The Tabetic Eye.—M. Gilles de la Tourette (*Journal des Praticiens*, March 11th), in a recent communication to the *Société médicale des Hopitaux*, says that the ocular manifestations of tabes are numerous, since this disease affects the retina, the external muscles, and even the lacrymal passages. There is one symptom, however, which he does not remember to have seen noticed elsewhere. He has often, he says, seen to enter his consulting room a patient whose normal gait gave no suggestion of locomotor trouble, and at first glance has nevertheless marked him for a tabetic patient by the aspect of his eyes. It was not a question of meiosis, which, when punctiform and found in blue irides, suggests tabes, but a peculiar brilliant appearance of the eye, which, nevertheless, is expressionless. This appears to the author to be a valuable early sign of the disease. It is independent of the condition of the pupils, which does not modify it, and is especially easy to note in those whose irides are dark in color.

The Risks of Infection in Railway Cars.—An illustration of the dangers to which those are exposed who are compelled to use public conveyances, as well as of the necessity of adopting suitable precautionary and corrective measures, is furnished by a recent investigation conducted by Dr. Petri, of the Imperial Sanitary Bureau of Berlin, who found that of ninety-one animals inoculated with material, principally expectoration, obtained from the interior of railway carriages, nearly one-third died as a result, while of the remainder, several on being killed were found to have become tuberculous. In those that had died in consequence of the inoculation, staphylococci and streptococci were the organisms principally found. Tubercle-bacilli had previously been found by another observer in the dust from railway carriages. Indiscriminate expectoration should be rigorously forbidden, particularly in public places and in public conveyances, and infraction of this rule should be adequately punished, at least by fine. While we may not hope entirely to eradicate transmissible diseases, the observance of a few sensible regulations will go far to diminish their prevalence and restrain their spread. To this end let us make and keep ourselves and our surroundings, together with the air we breathe and the water we drink, as clean, as aseptic as possible.—*The Philadelphia Medical Journal.*

Local Anesthesia by Tissue-Exsanguination.—Oberst induces local anesthesia by the combination of cocaine in small amount and the elastic tourniquet. Dr. Kofmann, of Odessa, effected it without cocaine. A tourniquet was applied round the upper arm in a case of ganglion. When the skin had been sterilized the hand was of a death-like pallor and insensitive to touch or pain, so that the ganglion was dissected out without the patient's knowledge. A second patient was a woman with a needle embedded in the hand; a deliberate dissection was carried out with a like freedom from pain. A series of cases of abscess, whitlow, etc., were treated with similar success. If the patients could not see it, they did not even know when the operation was performed. Complete anesthesia depends on the thoroughness of the elastic constriction of the vessels, and on a sufficient interval being allowed to elapse after the application of the tourniquet. In operating on the fingers or toes, Dr. Kofmann has found it better to apply the constrictor above the wrist or ankle, as he has seen gangrene from applying it to the base of the finger or toe. It is applicable to any operation below the elbow or knee. For the thigh, upper arm, trunk and head, he employs Schleich's method of local anesthesia, and has reduced the use of general anesthetics to a minimum.—*Edinburgh Med. Jour.*