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CYSTITIS.*

BY W. BRITTON, M.D., TORONTO.

Idiopathic acute cystitis is rarely observed, excepting as a complication of some pre-existing malady. It is said to originate *de novo*, occasionally, in scrofulous and rickety girls in whom there is manifest a predisposition to vaginitis and other varieties of mucous inflammation. It is found as a complication of pyæmia, typhus fever, and in certain cases of the exanthemata. The gouty and rheumatic diatheses are said to be predisposing causes; although, if cystitis be in progress and a fit of gout supervene, the consequent diminution of uric acid excretion is thought to allay temporarily the bladder symptoms.

Primary acute cystitis, with the few exceptions mentioned, is probably always a traumatic disease, although the injury is often inflicted in a secondary manner. Of the direct injuries may be mentioned, calculus, lithotomy and lithotripsy, the unskilful use of the sound, external blows (especially when the bladder is much distended), the prolonged pressure of the foetal head and some of the mechanical aids to delivery; the irritating effects of ill-advised or too free use of such articles as the balsams, turpentine and cantharides may be included in the category.

All the indirect causes of traumatic cystitis may be narrowed, in their *modus operandi*, to the two elements of over-distention and retention of urine—apparently one and the same thing, but widely diverse in the transition from cause to effect. Over-distention means unnaturally violent efforts to expel and consequent hyperæmia, while prolonged retention is the forerunner of urinary

decomposition and irritation—that indefinable something that is said to underlie the inflammatory process.

The causes of retention may be summed up as follows:—Congenital or acquired narrowing of the meatus, and tumors of that aperture such as frequently are found in the female; stricture, prostatic disease, especially if accompanied by hypertrophy; a calculus lodged at the neck; and atony and paralysis of the bladder, a not uncommon trouble of old people, and a complication of various forms of spinal lesion. In a subacute form, cystitis often occurs at the climax or towards the close of an attack of gonorrhœa; and, indeed, in the female, the almost constant existence of urethritis and its inclination to invade the bladder, are set down as some of the diagnostic features of specific, as distinguished from simple vaginitis. Inflammatory diseases of any of the neighboring organs may, by extension, invade the bladder; but this pertains more especially to its peritoneal covering.

Usually the disease invades primarily the mucous tunic, occasionally the peritoneum, and if it ever attacks the muscular coat, it has its starting point in one of the other two—commonly the innermost; and, indeed, this order of origin is not difficult to account for when the structure and functions of the bladder are taken into consideration. An eminent pathologist says that two-thirds of the diseases to which human kind are subject have their starting point in mucous membrane, so sensitive are its delicate cells to irritation; and in this particular instance we have to deal with an organ which is at once a receptacle for, and an instrument of expulsion of, a fluid ever varying in character and quantity according to the protean conditions of the system and its surrounding influences. It is protected from undue irritation in part by that normal vital principle that exists in healthy tissue, and in part by the constant secretion of a protective mucous coating, normal in quantity and character; it should not be distended beyond what its muscular fibres can bear without weariness; and, when expulsion occurs, exit should be so unobstructed as to necessitate only such a subdued contraction as is necessary for dilation of the outer portions of the urethra; unless it be shown that the longitudinal fibres assist also in opening the sphincter. Any wide divergence from

* Read before the Toronto Medical Society, Oct. 16, 1888.

health in the condition of the urine, especially if from retention; an abnormal quality or quantity of mucus, or want of harmony between the sets of muscles concerned in urination may, separately or conjointly, bring about a state of irritation which, sooner or later, is followed by hyperæmia; and Rindfleisch says that disordered and hypersecretion are the concomitants of hyperæmia, and that this hyperæmia is a proximate cause of the mal-secretion; also the more or less remote cause of other disturbances, viz., tumefaction, hæmorrhage, pigmentation, hypertrophy, etc., which, taken together, constitute the anatomico-pathological picture of catarrh of mucous membranes.

It may be asked, why should undue contraction of the muscular wall of the bladder induce congestion of the lining? The returning venules, as they pass through the muscular coat, are surrounded by a much thinner coat of connective tissue than the arterioles, and are, therefore, in more immediate contact with the muscular fibres; in consequence of this anatomical arrangement, inordinate contraction compresses the veins more than the arteries; hence the passive hyperæmia of the mucous coat, induced by such violent efforts as the bladder performs to overcome all sorts of obstructions to the urinary flow. The same result naturally follows those spasmodic contractions that are excited by the presence of calculi and tumors.

As in other mucous membranes the acute attack may be catarrhal or croupous in character; this latter, the form usually excited by cantharides and other irritants introduced into the system; and may end in resolution, ulceration, suppuration or gangrene, or may degenerate into the chronic form. After the inflammatory process is once set up, not simply the superficial layers of cells, but all the elements of the mucous membrane appear to be involved; and, indeed, one pathologist maintains that the trouble lies not in the mucous tissue alone, but in the underlying layer of connective tissue, so universal is the invasion. At any rate every cell is changed, if not in form, at least in character and ability to withstand undue irritation; therefore, even after the urine is restored to a healthy condition, the mucous secretion normal, and all symptoms have disappeared; for a considerable period of time, there must still remain a *locus minoris resistentiæ* and danger on slight provocation, of

re-excitement of the disease; this interval lasting until a new generation of cells is formed throughout. Hence, also in part, the tendency towards chronicity.

On examination, the mucous membrane is found discolored and softened—seldom universally, but usually in patches, which occur most frequently in the vicinity of the neck. Here and there may be erosions; or, if the disease has run very high or lasted long, there may be ragged ulcers laying bare the muscular fibres, or even gangrenous spots; although these last seldom are seen, excepting in the aged and debilitated, or as the result of severe traumatic causes. The spots of discoloration and erosions are mostly to be found on the rugæ, and may be covered with ropy mucus, sanious offensive fluid, or may be invaded in part by croupous membrane—this often is coated with phosphates. Rindfleisch says, that this croupous membrane, although it has the gross appearance of being fibrous in structure, really consists of corpuscles which have assumed a change of outline; the protoplasm having arranged itself in an irregularly radiating form by the corrugation of the cell, so that an agglomeration of the cells gives to the neoplasm the appearance of being made up of fibres. Occasionally it happens that the ulcers spoken of extend and cause perforation, which fortunately does not in every instance prove fatal, as the surrounding zone of inflammatory action may bring about adhesions to neighboring viscera.

The disease in the acute form is usually ushered in by malaise and chills, with frequent desire to urinate, followed by high temperature and the general symptoms of fever. The pain at first is not severe unless the peritoneum is involved, but considerable uneasiness is complained of in the hypogastrium and the perineum, perhaps in the glans penis and shooting down the thigh. If the anterior wall is the part chiefly involved, which is rarely the case, tenderness on pressure is felt a good deal in the hypogastric region; but, as the inflammatory process is ordinarily confined to, or greatest, near the neck, the perineal and perrectal tenderness are usually found to be the greatest. In these last cases the vesical irritability is more marked.

The chief symptoms complained of are irritability, straining and scalding in the urethra as the urine flows in small quantities, and in case

the *bas-fond* is much involved, there may be some tenesmus, which, in one case, I saw extreme. The pain and uneasiness are alleviated after urination and commence again as soon as urine accumulates, the interval of rest being shortened according to violence of the attack, and the closeness of the inflammatory process to the neck of the bladder.

Should resolution set in, these symptoms gradually subside and nothing is left but a condition of occasional irritability, which, as already stated, ends when there has been time for the formation of a new set of mucous elements. But should the inflammation continue, ordinarily, in two or three days, the urine is changed much in character; it is ammoniacal, and contains large quantities of mucus, also pus corpuscles and occasionally blood globules. Ammonio-magnesian phosphate is found plentifully and is recognized by the microscope; carbonate of ammonia and amorphous phosphate are present, as also occasionally sulphuretted hydrogen in small quantities. The sediment forms quickly with the pus in an opaque yellowish layer on top, and the clear supernatant fluid having often a yellowish tinge. Later on, if the disease pursues a severe course, the urine assumes a darker color, caused by the disintegration of the blood corpuscles by the carbonate of ammonia, and has a highly ammoniacal and fetid odor.

How the urea becomes converted into carbonate of ammonia does not appear to be decided. There exist two or three theories in the matter. Dr. Rees thinks that secretion being abnormal, on account of diseased and hyperæmic mucous membrane, this degenerated mucus acts as a ferment. Others suppose that some hitherto undiscovered ferment enters from the blood, while it is imagined by the majority of observers that bacteria play an important part in the process. I heard of an incident that occurred before much deference was paid to the pranks of these little bodies, that bears somewhat on this matter. In the good old days, when the rite of initiation, with all its mysteries, was a *sine qua non* in a certain medical school, one of the impressive ceremonies in the chamber of horrors was the passing of the catheter, ostensibly to investigate the physical competency of the aspiring but timorous candidate. This delicate operation was, I suppose, relegated to the most experienced of the inquisitors, and I believe the instrument used was the gum elastic;

therefore it is likely that no undue violence was used towards the victim. The inference was that he had been continent, at least there was no stricture, and the catheter entered the bladder easily; but a magnificent sample of cystitis was the result. Of course it is barely within the limits of the possible that some member of that august tribunal may have had an attack of gonorrhœa, and hence the consequence. But at any rate, Niemeyer records cases where the introduction of a dirty catheter has resulted in inflammation. The presence of pus or blood is easily recognized by the microscope and by the tests for albumen.

Coulson says that it is almost impossible to distinguish the corpuscles of mucus from those of pus; that it is probable that epithelial cells become transformed into pus corpuscles, and that the latter are spherical, granular on the surface, and have divided nuclei. Occasionally shreds of false membrane are voided with the urine, and cases are recorded where obstinate retention, caused by large sheets of detached membrane, has rendered cutting operations necessary. Should the case progress unfavorably, the condition of active sensibility to pain passes eventually into a *quasi* typhoid state, manifested by hebetude, subsultus, obstinate vomiting and purging, and ends fatally by way of coma.

There may be contraction of the bladder; but, as a rule, towards the end, if unrelieved by the catheter, sensibility being lessened, the bladder is allowed to dilate to enormous proportions. In the majority of these cases the disease has affected the ureters and pelves of the kidneys; and, as a consequence, the secreting structure of the kidney itself; so that the tubules are often dilated, the cellular elements atrophied, cysts may be present and the capsule adherent.

As a rule an uncomplicated case of cystitis is easy of diagnosis, but it is comparatively easy to overlook some of the diseases that bear a causative relation to it. The limits of this paper will not allow a full discussion of the distinguishing features of these different maladies; but a mere enumeration and brief reference to the salient points of contrast will suffice.

Diseases of the urinary tract, all the way from a diseased meatus up to nephritis, may be accompanied by pain; and, with few exceptions, more or less of this takes the form of irritability of the

bladder and is referred to its neck, hence the location of uneasiness alone should not be relied upon in forming a diagnosis. The abundant deposit of phosphates, such as occurs in debilitated states, can easily be distinguished from pus or mucus by the addition of nitric acid and the use of the microscope; in addition to this there would be absence of all the urgent symptoms of acute cystitis. Pyelitis, unless the ureter is blocked up, is productive of a copious sediment of pus; but, unless the bladder be involved, the urine when first voided is probably acid in reaction, instead of alkaline, as happens in those advanced cases of cystitis, accompanied by abundant pus formation; further, the albumen test will show much more cloudiness in proportion to the sediment, because the foreign element in pyelitis consists chiefly of pus not supplemented by mucus and phosphates.

Should structural changes take place in the substance of the kidneys, as usually occurs sooner or later in pyelitis, tube casts will be found. Neither will the vesical irritability be so great as in cystitis. Prostatitis, especially if leading to abscess, may closely simulate cystitis, but the distinction may be made by palpation through the rectum.

Calculi, though often productive of cystitis, may exist without it and cause many of its symptoms; but stone in the bladder, as a rule, has less scalding in the urethra, more frequent and copious hæmaturia, and the pain is greatest just after urination, while that of cystitis is temporarily relieved by it. In doubtful cases the sound settles the difficulty, unless the stone is encysted.

Simple irritability of the bladder arising from prolonged exposure to heat or cold, diuretic medicines, drastic cathartics, hysteria, neuralgic diathesis, or disease of neighboring organs as hæmorrhoids or prolapsus-uteri, is not likely to be mistaken for cystitis; for the attack is usually transitory, perhaps periodical, and the painful symptoms are the only ones observed.

In regard to treatment of the acute form in its early stage, the indications are all in the direction of the antiphlogistic. Rest absolute, for the patient, and as complete rest as can be secured for the inflamed organ—that is, saline cathartics to lessen the blood current and urinary flow—opiate suppositories to allay irritation, hot fomentations and counter-irritants, excepting the

cantharidal; demulcent drinks, in moderately small quantities and milk diet. Hot baths are very serviceable, and, if the urethra and neck of the bladder are not so sensitive as to make it difficult and very painful, it is much better to anticipate the excessive contraction caused by distention by the use of the catheter, and for obvious reasons a soft rubber is the preferable; for, as has been said, the spasmodic contraction induces hyperæmia of the mucous lining, causes still further perversion of its secreting function and so aggravates the malady.

As the urine is often highly acid in the early stage, the alkalies would be indicated; and in the later stages benzoic acid to counteract alkalinity. Various specifics have been praised—notably buchu, hyoscyamus, uva ursi, lupulin, cubebs, copaiba, and belladonna. Gross thinks copaiba in small and often repeated doses one of the best, if not the best remedy; and, as he thinks that a combination of remedies in this particular disease better than any one individually, he combines the copaiba with, I think, uva ursi and hyoscyamus.

I found in one case the capsules of copaiba, cubebs and santal wood apparently act well. I believe this fondness for copaiba did not originate with Gross, for Sir Astley Cooper used it extensively for the same disease.

Should the collection of mucus and pus be so great as to interfere with free urination, or should there be enlarged prostate with consequent permanency in the depression behind it, it would be necessary to use irrigations, which will be mentioned in connection with the chronic form of the disease. Of course when inflammation of the bladder is a result of other diseases, the cause must be removed if possible; otherwise the cystitis remains.

Time will not permit of discussing the chronic form of the disease, further than to say, that of course it is characterized by less pain; enormous quantities of sediment, consisting of ammonio-magnesian phosphates, mucus, pus, phosphate of lime, and often urate of ammonia; is apt to lead to extensive ulceration when it is considered incurable; may be lighted up into the acute form, when there will occur more pain and less sediment until the acute stage passes off again; and is liable to produce hypertrophy of the bladder, seldom concentric, ordinarily eccentric. It may last for

many years in a mild form occasioning only a little inconvenience; or it may, by invading the kidneys or by the constant discharge and pain, so undermine the strength as to lead to a fatal termination.

Prof. Berkeley Hill says, "the chronic form is eminently curable if the cause be removed and the kidneys are not affected. Even if the cause remain and the bladder is free from ulceration, the affection may be palliated sufficiently to prevent suffering and the shortening of life"—a pretty sweeping statement when the long list of remedies, is made up, each of which has a sponsor who vouches for its infallibility.

The diet, of course must be unirritating, and proper rest must be enforced. The same rules respecting the use of the catheter will apply as in the acute disease, and I conclude, from the published convictions of many and from my own experience, that irrigation properly conducted is of more service than internal medication.

Of the remedies recommended to be taken are, in addition to those already mentioned, tannin, nutgalls, tincture of the chloride of iron, Venice turpentine, compound tincture of benzoin, benzoic acid, and acetous extract of colchicum; this last indicated in the gouty habit. Care should be observed in the administration of belladonna, especially to old subjects, as an excess of the drug is apt to paralyze the detrusor urinæ; thus, while allaying irritation, doing more harm than good.

Irrigation is best done by gravity—a syringe is uncertain in its force, while gravity is constant—and may be simple or medicated. I have tried several of the remedies for irrigation and have thought that boiled water was followed by less irritation than any of them, in one case, at least.

From the time of Sir B. Brodie down to the present, a $\frac{1}{4}$ gr. to the ounce solution of nitrate of silver appears to have been the favorite, and is said to lessen the quantity of mucus, also the phosphates. I shall simply mention the others:

Permanganate of potash, or carbolic acid, if there is fetor. Heath prefers quinine and dilute sulphuric acid, if there be much pus and ammonia. Devergie used balsam of copaiba, with opium or belladonna in barley water. Either boracic acid, borax, or zinc sulphate is recommended, if there is simply an excess of mucus without other change in the urine.

So much has been said of late of the desirability, in obstinate cases, of opening into the bladder for the purpose of draining, that an expression of opinion from the members, on this point especially, would be interesting; for, at the very best, it is usually an intractable disease to manage. I had intended to narrate two or three cases bearing on cystitis; but, as the paper has unintentionally grown already too long, I shall only relate the particulars of a case in which an accidental complication brought about a cure, and made it self-evident, in this particular instance, that any means that can be devised for the constant drainage of the bladder, without the apparatus proving in itself a source of irritation, will solve the problem, how best to keep this organ, when inflamed, in a state of perfect rest. Such being accomplished, a case of persistent cystitis, unless the cause be irremovable, would be a curiosity.

Several years ago I attended in labor Mrs. F., a healthy Englishwoman. The foetal head was abnormally large; and, although the pelvis was well shaped, the labor was severe and slow. I tried the forceps—perhaps I used too much traction and too little compression, or perhaps, in my short-sightedness, I misapplied the instruments; at any rate, they slipped, but did not cause any observable external injury, and, luckily for my reputation, as I was then a new beginner and could not have survived many lacerations of the perineum, I then performed version, and without much difficulty. Everything went well until the third day, the urine being voided normally, when to my horror, symptoms of acute cystitis set in, which became aggravated for a day or two, when the strangury suddenly ceased, and the urine escaped per vaginam. I introduced a small sound into the bladder, and by conjoined digital examination, found that a very small vesico vaginal fistula had formed.

By this time, symptoms of endometritis of rather severe character began to appear. Consequently, I was obliged to let the bladder take care of itself, which it did beyond my most sanguine expectations; for while I had to meet the vaginal irritation excited by the occasional urinary trickling, after the uterine trouble disappeared, the cystitis gradually improved; and to cut the story short, the treatment consisted simply in keeping the patient on the side, the occasional application of nitrate of silver to the fistula, and the use of the

catheter, together with antiseptic irrigation of the bladder; in about six weeks the fistula closed and the cystitis disappeared.

As this occurred in the neighborhood of ten years ago, and there have been no bladder symptoms since, I suppose it may be set down as a radical cure. It is quite evident that the blade of the forceps, or the pressure of the foetal head, caused a fistula, and gave nature an opportunity, which she eagerly seized, to cure an inflamed bladder by drainage and absolute rest from contraction.

REPORT OF A CLINIC BY ESMARCH.

Professor of Surgery at Kiel.

Bellevue Hospital had the honor of a visit from the celebrated surgeon Esmarch, on Sept. 28th, at one of the surgical clinics. The distinguished guest was introduced by Professor Dennis to a large audience of professional men and medical students by whom he was enthusiastically received. He replied in a suitable speech and showed remarkable proficiency in the language for a foreigner, and then proceeded to illustrate some of the points of technique of his celebrated bandage. They may be briefly summarized as follows:

1st. The great mistake ordinarily made is in applying the bandage too tightly and thus favouring after capillary hæmorrhage. The cause of the hæmorrhage is well known to be due to paralysis of the vaso-motor nerves supplied to the unstriped muscle cells in the tunica media of the smaller vessels and arterioles, caused by the un-called for pressure of the tight bandage. It necessarily takes some time for the vaso-motor nerves to recover from their paralysis, and during this time hæmorrhage is taking place from the uncontracted vessels; therefore, in applying the bandage, use only sufficient pressure to control the arteries, and do not, as is too often seen at clinics and surgical operations, apply the bandage as tightly as possible.

2nd. Never apply the bandage unless the patient is completely under the influence of the anæsthetic and muscular relaxation is complete; the reason for this is obvious. This point was well illustrated in the case of the patient about to be operated on, the reflexes were not completely abolished, the legs were the seat of clonic tremors, and the house surgeon proceeded to apply the bandage;

but Esmarch checked him and refused to proceed with the application of the bandage until the patient was completely under the influence of the ether.

3rd. In the majority of cases the dressings can be applied to the limb before the bandage is removed, as was done in this case at the clinic. (This has special reference to bone operations.) This method has distinct advantages, as direct and continuous pressure is thus secured against the open vessels by the dressings before the bandage is removed, and this is in itself an excellent hæmodynamic. Furthermore, it secures what has been the aim of all later surgeons, the presence of an aseptic clot of blood, which organizes, and thus the wound is rapidly healed; and, instead of the old story, where cases of necrosis after operation usually occupied two or three months in healing up, now, by the organization of this clot, perfect union is obtained in three weeks and the patient can be discharged.

4th. To control the hæmorrhage after operations, all that is needed in ordinary cases is irrigation of the wound with hot antiseptic solutions, which act as irritants to the vaso-motor nerves, and thus secured contraction of the arterioles. Then the wound is firmly bandaged, and this may be supplemented by slight elevation of the limb after it has been dressed and the patient removed to the ward. In anæmic, and other cases where it is important to have as little hæmorrhage as possible, Esmarch recommends, in addition to the above measures, a light constriction of the limb with the rubber bandage for six or eight hours afterwards, which favors diminution of the rapidity of the blood current and the formation of thrombi.

Esmarch then proceeded to the practical demonstration of his principles by performing sequestromy. The patient was an elderly man suffering from necrosis of the tibia and fibula of the left leg, of long standing, and supposed to be due to idiopathic osteo-myelitis; a venereal history corresponding to chancroid was obtained, but no syphilitic symptoms could be elicited; dead bone was detected by the probe.

The Esmarch bandage was then applied from the toes up, and only light constriction made above the knee. The hands of the operator were then washed and thoroughly disinfected with a solution of 1-2000 bichloride, and the patient's leg shaven

and irrigated with the same solution. An incision was made four inches in length, over the lower third of the tibia, and the necrosed bone attacked by the ordinary steps of the operation of sequestromy, and by chiselling through the anterior surface of the tibia, which was considerably thickened and indurated. Esmarch gave his experience of the use of chisels. During his later years, in all his bone operations, he has used nothing but the common carpenter chisels of English manufacture, for the following reasons: 1st, On account of their length and having a handle appended, the view is unobstructed, as is often not the case with short surgical chisels; 2nd, Being of larger size, the time occupied in cutting the bone away is much shortened, and in extensive operations this is often a desideratum; 3rd, Their comparative inexpensiveness, and at all times being obtainable. During the progress of the operation several gummatous nodules were discovered, which at once decided the character of the lesion, and the contents of the medullary canal having been found in a degenerated condition, were thoroughly cleaned out with a sharp spoon. The fibula was next treated in the same manner, and numerous other gummata were discovered. The wounds and cavities were then thoroughly cleaned out and irrigated with hot bichloride solution, 1-2000, and stuffed with iodoform gauze, then a quantity of previously used bichloride gauze was applied, and over this a bichloride muslin roller. Then the whole leg was swathed in antiseptic borated cotton, and over the whole a bichloride muslin bandage was firmly applied. The limb was then elevated, the Esmarch bandage removed, and the patient sent to the wards, the distinguished operator recommending that he be at once placed on anti-syphilitic treatment, and without a doubt a most favorable result would be secured.

Notes.—As the chips of bone were flying before the operator's chisel, they were eagerly gathered up as mementos of the great surgeon's visit, and Dr. Sayre was observed to wrap one up in a ten dollar greenback, and put it carefully in his pocket, remarking that he thought more of the chip than the bill.

As regards the application of the dressings before the elastic bandage has been removed, I would state that, heretofore, most of the New York surgeons have been in the habit of taking off the

bandage and controlling the capillary hæmorrhage before they applied the bandage. This has always been a troublesome procedure, and one of the disadvantages of the Esmarch, in that a considerable length of time was occupied before the hæmorrhage could be stopped. Many of the surgeons expressed themselves as having been favorably impressed by Esmarch's methods, and since his visit to Bellevue all such cases have been dressed before the removal of the bandage, and so far very good results have been reported.

NARCOLEPSY.—BRIEF REPORT OF A CASE IN PRACTICE.

BY D. H. DOWSLEY, M.D., M.R.C.S., E., KINGSTON.

This affection regarding which little is positively known, may perhaps be sufficient apology for bringing to your notice the report of a single case:

A blacksmith by trade, aged about 28 years, a powerful, well-built man, apparently in good health, was subject to short attacks of deep sleep, lasting a few minutes, from which he would awake refreshed as from a natural sleep. The attacks of sleep would occur at any time, regardless of the hour of the day, or degree of temperature. On one occasion when driving to town in the morning, about nine o'clock, of a winter day, sitting upright in a sleigh with a companion by his side, and driving through pitches, he fell into a sound sleep, still retaining his position, upright in the seat. He slept for a few minutes, and woke apparently quite refreshed.

There were no symptoms of premonition; no symptoms of a convulsive nature, either preceded or followed the attacks, which occurred at intervals of a few weeks, and sometimes more frequently. The family history, as far as known, was good. This affection which appears to be a neurosis, has received the name of narcolepsy, and Legrand appears to look upon it as a true neurosis. This patient was treated with arsenic and iron. He thought he had made some improvement, from the fact that the sleeping attacks, did not occur so frequently, otherwise there was no change, the attacks being the same when they did occur. Speaking from memory, the attacks in this case have occurred during the past fifteen or sixteen years, with the frequency stated. If, as Legrand supposes, this is a true neurosis, the improvement, if any, was probably due to the arsenic.

Correspondence.

OUR NEW YORK LETTER.

From our own Correspondent.

NEW YORK, Oct. 23rd.

The medical profession of this city have had a great treat of late, in the presence among them of some of the most distinguished surgeons and physicians of Europe, who have been attending the Congress of American Physicians and Surgeons, held at Washington, Sept. 18th, 19th and 20th, 1888. Among those who visited us were Prof. Esmarch, Drs. Graily Hewitt, David Ferrier, Pye-Smith, Mr. Victor Horsley and Mr. Durham. Prof. Esmarch was tendered a reception at the New York Hospital by Drs. W. T. Bull and R. F. Weir. All medical men of note of the city were invited to meet the professor and shake hands with him. He performed the operation of removing the glands of the neck at the New York Hospital, and was again favored by having a very large number present to see him operate. Unfortunately the professor has since been very ill, and his friends were apprehensive of his dying here, but at this writing he is doing well. The celebrated gynecologist, Graily Hewitt, of London, was entertained by Dr. W. Gill Wylie at his house.

The New York State Medical Association held their meeting on Oct. 9th, 10th and 11th at Hotel Brunswick. The meeting was very interesting. The first paper read was entitled, "The Medical Profession and the Public," by the president, Dr. John Cronyn. It would be well if the profession was more harmonious in instructing the public to distinguish between true and false, between the charlatan and the conscientious physician. This will take a long time, but the profession can accomplish it in the end. Physicians, too, often encourage ignorance; they should strive to enlighten their patients. Genius, ambition, and love of profession could never make a physician, if the quality of the genius was not medical. A physician was born, not made, he must have reverence for the possibilities of his profession; he should be swift in action, possess power of immediate perception, analysis and induction.

Dr. F. W. Putnam read a paper entitled "Hic-cough, with Notes on Treatment." Milder cases

he said are cured by domestic remedies, but in cases of long standing, electricity applied to the diaphragm, the phrenic nerve, and the use of dry-cups over the phrenic nerve are of great benefit. There are many drugs that can be used with good effect, as chloroform, ipecac., valerian. Dr. C. A. Leale reported a very interesting case, and showed specimens. "Raspberry seeds mistaken for Gall-stones," presented at the last annual meeting by Dr. R. H. Labine, consisting of small hard corrugated bodies passed by a woman. There were in amount about half a pint of them. They were at first thought to be gall-stones but proved to be raspberry seeds.

Among many others, a paper entitled, "Does the Menstrual Flow originate in the Tubes," was read by Dr. E. J. C. Minard. The paper was based on a case in which menstruation was going on at five months after child-birth. The patient was nervous and prostrated; the flow was very free. On examination the uterus proved to be inverted, the tubes dragged down to the peritoneal surface of inverted uterus. The tumor that was formed was dark red with some darker spots over the surface, which might be said to resemble the tongue of scarlet fever without any coating. From the surface there could be found no flow, but from the tubes a dark, healthy menstrual flow could be wiped away; it was non-fibrinous, passed out drop by drop, and when the tubes were pressed upon would form quite a stream for an instant. Now, if it does always come from the tubes, it will, says the Dr., explain many things in gynæcology that are now dark.

At the meeting of the Academy of Medicine, on Oct. 4th, Dr. E. J. Janeway read a paper of great interest, "Remarks on the Diagnosis of Diseases of the Liver and the Fever accompanying Biliary Obstruction." The Dr. told of the difficulties in making diagnosis of the cases as compared with diseases of the heart, lungs and kidneys. Physical examination alone he said would never prove sufficient in the majority of diseases. That in the kidneys, the urinary examination will give a clue. He went over the ground thoroughly, giving many points to aid in diagnosis. He mentioned a case of acute yellow atrophy of the liver, in which the bile duct was not obstructed, and there was no bile in the stools. The writer had a case of acute yellow atrophy of the liver

in one of his wards, only a few days, where the stools at first had no bile; they were white, and on autopsy there was no obstruction to the bile duct, but a few days before death the stools were colored from blood. Dr. Janeway spoke of explorations with hypodermic needle for deep abscess of liver. He prefers to make punctures either in axillary line or on the back. He thought the occurrence of abscess in the left lobe was about one in four.

"AJAX."

Selected Articles.

"IT IS TO THE LYMPHATIC SYSTEM AND CELL AGENCY THAT MOST, IF NOT ALL, FORMS OF DISEASE ARE DUE."*

In every variety of disease to which the human body is liable we have a direct cause producing a definite result, and to determine the exact nature of the disease both the cause and its result have to be taken together into consideration. Thus fever is a symptom or result of some agency in the body producing that condition; but to constitute scarlet fever we must have these symptoms or results take a more or less definite course, be of a definite character, and dependent upon a specific agency. Hence in scarlet fever, and also every other variety of disease, we have an agency, or exciting cause and results, or symptoms originating therefrom. Between these a definite period of variable duration exists, known as the latent period, and it is during this period that I believe highly important changes take place. For example, in the ordinary operation of vaccination a definite material is introduced into the body at a certain spot, and no immediate results are visible, and it is only after the lapse of a certain period of apparent quiescence that a definite local result manifests itself, and this gradually takes a progressive course, accompanied with a distinct constitutional effect.

The question arises, What is it that occurs between the inoculation and the commencement of the papular formation with its attending febrile symptoms? To arrive at a possible answer to this question, we must first bear in mind the nature of the lymph inoculated. This is a slightly viscid, clear, and transparent fluid, with alkaline reaction and little or no smell, and when viewed with the microscope is seen to have a clear liquid portion or plasma, and a solid portion made up of corpuscular elements, which float in the plasma or lymph; these are few in number, of somewhat rounded but irregular outline, and correspond in all particulars

to a description of the corpuscles found in the lymph of the lymphatic system, and both of these are not far removed in character from that of an embryonic protoplasmic cell. In the next place, we must recollect that the seat of inoculation is constructed of cells, arranged with varying regularity in layers; the lowermost of these, belonging to the epidermis, are elongated in shape and perpendicularly disposed upon the dermis, and with their extremities intimately connected with the corresponding irregularities of the dermis. Immediately above these, the cells are of more rounded shape and are furrowed, and so arranged that these furrows, approximated together, form little channels. Above these we have the flattened cells which form the upper and denser portion of the epidermis. With the exception, therefore, of these latter layers, the epidermal cells are sufficiently loosely packed together as to leave interspaces, however small, between them; and, moreover, in these spaces leucocytes, or corpuscles similar in structure to those spoken of in vaccine lymph, and the lymphatic system may here and there be observed, and they also contain a fluid plasma. The dermis, or subcutaneous tissue also shows, on close examination, the existence of similar spaces, with their cells and plasma, and continuous above with those of the epidermis, and below in the closest contact, if not continuous, with the lymphatics. These spaces may therefore be looked upon as the very commencement of the lymphatic system. Now, in vaccination, these spaces receive some at least of the inoculated vaccine lymph; for, if the lancet wounds the bloodvessels in its course, it has first passed through spaces existing above them, and, as the blood current is rapid, and therefore does not afford sufficient repose for developmental changes to take place in it, we must, I think, conclude that such changes as do take place occur in these lymph spaces. In their ordinary course of life the lymph cells grow and multiply, and in their growth assimilate materials from, and modify the character of the plasma in which they live, in much the same way as a torula cell of yeast assimilates material from the saccharine solution in which it grows during the process of fermentation and converts that solution into alcohol. When, therefore, the plasma derived from a vaccine vesicle is deposited in a lymph space, it mixes with the plasma already existing there, and the cells in these spaces now live in material, much of which is the product of vaccine lymph cells. In their growth and physiological functions they assimilate and build themselves up with this material, and so get impressed upon them the same characters as the cells of vaccine lymph—as Dr. Creighton has called it—become spermatised. These cells then, in their turn, modify the plasma of the next space (remembering that the spaces are virtually continuous), and so on, until, by an onward progress from

* Extract from Thesis for the M.D. Degree.

the periphery inwards, varying in its extent and speed according to the virulence or specific strength of the inoculated cells, or cell products, the whole lymphatic system becomes spermatized and brought into a similar condition to the foreign agency introduced. We need now only recollect the intimate connection between the lymphatic system and the vascular system, to understand how the whole blood-vascular system generally becomes, in the most virulent varieties, infected. Since the vaccine lymph inoculated is foreign to its new situation, it acts as an irritative agent, producing a local and general inflammatory result, but tainted with the peculiarities of the disease from which it is derived. Looking further into the matter, let me again state that the vaccine lymph ultimately infects the whole system as above described, and so long as this general infection remains in the system, any subsequent inoculation with vaccine lymph is unable to bring about the same definite result, since it is no longer foreign to the plasma of the spaces then receiving it; but so soon as this influence has died away, or been worked out, any subsequent vaccine lymph inoculated would have the same power again, varying in extent, however, with the greater or lesser loss of the influences. In vaccination the accompanying symptoms are weak in intensity on account of the weak spermatizing influence of the vaccine lymph. They are febrile in character, and are no doubt due to an altered condition of the blood, brought about by the changes in the lymphatic system being conveyed by the lymphatics into the bloodvessels. As the contagium of variola can only produce variola of a like kind, so also the contagium of a definite exanthematous affection can only produce the skin eruption peculiar to its progenitor. It would seem that the specific fevers vary somewhat in the influencing power of their contagia; in many it seems to be life-long, and hence it is that one attack of these gives immunity from subsequent ones. But we must recollect that there is always a tendency for this influence to diminish by age, and that therefore, in some cases, it sufficiently disappears to render the subject liable to a further invasion of this particular disease. When from ill-health the physiological activity of the lymphatic cells in the system is diminished in power, it is naturally even easier for a contagium to attack them than when in perfect health. Hence it is that women after parturition so readily contract scarlet fever. Also, when so reduced in strength from nerve influence, or other causes, their products suffer and are weak, if not abnormal in constituents, and these may therefore develop diseases without any external agency whatever; hence the connection between parturition and phlegmasia dolens.

Taking the above-stated view respecting the lymph spaces, and their connection with the lymphatic system, we are enabled to state that this

system has an extremely wide distribution throughout the human body; existing, in fact, not only in the cutaneous and subcutaneous tissues, but also internally it is found in the follicles of the lymphatics, Malpighian corpuscles of the spleen, Peyer's patches and solitary glands of the intestine, follicles of the pharynx, tonsils, trachoma, glands of the conjunctiva, also around bloodvessels, in the pia mater, smaller bronchi, beneath the plural endothelium, and also that of the peritoneum, alimentary mucous lining, and medulla of bones. From this immensely wide distribution, therefore, we have no difficulty in understanding how easily the lymphatic system can be reached from without, and that the contagium of a disease need not necessarily be artificially inoculated to gain an entrance into it. Scarlet fever, for instance, seems to gain entrance by the throat and respiratory tract. In measles the conjunctivæ, seem to have a very early primary connection with the specific contagium. In typhoid fever it would seem to gain admission by the intestinal tract, judging from the lesions of the agminated and solitary glands and secondary involvement of the mesenteric glands. Passing from the so-called specific fevers, we may next mention syphilis; and here we also have a distinct inoculation in the neighborhood of the lymphatic system, and the neighboring lymphatic glands are soon involved; and further, before the characteristic eruptions make their appearance, there is a distinct latent period in which changes such as I have described can go on; moreover, we know also the beneficial effect of mercurial inunction on this disease. In syphilis, however, the specific influence seems extremely tardy in working itself out. Again, in pyæmia we find the seat of primary mischief to be some local abrasion, or wound accidentally or surgically made, or after parturition, and in all of these the connective tissues and lymphatics are early involved; and although cases do occur in which no such lesion seems apparent, we may still suppose that the virus can reach the lymphatics by the respiratory tract. In elephantiasis græcorum, the cellular matter which infiltrates the affected tissues is probably developed from the connective tissue cells and leucocytes. In ague, the spleen is soon and sometimes permanently involved, and it will be remembered that this organ is intimately connected with the lymphatic system. In skin affections we can also show forth this lymphatic connection. Thus in erysipelas the tonsils are often the seat of premonitory inflammation; the erysipelatos swellings contain lymph and corpuscles, the neighboring lymphatics are enlarged and tender, and the blood contains a distinct increase in the number of its white corpuscles. It would appear, therefore that in those forms of disease, at least, which are recognized as the result of a contagium, the lymphatic system seems to be the chief

seat of the more important changes which go on during the so-called latent period, and that the definite symptoms which follow are results of these changes conveyed by the medium of the blood-vessels to the several organs and other parts of the body. Taking now into consideration other varieties of disease, such as tubercle and tumors, we still find the lymphatic system connected with their development or spread, for there seems to be but little doubt that pulmonary tubercle has its origin in the inter-alveolar septa and parietes of the bronchioles, in which situations are found embryonic cells and leucocytes in large numbers; and, further, the spread of tubercle follows a lymphatic tract, as in those cases in which a caseous lymphatic gland is the source of generalized tuberculosis; also we know that the mucous membrane of the intestinal tract, a part most closely connected with the lymphatics, is a common seat of tubercle.

As I have stated, it is from the product of a cell's activity, in its turn affecting or spermatizing other cells in its immediate contact by their assimilation of this abnormal product (ordinary lymph being the normal medium of a healthy leucocyte), that all the subsequent changes are probably due; it need not of necessity, in every instance, be the product itself that gains admittance into the body to act as the germ of a disease, but the particular cell manufacturer itself may, in some instances, enter and exert its direct influence, therein, or even the normal leucocytes, or cell elements of the body may, by abnormal irritation or nerve influence, have their physiological characters changed, and the lymph, therefore, in which they grow will, by their assimilative and productive process, be likewise ultimately changed in a corresponding manner. It is by this latter method that I would explain the enlargements of lymphatics from distal irritation, and also the possibility of developing tubercle artificially by other material than the products of tuberculosis, as Sanderson and others have long ago shown. Also this will, I think, in some manner, explain the connection between a sudden shock and subsequent development of disease dependent thereon, such as we now see from railway accidents, and such as I believe to have been the case in a young patient of mine who died of localized meningitis, which gradually developed itself in a previously perfectly healthy person, with no trace whatever of tubercular history, soon after receiving a severe shock by witnessing the accidental death of a young friend whom he was chasing in the dark, and who, forcibly running against a water hydrant on the roadside, received such internal injuries as to cause rapid death. Again, there may be in some cases an hereditary tendency for leucocytes, or cell elements to take on an abnormal growth at a fitting opportunity afforded by ill-health, or the decadence of life, implanted upon them by the parent, just in

the same way as features and peculiarities are implanted on the offspring of man and animals. Also the foregoing ideas do not exclude bacteria as a source of disease, they being equally living cells and bringing forth their own peculiar products. Finally, we know that tumours have a cellular origin, and in one class, at least—viz., the carcinoma—the lymphatics are most intimately connected with their growth and spread, for the alveoli of cancers may be regarded as the dilated origins of the lymphatic system. Whether these can be derived from contagion seems as yet difficult to positively determine, but from cases which have come under my own observation, I am personally inclined to believe it possible. Taking, then, into consideration the above ideas, I desire to maintain that it is to the lymphatic system and cell agency that most, if not all, forms of disease are due.—W. Groom, B.A., M.D. Cantab., etc., *Lancet*.

LACTIC ACID AND DIET IN INFANTILE DIARRHŒA.

Less than two years ago, Hayem, of Paris, presented to the Academy of Medicine in that city a report on the use of lactic acid in the green diarrhœa of children. In the preparation of this work he had been assisted by his interne, Lesage, whose particular share in it had been the development of some pure gelatine cultivations of a germ which Hayem had discovered as being present in the vomited and rectal discharges of this variety of diarrhœa. He said he had established beyond the possibility of a doubt, by clinical experiment, the direct relation of this germ to the green color, and as such he claimed for it the right of discovery. However, soon after his report was published this claim was contested by Damaschino, who said that, three years before, he had discovered this same microbe, had shown its relation so green diarrhœa, and had presented to the Biological Society some micro-photographs of it. Hayem admitted his priority to the microscopical discovery, but still claimed as his own the credit for showing the proper relation of the bacillus to the particular form of diarrhœa. He stated that Damaschino had gone no further than merely to recognize the germ and then cited the experiments which Lesage had made of introducing into the intestinal tract of healthy animals some pure cultivations, and producing by them a characteristic green diarrhœa. He also showed that the discharges were contagious.

The microbes, which are rod-shaped and can exist only in an alkaline medium, show a disposition to bunch themselves into groups, and their number is in direct relation to the severity of the attack. These are, therefore, the first successful attempts to establish the parasitic origin of at

least one form of diarrhœa, as probably also they are the first efforts to treat the disorder according to germicidal methods. Since then, in this country, that attention has not been given to the experiments which the conclusions would seem to warrant.

It was my privilege, soon after the report of Hayem was published, to have an opportunity of testing clinically in dispensary work the statements made by him. After using the acid in the green form of diarrhœa for a short time, the suggestion presented itself of trying the effect of it in all the varieties of diarrhœa without reference to the color of the stools. This idea of the universal application of germicides to diarrhœa was strengthened by the paper, a few months later, of Dr. William D. Booker, read before the International Medical Congress at Washington, on the different forms of bacteria found in the discharges of summer diarrhœa. He stated that twelve varieties had been isolated, eleven being bacilli and one belonging to the variety cocci. He gave their action on milk as follows: "Some coagulated milk with acid reaction and evolution of gas; one caused coagulation with alkaline reaction; one gave the milk a peptonized appearance; and other varieties caused no perceptible change."

On account of its simplicity as well as its elegance, the employment of this universal acid treatment was a very easy one, and the results were such as to leave no doubt as to its usefulness. The trial began during the summer of 1887 and has been continued during the present summer, over one hundred patients receiving treatment. The age of the patients varied from ten weeks to twenty-four months, and there was great variety in the severity. The stools, which ranged from three to twenty daily, presented all the varieties found in the different forms of diarrhœa. They were the watery-mucus, the yellow with coagulated casein, the slightly greenish with mucus, casein, and sometimes blood, and the distinctly green. In very few cases of the green diarrhœa so treated was there failure to afford some relief, and many of the recoveries were certainly remarkable. But, while the trial confirmed the conclusions of Hayem as to green diarrhœa, it also establishes the usefulness of the acid in the other varieties.

The significant features in support of lactic acid are these: It not only relieves the diarrhœa, but it also acts beneficially for the vomiting, fever and restlessness. It changes also the very offensive odor of the stools. The vomiting is controlled within a few hours so completely that the child can begin to take nourishment, and, although it may subsequently occur at intervals, a continuance of the treatment soon stops it. Again, the fever which attends every case of any severity is reduced by it. To not a single child in the one

hundred cases was any antipyretic given, the fever usually subsiding before the diarrhœa had fully stopped. Attending the reduction of temperature there was shown a disposition to sleep, and the intestinal pain, which was often severe, received no other medication than the acid. To none of them was opium given in any form.

Within a period varying from twelve to seventy-two hours the discharges would begin to change, the greenish becoming less watery and assuming a yellow color, while the watery-yellow and sometimes bloody had a greater consistence without the unpleasant odor. The general results have been so satisfactory that all astringent and alkaline remedies have been abandoned, lactic acid alone now being given, no matter what variety of diarrhœa presents itself.

But, as the children so treated came largely from tenement-houses, where crowding, heat, poor ventilation, and improper food are important factors, it was found advisable to adopt some form of dietetic measures in connection with the acid. In a monograph on the treatment of the diseases of children, read by Dr. Jacobi in 1879, a valuable suggestion is given concerning the feeding of children. The frequency of diarrhœa in children fed wholly on breast milk had already presented itself, and for a considerable time it had seemed contrary to reason to so continue feeding, although good authorities advised, whenever possible, to insist upon a diet wholly of breast milk. This was done and the result was no better, while in children somewhat older, who had begun to take other foods, there was usually a benefit when these were alternated with mother's milk. An exclusive diet, either of breast milk or prepared food, did not seem to give good results, and the question was not satisfactorily answered until the method employed by Dr. Jacobi was tried. In his monograph he states that even normal mother's milk contains fat that is not digested, and that when diarrhœa occurs, if lumps are found in the passages, they are not wholly undigested casein, but, on the contrary are mostly fat, and probably remnants of intestinal epithelium. These fats are olein, margarin, and stearin. Fatty acid in abundance is a common cause of derangement of digestion and assimilation, and it impedes the normal secretion of other digestive fluids.

He then quotes the conclusions of Wegscheider concerning the fat in breast milk: "Fat cannot be completely absorbed; one part leaves the intestines in a saponified condition; a second part as free fatty acid; a third as fat in an unchanged condition." From this he concludes that one precaution to observe is to guard against food too rich in fat. As the mother's milk is best when it can be tolerated, he endeavors to make this possible by diluting it with some liquid farinaceous food. To do this, he suggests preceding the nursing by one

or two teaspoonfuls of barley-water. Instead, however, of the barley-water, some of the prepared foods were tried according to this principle and the results were beneficial, due, probably, to the small percentage of fat which they have been shown to contain. There was less troublesome casein to act as an intestinal irritant, and, when they were taken in connection with the lactic acid, recovery was usually speedy. This dietetic precaution has been adopted, and is recommended, whenever practicable, in either variety of exclusive diet. The size and frequency of the dose of lactic acid varies entirely with the age of the patient and with the number of discharges. A two-per-cent. solution is usually ordered. The following is the formula advised by Dr. Hayem :

R Pure lactic acid, ʒ ss.;
 Syrup, ʒ j;
 Water. ʒ ij. M.

Each drachm of the solution contains about one drop of pure lactic acid.

For a child under twelve months, half a teaspoonful every hour is sufficient. If the discharges are very frequent, a teaspoonful may be given every hour for six doses, changing then to half a teaspoonful. For over twelve months a teaspoonful every hour is the ordinary dose. Dr. Hayem recommends its use one day after the diarrhœa has stopped. The large doses at first suggested in the report do not appear to be necessary, and there is danger, if it is given in larger quantities, of causing irritation of the buccal mucous membrane. It is best to dilute even these small doses, as otherwise there is a decided acid taste, not unpleasant, however. Other germicides have been suggested and tried, such as salicylate of sodium and naphthaline, but lactic acid, while possessing all the curative properties of the others, has additional advantages :

1. It is more palatable than salicylate of sodium or naphthaline, more readily tolerated, and simpler to administer.
2. It controls vomiting and permits the earlier use of food.
3. Under it, temperature is reduced and intestinal pain quieted.
4. Restlessness is overcome and sleep rendered possible without the use of opiates.—Dr. F. W. Shaw, in *N. Y. Med. Jour.*

PATHOLOGY AND TREATMENT OF THE ENLARGED PROSTATE.

In bringing this subject before you, I would ask you to observe that I purposely avoid speaking of the prostate as a gland, as I consider such a term inappropriate to a part where, so far as function is concerned, the secreting element is subservient to the muscular. As I have recently discussed this

subject at considerable length in my Lettsomian Lectures, I shall confine myself as closely as possible to those points in pathology which it is necessary to make prominent for clinical purposes. If we sum up our experience as practitioners relative to enlargement of the prostate as observed in advancing years, I do not think we shall find much difficulty in recognizing that this physical change exists under two conditions which are sufficiently well marked. Whatever may be the proportion of males over sixty years of age who experience some degree of enlargement of the prostate, the evidence appears tolerably conclusive that it is only the minority of this number who develop symptoms which can be regarded as evidence of disease. Hence we may divide persons who have large prostates into two classes: (1) those who do not suffer from them, and (2) those who do.

Taking the former first, I have for a number of years carefully watched persons who had large prostates, but were not aware of it themselves from any circumstances which might tend to suggest it. In many instances the discovery was made, as it were, quite accidentally. In addition to evidence of this kind, I have met with numerous instances where post-mortem examination revealed the presence of a considerable prostate, though no symptoms previously existed. Facts such as these seemed to suggest that the enlarged prostate had come in for much uncalled for abuse, and that like other hypertrophies in the body, it might be serving a useful but hitherto unrecognized purpose. Passing to the second class of cases, it was equally evident that there existed a considerable proportion of instances of prostatic enlargement which were attended with most distressing symptoms of vesical obstruction and irritation. The contrast between these two classes of cases, which did not appear to be necessarily transitional, was so marked as to almost suggest in itself some physical alteration in the part to account for the difference. Without going further into detail, my examinations during life and after death led me to the conclusion that so long as the prostate retained its natural structure, it did not seem to matter much, so far as its function was concerned, what size it attained. On the other hand, when it underwent degenerative changes which reduced it to little else than a mass of fibrous tissue in the form of lobulated, nipple-like, or interstitial tumours, it was pretty certain to excite varying degrees of irritation.

The next points that naturally arise are : First, how is it in some instances that the prostate, though increased in bulk, still remains throughout life histologically and functionally normal? And, secondly, under what circumstances does it pass into the condition of a fibroma, and produce symptoms of obstruction and cystitis?

In reference to the first point, I would remark that the human body furnishes us with undoubted instances of hypertrophies, proving themselves to be not only necessary, but precisely compensatory, relative to what is required. If, as I have urged, the chief function of the prostate consists in providing a retentive as well as a supporting apparatus for the contents of the bladder, there is no reason, when the time comes for substituting quantity for quality, why the provision should not prove to be permanently compensatory. The conditions under which muscular hypertrophy exists, as observed about the neck of the male bladder, seemed to indicate that, should circumstances arise to render the necessity for such increase inoperative, the structural excess then undergoes degenerative changes, and assumes properties in accordance with that type of tissue with which it has thus become assimilated. And it appears to me that in the study of hypertrophies there yet remains some interesting work to be done in connection with those transitional changes which depend upon the suspension of, or alteration in, the conditions which in the first instance rendered the overgrowth a necessity.

We have seen that the large prostate is able to perform its function just as perfectly as the smaller one of earlier life. Taking, however, those instances where such is not the case, and where the large prostate proves to be a serious detriment to the individual, it seems to me that in the greater portion the development of symptoms are about coincident with that physical change in the shape of the bladder which we know by the name of "pouching," where a depression is formed above the prostate in which urine may lodge. It has been generally taught that this pouching of the bladder is a direct consequence of enlargement of the prostate, the supposition being that as the latter grows towards the bladder cavity, where there is the least resistance, a depression is left above the growth. Now though this may in some degree be true, it does not represent what commonly occurs. My observations lead me to believe that this pouching, or space for residual urine, is caused by the sinking of the bladder wall itself away from the prostate as the result of urine pressure on the part, and not in the first instance by the encroachment of the prostate upon the interior of the viscus. It is quite easy to demonstrate this upon the dead subject. When this occurs with a large prostate which hitherto has been performing its functions in a natural manner, the immediate effect is to cause a prominence which previously had no existence. Following upon this, we have the conversion of the prominent prostate mass into a fibroma, with the gradual acquisition of those properties which such a structure possesses. In the bladder we see this taking the form of fibrous masses, which cause obstruction and excite mucous exuda-

tion and cystitis. To attribute the latter symptoms to the mere presence of a few ounces of urine in the bladder, which cannot be spontaneously voided, is certainly not warrantable. Passing to points in practice, it is evident that if a person has a large prostate, however well it may be working, it behoves him to be careful that the bladder is not submitted to such a kind of usage as either may gradually or suddenly alter its relations to the outlet. All those circumstances which by their degree or continuance throw an undue strain upon the bladder at a time of life when the tissues begin to lose somewhat their power of resistance, should be studied with the view of avoiding them. In the next place, when these strains do come by the wear and tear and accidents of living, we should be prompt in recognizing them and giving the necessary assistance, either mechanically or by medicines, as the case may be, to prevent permanent damage being done.

I would say a few words, in conclusion, as to the treatment of prostatic hypertrophy when the part has to a large extent assumed the structure and properties of a fibroma. The degree of vesical irritation and obstruction under these circumstances is sometimes very intense, and various means have been proposed to deal with this condition by operative procedures, having for their object either the section of the obstructing part with provision for the more perfect drainage of the bladder by artificial means, or the removal of more or less of the prostatic mass. In both of these directions considerable relief has been afforded. Having regard to the fibroid condition the part assumes, I have thought, if there is any truth in Apostoli's treatment, that it is possible it might under these circumstances prove serviceable. I have now this subject under consideration, but at present I have not sufficient material for our purpose of to-day. I am aware that electrolysis has been practised both in this country and in America, but I cannot say that as yet we have sufficient evidence to warrant its more general adoption. I would lay stress on the examination of the prostate from the rectum as determining our views in reference to the patient's future when retention of urine is due to this cause. When this happens in a person with a hard nodulated prostate, where there is evidence to the touch that fibrous tissue predominates largely over the muscular, the power of the bladder seldom returns, and the use of the catheter is generally perpetual; and when, on the other hand, the prostate is found soft and yielding to the touch, indicating that muscle still prevails, we may as a rule anticipate complete restoration of function. I attach importance to the distinction, as in most cases of acute retention due to prostatic enlargement it enables us to form reliable opinions relative to the probable duration of catheterism.—Reginald Harrison, F. R. C. S., in *Lancet*.

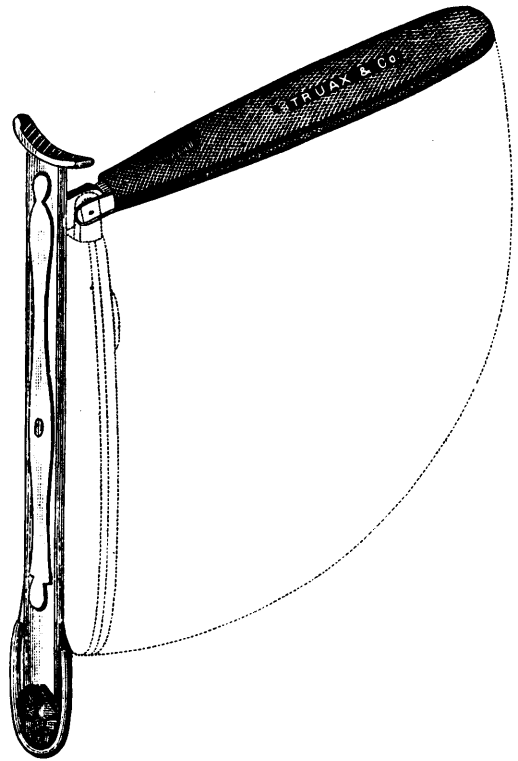
AN IMPROVED TONSILOTOME.

Any physician who has had a considerable experience in tonsilotomy, with the various tonsilotomes, will not be likely to deny that these instruments are generally too complicated. They are armed with needles, barbs, or sharp-toothed forceps for piercing the tonsil and dragging it through the fenestra before any cutting is done by the blades. A tonsilotome constructed after the pattern I have made renders the barbs, etc., unnecessary. It reduces the painfulness of the operation by one-half; it divests the procedure of any danger of an accident to the operator or patient; it makes a skilful and easy operation possible with a minimum amount of experience; it resembles a large folding tongue depressor so closely that children usually offer no opposition to its introduction for the removal of the first tonsil: and it combines strength and compactness with simplicity of construction. It is made on the principle of the guillotine, the blade of which is propelled by the thumb of the same hand which grasps the handle. The latter is set at such an angle to the shaft as will permit the most perfect coördinate action of the muscles of the hand and arm of the operator. All the work may be done with one hand. This advantage is not a small one for two reasons: The powers of coördination and antagonism of muscles are far more perfectly under control in operating an instrument that requires but one hand, than they are when both hands must coöperate; and one hand of the operator is left free to hold the head of the patient, if necessary, as the dentist does in extracting a tooth. The advantages of a tonsilotome that can be operated entirely by one hand are about the same as in a tooth forceps which does not require two hands to manipulate.

I have had two sizes manufactured, the smaller having a fenestra of the calibre ordinarily found in such instruments, the larger supplied with an aperture larger than the largest Mackenzie tonsilotome, while it is so compactly constructed as to require less space in which to operate. I have used the larger size to extirpate enormously hypertrophied tonsils in children as young as two and one-half years, where it was impossible to insert the Mackenzie instrument of the necessary size. The smaller one is sufficient for the majority of cases, but the fenestra is not capacious enough to admit the bases of the extraordinary glands we occasionally see. It is advisable to remove the whole tonsil, and as the tops only of the largest tonsils can be severed with the smaller instruments, it may be better to have the larger size if but one size is to be kept.

The blade is so protected as to make it impossible to wound the ascending pharyngeal, or the internal carotid artery. The shaft that propels the blade is of such width as to make the use of a

gag unnecessary, for it protects the finger of the operator from the patient's teeth, if it is placed in the mouth to ascertain when the fenestra is in such position as to embrace the whole tonsil, as it is necessary for one to do when operating in children with other tonsilotomes. Since I have used the guillotine I have not had my finger bitten, while it was not an uncommon occurrence before to come off second best, as far as pain was concerned. With the shank wide enough to afford protection it is unnecessary to introduce the finger into the mouth, for the teeth and lips cannot close enough to prevent the operator from seeing plainly the field of operation. There is no working in the dark, or fear of damaging structures you do not wish to attack.



The handle is firmly fixed to the shank with a hinge-joint and self-acting spring-lock, so that the fenestra can be pressed down around the base of the gland with any degree of power desired. This feature dispenses with any necessity for hooks, forceps, needles, or barbs for spearing the tonsil. The latter being a soft, fleshy mass, adapts itself to the shape of the fenestra and protrudes through it the instant its base is pressed about. The pain of spearing or tearing the tonsil by toothed or barbed accessories, designed to drag the gland through the fenestra before the blade cuts, excites the most vigorous struggling and resistance on the part of a child. Even when the utmost care has

been exercised, the barbs have pierced the soft palate, or the surgeon's finger, instead of the tonsil. Moreover, the gland always comes out with the instrument, the same as though barbs were used. There is another important advantage in having the handle attached to the shank with a hinge provided with an automatic lock, for the cutting extremity of the instrument cannot be thrown out of your control by a disturbance of the coaptation of its parts. The last time I operated with a Mackenzie tonsilotome the child jumped just as I was placing the fenestra about the tonsil. The shank revolved upon the handle, leaving the latter in my hand, while the cutting end was entirely displaced and removed from the vicinity of the gland. It is impossible for this improved tonsilotome to play you such a trick. The handle is made of rubber, knurled so as to afford a firm grip, and it contains a concealed spring-lock operated by a convenient thumb-plate. When this is moved downward the hinge-joint is unlocked, and the instrument folds upon itself like a pocket-knife, occupying the space of about an inch and a quarter in width and thickness by six and one-half inches in length.

Another pertinent point that should not be neglected in this age of antiseptics, is the provision for cleansing and disinfecting the three pieces of which the instrument consists. By raising the proximate end of the horizontal top-spring of the shaft and swinging it 90° to either side, it becomes disengaged from its lock and it liberates the blade from the shank. This arrangement makes it as simple as possible for taking apart, cleansing and putting together again.

In amputating the apex of a relaxed and elongated uvula the tonsilotome should be used with the handle directed upwards. It should occupy just the reverse position as a uvulotome to the one it occupies when used as a tongue depressor.

Another merit that is not too small to mention is that its simplicity of construction renders it inexpensive.—*Dr. Seth H. Bishop in Jour. Am. Med. Association.*

THE COMPARATIVE MERITS OF TRACHEOTOMY AND INTUBATION IN THE TREATMENT OF CROUP.

Dr. O'Dwyer's method of intubing the larynx, he said, has now been before the profession in a prominent manner about three years, and it is surely gaining favor, as its merits and its limitations are being more clearly understood. The operation has its advantages and its disadvantages. It gives relief to the dyspnoea and it saves lives. The statistics of recovery vary much, as in tracheotomy. Twenty-six per cent. is a fair average after intubation. The recovery rate in 327 trach-

eotomies performed at the Boston City Hospital was twenty-nine per cent. In about 100 cases of intubation performed at the same institution the rate of recovery was twenty-six per cent., showing a slightly smaller percentage than the old operation. It is not claimed that these figures and facts are conclusive. The number of intubations is, as yet, too small to settle the question. The recovery of patients under three years of age was in the same proportion after each operation, namely, twelve per cent. O'Dwyer, Brown, and Waxham save about one in four after intubation; Huber and Montgomery save one in two; Northrup and Denhard save one in five; Jenning, one in ten; Chatham, one in fifteen; and A. B. Strong, one in thirty-one. This variation of results in the experience of different operators, proves conclusively that the type of the disease determines the result to a great extent—far more, in fact, than any mode of treatment. The conclusion on this point is that the new operation saves nearly, or quite as many patients as did the old.

In regard to the facility of doing intubation, it may, like tracheotomy, be easy or difficult, according to the age of the child, the condition of the larynx, and the strength of the patient. Both operations are difficult in children under three or four years of age, and both are attended with some danger. In tracheotomy the risk lies principally in hemorrhage and collapse. In intubation, it lies in pushing membrane, etc., down in front of the tube, producing more or less complete obstruction. In very weak children, collapse may result from prolonged efforts at placing the laryngeal tubes. Under these circumstances the surgeon should choose the operation with which he is most familiar. The old operation can be done with one good assistant. Intubation requires at least two fairly good ones. Unless great care be taken, the operator's finger may be severely bitten, which, in at least one case, has resulted in death.

It is desirable to have a physician close at hand for three or four days after both operations. If the tube must be allowed to take care of itself, intubation is preferable. If ordinary care, such as a good nurse, or other clever person can give, is available in cases located at a great distance from a physician who can place O'Dwyer's tube, then the old operation is better, there being less danger of fatal obstruction, and the question of feeding giving less anxiety. The weight of testimony goes to prove that it is less work to take care of intubated than of tracheotomized patients. The time occupied in caring for the tube in the latter class is largely taken up in feeding the former class of patients.

Northrup's statistics of 107 autopsies, performed at the New York Foundling Hospital, go to prove that there is no such thing as "food pneumonia," as in no instance were signs of food found in the

smaller bronchi. Dr. O'Dwyer advances the opinion that the secondary lung affections, especially pneumonia, are due to retained secretions, which, owing to the presence of the tube in either operation, cannot be ejected by coughing. Others hold that this complication is due to the fact that the air enters the lungs without first being warmed and moistened by passing through the nasal chambers. The author ascribes these affections to the natural tendency of exudative processes to extend in all directions, basing the opinion upon the fact that pulmonary complications are as frequent in cases not receiving surgical treatment, run the same course, and are as fatal as in those in which operation is resorted to.

While a wound in the skin is objectionable on general principles, yet the wound of tracheotomy gives little trouble and does little harm. The diphtheritic poison gains admission to the system before the wound exists, and the course of the disease, as regards sepsis, is the same after as before the operation. In only 6 of the 327 operations at the City Hospital of Boston was diphtheria in the wound noted; 3 of these cases recovered. Both tubes may produce ulcerations in the trachea, but the result is seldom serious.

Conclusions.—1. Intubation may be tried in all cases of croup. 2. It is preferable in young children, and in cases in which the tube must be left entirely to itself. 3. It may be resorted to for euthanasia, provided the operator is reasonably expert and can do it without producing collapse. 4. Tracheotomy is called for in those cases in which intubation cannot be done, or in which it fails to give relief; or in which the laryngeal tube is repeatedly ejected, or requires frequent removal for cleansing. It may also be required in those cases in which sufficient food cannot be given while the O'Dwyer tube is in position. It is also preferable in cases situated at a distance from a surgeon capable of introducing the laryngeal tube. 5. The tracheotomy instruments should always be at hand in intubation in cases of emergency.—Dr. Gay in *Med. News*.

TIGHT LACING.

Amongst the various subjects to which the members of the British Association directed their attention at the late meeting at Bath, and upon which the ladies attending the Biological Section may fairly be regarded as competent to express an opinion, was the custom of women to wear stays. The discussion might have been considered a mere playful interlude introduced by Professor Roy and Mr. Adami to enliven the proceedings, were it not that trival subjects—trival, that is, from the Association's point of view—are most likely to excite the bitterest feelings. The wearing of corsets has really two aspects, which deserve separate consid-

eration—the hygienic and the æsthetic. From the hygienic point of view, the question resolves itself into one of the degree to which the compression, or, as women say, the support, of the chest is carried, and the rapidity with which that degree is attained. The body as a whole, and the several organs composing it, have a wonderful power of accommodation to surrounding circumstances, permitting changes of form and even of position that appear at first sight incredible, without material impairment of function. If the form of so unyielding a part as the head can be greatly altered, with preservation of ordinary brain power, as occurs amongst many savage tribes, by pressure begun early and steadily continued, we may be sure that much more might be accomplished if similar pressure were applied to so mobile a part as the chest without greatly impeding the function of respiration. Such moulding of the form of different parts is familiar to all as effect of disease; and many a man or woman, after an attack of pleurisy terminating in empyema and adhesions, possesses an unsymmetrical thorax, which nevertheless serves him or her well throughout a long and active life. The body, in other words, permits considerable liberties to be taken with it without serious impairment of health; and if pressure of the chest were commenced in early childhood, and steadily persisted in, no doubt still greater deviation than is commonly seen could be induced. As a matter of fact, however, in this country such pressure is not applied; the stays given to girls by sensible mothers up to the age of fourteen or fifteen are soft, and exert little more pressure than the waistcoat of a boy. At that age, when the figure naturally changes, the firmer support is taken into use, and the amount of harm it occasions is dependent on the degree to which support becomes compression. There are no doubt many girls who, desirous of making themselves conspicuous and, as they foolishly believe, attractive, tighten their waists to such an extent as to incapacitate them for taking exercise and for the necessary ingestion of food; they consequently become weak, pallid, and chlorotic. These evils are, moreover, intensified by the rapidity with which the compression has been applied, and all who are interested in their welfare should exert themselves to point out the egregious folly of such a practice. Upon the æsthetic side of the question there is little to be said; here, as in so many other controversial questions, *de gustibus non est disputandum*. Amongst the Greeks, for ages the arbiters of taste, the women wore an apology for stays, and we are told that at a very early period the girdle was strengthened by metal, and long before the Christian era a broad band or belt was worn next the skin to support the breasts. According to Planche, the practice of tight lacing appears to have been introduced by the Normans as early as the twelfth century, and

has been in use ever since. We apprehend the ordinary Englishman, though he may wonder at, does not really admire a wasp-like figure. Both hygienically and æsthetically, tight lacing is a mistake. Yet it must be remembered that, partly as a result of climatic conditions, partly from abundance of food and absence of severe work, and partly perhaps from the hereditary effect of sexual selection, a large proportion of the young women of England, of the middle classes at least, are disposed to the accumulation of fat in the breasts, and though from the age of seventeen to twenty-four the breasts may be firm and prominent, yet after that period they are apt, without artificial support, to become flaccid and pendulous. The advantage of support, however, is no argument for the employment of compression. Dr. Hoyle made a good hit in saying that no woman regarded herself as properly dressed unless she felt a little uncomfortable. He might have added that the proportion of discomfort experienced may be pretty safely taken as the measure of mischief being effected in the willing victim of tight lacing.—*Lancet*.

A LOCAL TREATMENT FOR VAGINISMUS AND VAGINITIS.

Vaginismus, as you all know, consists of a hyperæsthesia of the nerves supplying the mucous membrane and muscles of the vagina, and its orifice, which upon being irritated produces a spasmodic contraction of the sphincter and other vaginal muscles. This condition may be due to functional or local causes, more often the latter.

Vaginitis is an inflammation of the lining membrane of the vagina, and it may be of a specific or a non-specific character. This disease is often connected with vaginismus. In the treatment of these troubles the first step is to remove the cause if this be possible. In vaginismus you are aware that it is not easy to introduce a speculum, or even the finger into the vagina, without considerable pain to the patient.

My method of proceeding in these cases is to place the patient on her back, the pelvis somewhat elevated and the knees flexed. I either introduce a bivalvular or a small cylindrical speculum, I prefer the former as on account of its flatness it is easier introduced. Before introducing it, however, I lubricate it with vaseline, and then take a camel's hair brush and apply a four per cent. solution of cocaine both to the speculum and to the orifice. I then introduce the speculum into the vagina and very gently open the blades. By this means I give the patient very little pain. After placing a small roll of cotton beneath the speculum across the perineum, I pour into the vagina through the speculum, a solution composed of sulphate of zinc, one or two grains, chloral hydrate five grains,

water and glycerine of each four drams. I wait several minutes and then withdraw the speculum slowly but not completely out of the vagina.

As I withdraw the speculum, the walls of the vagina come together and the solution touches every portion of the mucous membrane. I now push the speculum back again, and introduce a small cotton tampon with a string tied to it, pushing it back with a long dressing forceps, at the same time withdrawing the speculum. The tampon will absorb that part of the solution which remains in the vagina and that which escapes will be absorbed by the cotton on the perineum. I now place a piece of cotton between the labia, apply a bandage and the operation is completed. I let my patient remove the cotton and withdraw the tampon in from four to six hours afterward.

I repeat this treatment three or four times a week. After the first treatment, I have no need for the cocaine, as the finger or speculum can be introduced without giving much pain. In vaginitis I proceed in the same way, except I do not use the cocaine solution. In vaginitis the chloral acts as an anæsthetic to the mucous membrane and vaginal muscles. Between visits I have my patient to use vaginal douches of hot water with a little borax added to it. By this treatment I have secured excellent results, and my patients and their husbands (if they have any) appreciate it very much in vaginismus.—Dr. Guhman in *Weekly Med. Rev.*

INJECTIONS OF OSMIC ACID IN MUSCULAR RHEUMATISM.

In No. 24 of the *Russkaya Meditsina*, 1886, I published some cases of muscular rheumatism in which I had employed osmic acid in the form of hypodermic injections. These cases, though not very numerous, were tolerably characteristic, and bore out the suggestions first made, I believe, by myself, as to the advantages of a persevering use of this method of treatment.

At the commencement I employed osmic acid in quantities of from three to six drops of a one per cent. solution for a single injection—the same doses in fact in which it is recommended in cases of neuralgia. At the present time the doses given internally are from the one-sixtieth to a quarter of a grain per diem, and the hypodermic doses should therefore be about half as great. A very important case however that has occurred in my practice proves that these doses may with great advantage be increased. The case was that of a patient named Vikulin, belonging to the town of Maikop, a merchant, thirty-three years of age, tall, of good constitution and well nourished, who for the last two years had suffered from severe pains in the dorso-lumbar region, especially on the right side, extending to the lower extremities and

being most felt in the right leg. These pains seemed to have their seat in the lumbar muscles; they were much increased by local pressure with the finger, as also during changes in the weather. The pain was so considerable at night that the patient scarcely got any sleep. No morbid physical signs could be made out either in the lumbar region or in the legs. For about two years the patient had suffered from difficult and painful digestion, due apparently to acid dyspepsia. The tongue was coated; the patient sometimes had a desire for food, but as a rule he ate little, because after even a scanty meal he had pain and tenderness in the region of the stomach which were increased by pressure; the bowels were confined; besides, he frequently had palpitation, due, as it seemed, to derangement of the digestive functions, the size and sounds of the heart being normal, and the palpitation coming on during or soon after a meal. The kidneys acted normally. During his two years' illness the patient had frequently had medical advice, but had derived but little benefit from it. When Mr. Vikulin first came to me for advice last winter complaining of lumbar pain, I gave him an injection of a Pravaz syringeful (about twenty-five minims) of a five per cent. solution of salicylate of cocaine in the lumbar region each day for three successive days. These injections were given in the morning, and for some hours afterwards the pain was much less, but at night it returned in all its old intensity, giving him no rest and being especially severe when he turned round in bed. I then determined to administer a fourth and final injection of the salicylate of cocaine, but by mistake injected instead a whole syringeful of a one per cent. solution of osmic acid, equivalent to about a quarter of a grain of the pure acid. Immediately afterwards the patient felt a severe burning pain in the lumbar region, and as this did not diminish in the course of twenty minutes while the man was lying on his face, I sent him home, without of course revealing my mistake to him, and told him to go to bed and apply cold compresses to the loins. I was much alarmed by the thought of the chances of phlegmonous inflammation or even sloughing, considering the large dose of osmic acid I had given. I was consequently much gratified by the patient appearing the next day with a cheerful expression and the intelligence that he had had the first good night's sleep for two years, being able even to turn round in bed without pain. He said that the burning pain had only lasted for about two hours, and then had completely disappeared, so that he had not gone to bed or applied cold compresses as I had directed. On examination I found the skin very red around the puncture over an area the size of a hemp seed, and tender on pressure over an area the size of a florin, but with no appearance of swelling. After the patient

went home I prescribed for his indigestion two grains of Finkler's papain with six of milk sugar, as a powder an hour after meals to be followed by a teaspoonful of a mixture containing bicarbonate of sodium, aromatic spirit of ammonia, carbolic acid and glycerine.

When the patient came to me the next time some three months later he reported that the pains in the loins and in the lower extremities had been less, and that his nights had been but rarely much disturbed. Upon examination I found that there was still a good deal of tenderness on pressure in the lumbar region. His digestion was perfectly normal, his appetite good, and there was no pain over the region of the stomach after meals; the bowels too were no longer confined. I administered three injections into the parenchyma of the lumbar muscles of from eight to fifteen drops of a one per cent. solution of osmic acid on three successive days. At the present time, according to the account given by the patient when I saw him several months afterwards, the pain in the loins and in the legs have completely disappeared and he is able to walk easily and to sleep well.

The case has a scientific and practical interest, showing as it does that a whole Pravaz syringeful of a one per cent. solution of osmic acid may be injected into the muscular tissue without giving rise to serious consequences either of a local or a general character. At the present time I give in muscular rheumatism an injection, into the parenchyma of the muscle, of eight drops of a one per cent. solution of osmic acid and gradually increase the dose up to a syringeful, having regard to the different susceptibilities evinced by different persons especially women, to this remedy. Large doses of osmic acid have two advantages over small ones. First, fewer injections are needed, and consequently there are fewer punctures, and it is these that set up the burning pain which constitute the main objection to this mode of treatment, and secondly, large doses act more promptly and with greater certainty. These injections I administer both in chronic and in acute rheumatism without employing any other external or internal remedy. I have not had a single case either in private or in hospital practice where this treatment has not produced a considerable improvement, and in the great majority of cases complete recovery has taken place after two injections, in rare instances as many as six being required. I have not seen any cases where the affection has returned.

Let me now say a word or two about the action of papain, which proved so successful in the above mentioned case. In all cases of indigestion, in dyspepsia and in chronic cases associated with acid eructations with painful gastric fermentation I order—when the patient is well enough off to afford an expensive drug—Finkler's papain in not less than two-grain doses with milk sugar one or

two hours after meals. I direct these powders to be taken in a spoonful of the alkaline mixture mentioned before. This has a good effect on the pain occasioned by acid fermentation while chymification is going on, by neutralising the acid as it is formed. For this condition papain is unrivalled as a remedy; it causes hard food to be digested, and the fibrous tissue of meat and vegetables is dissolved by its means. I have by this method of treatment completely cured some long standing cases of dyspepsia of the most obstinate description, associated with gastric pain and with constipation. Of course I at the same time took care to attend to the general habits, and especially the food of the patients. The way in which Mr. Vikulin's case yielded to papain appears to be very characteristic.—*Pract.*

TEREBENE IN BRONCHORRHŒA.—Dr. John W. Martin, in a communication to the *Med. Press and Circ.*, August 29, 1888, says that he has employed terebene in three cases of bronchorrhœa, with marked success. His first case was that of a woman 79 years old, who had an attack of right hemiplegia, followed by a severe attack of bronchopneumonia. At the decline of the inflammatory stage profuse bronchorrhœa set in, accompanied by a state of great exhaustion. A variety of treatment failed to give relief. In addition to the bronchial discharge there were urgent digestive troubles, dyspepsia, flatulent distension of the stomach and intestines, causing much inconvenience to the action of the heart, and seriously interfering with the administration of proper nourishment. The urine was free from albumin. Terebene was first ordered dropped on a lump of sugar, but this proved to be disagreeable to the patient, so that the following formula was substituted:

Gum terebene,	
Spt. chloroform	āā ṡx.
Mucilage of tragacanth	f̄3i.
Syrup	f̄3ss.
Water	q. s. ad f̄3i.

Dr. Martin states that from the day the terebene was ordered there was a steady improvement of a most marked character. Of the other two cases one was a man, about 40 years old, suffering from passive broncho-pneumonic congestion, attended by profuse expectoration. The patient was very weak, and no treatment seemed to give relief until he was placed upon terebene. Immediate benefit was apparent. Marked diminution was noticeable at the end of twenty-four hours, and expectoration ceased within three days. The further progress of the case was in every way satisfactory. The third case was that of a wine merchant's traveller, who had, at the outset, acute broncho-pneumonia. When the acute symptoms

subsided, profuse expectoration remained a very troublesome symptom. Various remedies failing to check this discharge from the lungs terebene was ordered by Dr. Martin with rapid and most beneficial results. The expectoration almost disappeared at the end of the third day, and the patient steadily improved. In prescribing terebene or turpentine, he regards it as necessary to be careful to examine for kidney mischief. If such is present, he would regard it as a contra-indication to the use of terebene.—*Med. and Surg. Rep.*

THE LATE DR. JOHN MILNER FOTHERGILL:—Born of a stout dalesmen race, he might, by his vast personality, have been an exaggerated caricature of the wildest dream ever imagined by a satirist of the typical John Bull. Enormously stout, even as a lad, with a round, rosy face and long black hair, his great carcass, set upon sturdy legs wide apart, might be constantly seen at the university gate, a centre of all mirth and jollity. To him the students' hostelry was too well known. By many names he was called; some of his teachers will remember him as the "Pirate Captian." But with all his wild Bohemianism and his Falstaffian ways and bulk, any one who came in contact with him who had an eye to see recognized in him a man of commanding personality, with immense power of good or evil. The writer then a demonstrator once said to him: "Fothergill, you are a very clever fellow; why do you pretend not to be and waste your time?" "Do you think I am clever?" said he. "Yes, I know it." "Well then watch me and I'll try." And from that day to this, with all his oddities, rustic manners and intense self-consciousness, Fothergill showed himself to be a man of great ability, power of work, perseverance, and originality in expression, if not in experiment. A great and successful student he never was at the university, even after he began to work; he had wasted too much time for that; but he took his degree in 1865 with credit, passed the colleges, and then, after graduation, with a loyalty that did him much credit, he went home to Morland to assist his father in the rough work of a general practice in the Westmorland hills. His father was a quaint specimen of the old school, square-headed with a firmly knit frame, without the enormous bulk of his son, who, with native shrewdness, much kindness and the wisdom of experience, attended the stalwart dalesmen and statesmen of his native valleys.—*Ed. Med. Jour.*

CHLOROFORM.—After fairly trying most of the agents in use I now exclusively employ chloroform, and having for years kept an accurate record of its administration, and giving it freely and without stint in all sorts of surgical proceedings, never refusing its benefits to a single patient, no matter what his condition or the operation to be performed,

I have never had an accident except once, when an epileptic took a fit while being put under its influence, and died with a full and fixed chest. For speed and energy, for ease of application and agreeableness, for rapid recovery with little subsequent trouble, and for safety when properly administered, chloroform is, in my opinion, unrivalled. That it needs no apparatus but a towel is a great point in its favor. This is the record of one who has administered it constantly almost from the time of its introduction into practice, and the statement in this sense may not be without its value. I never measure the quantity used, but exhibit in freely, and take the color of the lips and the respiration as my chief guides. Making the patient count at the beginning of the administration is a most valuable aid; and Nélaton's inversion of the body with artificial respiration is, I think, the surest mode of resuscitation in danger from failure of the heart. A minute is about the average period for inducing insensibility; and it is very rare, if proper precautions are taken in the way of preparation and after management, to have any sickness. There is little doubt that "nervous" persons and those who are intemperate in the use of alcohol, tobacco, and narcotics, and also epileptics, require special care. Over-saturation from the too frequent renewal of chloroform induces, in my opinion, the chief after-trouble.—Dr. McLeod in *Brit. Med. Jour.*

THE MECHANICAL TREATMENT OF ERYSIPELAS.—The methods heretofore employed in the treatment of erysipelas may be divided into the medicinal and the operative. The former is, of course, the older, and it is to Kraske that the more modern method of scarification, the operative method, is attributed. He did not originally employ multiple scarifications in order to render more effectual the action of antiseptics locally applied, as was done later, but rather to relieve tension and to give exit to the septic fluids. Riedel modified Kraske's method by making incisions two or three inches in length on the borders of the erysipelatous area, instead of multiple scarifications in the diseased part itself. Both these methods have given good results, but they have some serious disadvantages. The incisions cannot be made on the face or other exposed parts, on account of the disfiguring scars which remain, and even when the disease is on the body, it is no light matter to the patient to be cut so often and in so many places.

A new method, called by the author the "mechanical" method, is proposed by Dr. Anton Woelfler, in an article published in the *Zeitsch. f. Ther* of July 15, 1888. He was led to its adoption from a consideration of Barwell's plan of covering the erysipelatous area with white paint. He found, however, that simply painting the part

was not sufficient, but that it was necessary to cover the diseased skin with some waterproof material retained by a bandage. Further experience showed him that, when the bandage became loose, the erysipelas was very apt to spread, and he then adopted the practice of sealing the covering with traumaticin, a solution of guttapercha in chloroform. This answered the purpose of keeping the disease within bounds very well, as a rule; but in certain parts, where there were many inequalities of surface and where the skin was very movable, the erysipelas would occasionally escape from under the protective, necessitating an extension of the traumaticin dressing. The author then resorted to strapping with adhesive plaster, and had no further trouble. He reports over twenty cases successfully treated with the traumaticin or adhesive plaster. The disease process was confined to the area covered by the dressing, the temperature speedily fell and the patient made a rapid recovery.

Dr. Woelfler regards the action of the compressive dressing as a purely mechanical one in preventing the invasion of new territory by the pathogenic cocci. It is probable, he says, that the microbe soon exhausts the material for its sustenance in the skin, and, unless it can spread to the neighboring healthy parts, it quickly dies. The operative methods prevent this spread by dividing the small vessels in the skin, thereby producing extensive capillary thrombosis and the pressure of the traumaticin or adhesive plaster exerts a similar restraining influence.—*Ed. Med. Record.*

ANTISEPTIC PRECAUTIONS IN INTERNAL URETHROTOMY.—Attention was drawn to the fact that this operation had been advocated for many years in certain cases of stricture which do not yield readily to dilatation, yet its principles had never been generally accepted by surgeons. He thought this was due partly to the fact that its results were not supposed to be good, and partly to the dangers of the operation itself. As to its results, he said it was often urged that the worst strictures were always those in which urethrotomy had been performed. Of course this was perfectly true, but it would be fairer to state that it was only the worst strictures that were submitted to urethrotomy. If strictures were neglected after the operation, they, of course, recurred, and this gave a certain currency to the idea that it was the internal urethrotomy that had made them relapse. The dangers of the operation, he said, were dependent upon septic fever, and this depended upon either self infection from a septic urethra or on dirty instruments. The latter source of infection could be easily guarded against by the thorough cleansing of instruments and catheters, whilst the purification of the urethra was no easy matter. To effect this, however as far as possible

the urethra should be irrigated with sublimate (1 in 2000) for several days beforehand, and, upon the stricture having been divided, the bladder should be washed out with a similar solution, and then with hot water at a temperature of 105° F. Afterward, a catheter should be tied in for twenty-four hours. By this means the urine came very little into contact with the urethra, and septic infection was avoided. Fifteen cases were related in which the plan had been successfully tried by the author, and he alluded to some in which the plan had been suggested to other surgeons.

Mr. Swinford Edwards, in discussing Mr. Clarke's paper, said that in the last six internal urethrotomies which he had performed he had not only carried out the suggestions of Mr. Bruce Clarke, but had administered boracic acid before the operation, and for a few days after, with a view of sterilizing the urine, as suggested by Dr. Palmer. In none of these cases did urinary fever supervene; but, brilliant as was internal urethrotomy, he believed that the time was soon coming when it would be almost, if not entirely, supplanted by electrolysis for strictures in the deep or fixed urethra which were unfitted for the simple treatment by dilatation.—*J. Bruce Clarke in Lancet.*

THE THERAPEUTICAL VALUE OF SALOL.—According to the most recent observations the principal effect of the administration of salol is to produce a marked and immediate remission of the pain in cases of acute rheumatism. Its effect on the temperature, however, is less marked than that obtained by means of the salicylate of sodium, and the relief afforded is of much shorter duration. In fact, unless the patient is kept well under the influence of the drug the suffering returns with its original intensity. Salol is, to all intents and purposes, innocuous, and is said never to give rise to toxic symptoms. Even the discomfort which not infrequently follows the internal administration of salicylate of sodium has not been observed with salol. Hence whenever the use of the former drug is contra-indicated, salol will be found both useful and reliable. The best effects were obtained with it in the treatment of sub-acute rheumatism, and the patients soon learn to appreciate the relief which follows its administration. Salol is insoluble in pure water, but is slightly soluble in organic liquids of alkaline reaction. It is best given in the form of compressed tablets, pills, or in an emulsion.—*Brit. Med. Jour.*

APPLICATION FOR BURNS.—As an application for burns, *Centralblatt für Therap.* suggests the following:

R. Ol. olivæ, p. vj.
Salol, p. j.
Aquæ calcis, p. vj. M.

A convenient mixture for *Transient Anæsthesia* is suggested by the *Revue de Therap.*, May 1st, 1888:—

R. Chloroform,
Alcohol,
Aquæ Cologniensis, q. s. M.

In a case of *poisoning by aconite and belladonna*, reported by Dr. Bradley in the *British Medical Journal*, the patient recovered under the following treatment:—The hypodermatic injection of 0.1 gr. of apomorphine ten minutes after the accident, and the injection of ether to stimulate the heart.

A convenient formula for the administration of *Chloral with Morphia* is the following:—

R. Chlorat, hydrat., ʒij
Morphinæ sulph., gr. iss.
Syrup. aurant. cort., f ʒj.
Aquæ destillat., f ʒij. M.
Sig.—Dessertspoonful as directed.

A convenient method of *prescribing Tincture of Iron* in a mixture that is *not inky*, is the following:—

R. Tinct. ferri chloridi, f ʒij.
Potass. citrat., ʒij.
Tinct. gentian. comp.,
Elixir. simplicis, f ʒiij. M

Sig.—Two teaspoonfuls in water after meals.—*Coll. and Clin. Rec.*

RESECTION OF LARGE INTESTINE.—The patient was an enormously stout woman, weighing 250 pounds, and was seven months pregnant. An umbilical hernia of some standing came down and could not be returned. Her medical attendant put on a firm binder, and sent her into the Maternity Hospital, under the impression that the child was dead, and that she was about to miscarry. On arrival there her condition was at once recognized, and she was transferred to the infirmary. When admitted she was collapsed and *in extremis*. There was a large bright red tumor on the top of an enormous abdomen. An incision nine inches in length was made and the sac opened into. A gangrenous and burst intestine and gangrenous omentum were then found. The omentum, sac, and sloughs of cellular tissue were removed, and fifteen inches of gangrenous large intestine cut away. The two ends were left at the umbilicus, no attempt being made to unite them. The woman was got back to bed alive, and fed per rectum. Thirty-six hours after the operation she gave birth with one pain to a child, which lived for several hours. Afterwards the woman made an uninterrupted recovery. She still defæcated at the umbilicus, but Dr. Cotterill hoped to remedy that by a second operation. The part of intestine removed was from the transverse colon.—*Ed. Med. Jour.*

HYDRASTIS CANADENSIS.—Hydrastis can. has been recommended for all forms of chronic metritis, for inflammations invading the tissues around and in the walls of the uterus, for inflammations of the ovaries, and for uterine fibroids; the growth of the latter, it is maintained, being not only arrested, but in many cases have been found to undergo retrogression under the use of hydrastis. Hydrastis certainly does restrain the flow of blood in myofibromata, but in case of menorrhagia where the loss of blood depends upon a para- or perimetritis that its efficacy is most marked. It not only relieves the ovary-pain, but checks uterine hæmorrhages where there has been such evidence of inflammation outside and immediately around the uterus that intra-uterine medication could not have been attempted. The drug has in my hands had little or no effect upon uterine hæmorrhage dependent upon mucous polypi. I have found, however, that it soothes ovarian pain, acute or chronic, and checks the bleeding of the latter; it checks the bleeding of endometritis, and relieves that unpleasant pain which prevents the woman thus affected from either sitting or walking; it relieves and in many cases has arrested, the hæmorrhage due to puerperal metritis and chronic peritonitis; and in many instances it has relieved the headache so frequently complained of by women who are the subjects of chronic inflammatory affections in and around the uterus and ovaries.—*Lancet.*

THE TREATMENT OF PSORIASIS.—In spite of all the new forms of treatment introduced from time to time for the cure of psoriasis, some of which have their special application for certain cases, Vidal believes (*Jour. de Méd.* No. 10) that for the generality of cases we find in the oil of cade a superiority which forces us to come back to it again and again. By its use it would appear that recurrences are less frequent. The following formula is given:

- R. Glycerole of starch, 100.
- Green soap, 5.
- Oil of cade, 100. M.

This makes a soap much easier of application than the oil of cade alone. It should be applied each night and a flannel night-dress worn, which is only changed at long intervals. In the morning a bath with tar soap is to be taken; and, if desirable, the odor of the tarry preparation is removed with some perfume.—*Jour. of Cut. and Genito-Urin. Dis.*

TREATMENT OF TYPHOID FEVER.—In compliance with the request of the Sydney Board of Health, Dr. W. Pierce, medical superintendent of the Coast Hospital, has reported upon the treatment of cases of typhoid fever, of which the rate of

mortality during the first five months of the present year has been unusually low. Dr. Pierce, in his memorandum, states that, in cases received within the first ten days of the disease, calomel (three to five grains) is administered; and after that acetanilide, in five-grain doses, whenever the temperature exceeds a certain point (101° to 103°), up to six or eight times in the twenty-four hours. The effect of this is to cause a fall of temperature in about forty minutes, attaining its minimum in from two to four hours, with concomitant fall in pulse and respiration rates, with decrease of arterial tension and profuse sweating. The tendency to delirium is diminished, and there is "a remarkable feeling of ease and repose, which appears partly to depend on the production of a certain amount of peripheral anæsthesia." When the effect of the drug passes off, the temperature often rises with great rapidity. He considers this treatment to have many advantages over cold bathing. He has given the drug continuously for several weeks, and has not found it contra-indicated, even when there were cardiac complications. It renders the course of the fever milder, but it may not lessen the duration of the disease. In all cases where it is freely given there is liability to occasional cyanosis of extremities and face, with irregular pulse. Alcohol was given very sparingly, and generally only in cases of failing heart; and Dr. Pierce thinks that the prolonged use of alcohol is very injurious. He also describes the measures employed to combat the various complications. At the meeting at which the report was read the Board of Health passed the following resolution: "That the Board of Health desire to record their appreciation of Dr. William Pierce's very able report on the subject of typhoid fever, and the reasons which have led to the small mortality in the Coast Hospital, of which institution he is the medical superintendent, during the first five months of the year 1888."—*Lancet.*

ERYSIPELAS AND TUBERCULOSIS.—As the result of experiments, M. Solles concludes that erysipelas retards the evolution of experimental tuberculosis in the guinea-pig; the animals may survive twice as long as when erysipelas is not produced in them. This survival is all the more remarkable since experimental tuberculisation in the guinea-pig causes a general tuberculosis, which is much more rapid and much more serious than human pulmonary phthisis. The antituberculous action of erysipelas is double: it has a general influence, as shown by the prolongation of life; and it has a local influence limited to the erysipelatous area, causing the induration, ulceration, and lymphatic swelling due to the tubercle to disappear. This localised action, clearly antagonistic to tubercle, is of such a nature, argues M. Solles, as to encourage the search after some parasite which shall have

the power of destroying the bacillus tuberculosis.—*Lancet*.

CURE OF RUMINATION.—Dr. Alt reports a case at Hitzig's hospital at Halle. The digestion of albumen was extremely rapid, while the digestion of starch was checked, and amylaceous matter had to be returned to the mouth, in order to be properly mixed with saliva. The treatment consisted in large doses of alkaline medicines, washing out the stomach, giving albuminous food, and galvanizing the œsophagus. In a fortnight this condition (which up to the present has been looked upon as incurable) was completely removed.—*N. Y. Med. Abs.*

QUACKS PREFERRED.—The French medical press gives a curious instance of preference for quacks. A provincial magistrate received complaints that a certain person was practicing medicine illegally. The quack admitted that he practiced, but produced a diploma showing that he was Doctor of Medicine of the Faculty of Paris. He explained that while he was unsuccessful as a legitimate practitioner, as soon as he concealed the fact that he was a graduate, and posed as a quack, his fame began to spread, his income grew, and he saved and invested a considerable sum of money. He begged the magistrate to keep his secret, being sure that if it was known that he was a qualified man he would lose all his practice.—*Journal Med. Assoc.*

CHRONIC SYPHILITIC SALIVATION.—A. W. Furber, M. D., L. R. C. S. and L. D. S., says:—I have for a long time had a—gentleman—patient under my care for the disease of the teeth, and although my operations progressed favorably, I had many difficulties to contend with. The whole of my patient's teeth appeared to have a syphilitic taint, and with increased flow of saliva, amounting to chronic salivation. These were not the only troubles I had to surmount; but that which retarded my work most was the repeated recurrence of syphilitic ulcers of the sulcus and gums generally, which, though not painful to my patient, was still a source of considerable discomfort and militated greatly against the success of my operations. Iodia having come under my notice, I was inclined to give it a trial, and with the addition of a small proportion of liq. hydrarg. bi-chlor., taken daily before meals for a time—also used occasionally as a mouth wash—the salivation became normal, the mucous membrane assumed a more healthy state and the teeth generally looked like coming back to their original color.

DANGERS ATTENDING A TOILETTE OF THE PERITONEUM.—In reporting a case where a thirteen pound tumor of the right ovary was removed, the author called attention to the fact that the wash-

ing out of the peritoneal cavity with warm water was not devoid of danger, and often causes the stoppage of respiration. In two of his cases the respiratory act was re-established with difficulty; in another, death from failure of respiration occurred. He thinks this action is due to the direct effect of the water upon the diaphragm or solar plexus, and that is more apt to occur when the water is hot.

He advises, first, that the patient be placed in a semi-recumbent position, with the chest more elevated than the pelvis, in such a way that the "lavage" may be confined to the pelvis and lower abdomen, no water being able to reach the diaphragm; second, that the irrigating fluid should never be above the temperature of the body; third, that the state of anæsthesia should be carefully watched at the time of "lavage."—*Le praticien*, Sept. 3, 1888.

TO PREVENT RUST ON INSTRUMENTS.—It is said (*Med. Rec.*) that if steel instruments be immersed for a few moments in a saturated solution of potassium carbonate, they will be effectually prevented from rusting.

THE BALL IN HOXAWATTOMIE.

Dedicated to Prof. Vaughan, of Ann Arbor.

There was a sound of revelry by night,
And Hoxawattomie had gathered then
Her beauty and her chivalry, and bright
The lamps shone o'er fair women and brave men.
A thousand hearts beat happily, and when
The cream was served in a voluptuous ice,
Soft spoons made love to spoons that answered them again.
And everybody said, "My, but it's nice."

An hour passed on; all Hoxawattomie,
Disporting in the waltzes, felt a pang
Right in the midriff—could it be pie
Or, was it possibly, the peach meringue.
Perhaps the wormy chesnuts some one sang
On the piano, that had made them sick.
Whate'er the cause, certes, the entire gang
Desired a doctor, and desired him quick.

"On with the dance," the village druggist cried,
"No sleep till morn when youth and pleasure meet:
Of stomach ache no mortal ever died,
Let's chase the glowing hours with flying feet.
Hark! did ye hear the rattling in the street?
The doctor's carriage—can old foxy con
The lurking poison in a cream so sweet?
He can, he can, high Heaven, it's tyrotoxicon!"

And then there was a hurrying to and fro,
And gathering tears and symbols of distress,
And cheeks all pale that but an hour ago
Blushed at the tale of their own loveliness,
And there were sudden gripings, such as press
The very stuffing out of love's young dream,
And with a frantic universal guess
All shrieked; "It was the cheese-germ in the cream!"
—*Leonard's Medical Journal.*

THE CANADA LANCET.

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TORONTO, NOVEMBER, 1888.

The LANCET has the largest circulation of any Medical Journal in Canada.

ALBUMINURIA.

The fact that albumen is frequently found in the urine of persons who have, in the ordinary acceptance of the term, no kidney disease, is gradually becoming accepted by the profession as true. Doctors are very often worried by patients who have had the ill fortune to discover that their urine contains albumen, this being looked upon by the laity as a sure sign of "Bright's disease" and consequent early death. Their forebodings are all poured out to their attending physician, who must be strong indeed in the confidence of his patient if he can let him know that there is albumen in his urine, and yet convince him that he need not fear death from immediate kidney trouble.

The insurance companies almost universally reject an applicant who has this symptom, and, perhaps, with our present knowledge of what may be termed extra-renal or false albuminuria, and "physiological albuminuria," they are quite justified in so doing. At any rate, it is probable that a medical man would require to know well the standing of a practitioner who might recommend such an applicant for insurance if he, the first medical man, were personally responsible for the amount of the insurance policy issued.

The careful diagnostician will take into account the various conditions outside the kidney before he concludes that albumen, even in a considerable amount, means structural change in that organ.

The fact that he can truthfully say to his patient, who by some means has discovered that this dread substance is present, that it may not be from his kidneys at all, will be a great comfort to both physician and patient.

In the false albuminuria the proteid found in the urine is not true serum albumen, derived directly from the blood as in true albuminuria, but is the result of some inflammatory or ulcerative process going on in some part of the genito-urinary tract outside the kidneys, as, for instance, pus, which is indeed nearly always the chief factor in producing this spurious kidney disease. Such pathological conditions as urethritis, purulent catarrh of the bladder, pyelitis, and such less important and circumscribed morbid conditions as ulcerations, small glandular abscesses, cancer, tubercle, and various forms of neoplasm may furnish elements such as blood, pus, or debris which, either singly or combined, will give the albuminuric reaction.

The Germans speak of a "physiological albuminuria," which differs from the false species above accounted for; in which there appears to be a congenital deficiency in the power of the glomerular epithelium to resist the passage of albumen through it. The question as to whether, in such cases, there is any tendency to the development of renal disease can not be considered settled, though such authorities as Leube and Fürbringer consider, as does Moxon, perhaps, that a young man who has albumen in the urine, say only occasionally, and in the forenoon, should be a good risk for life insurance. Hilton Fagge states that both Fürbringer and Moxon detected hyaline casts in one instance of this physiological albuminuria, so that, says he, "casts cannot be taken as conclusive evidence of serious mischief in the kidneys."

Dr. Shepherd lately presented to a meeting of the Connecticut Medical Society, an elaborate statistical report on albuminuria (*Jour. Am. Med. Assoc.*), compiled from examinations made on supposed healthy men. He covers all the ground and gives his conclusions as follows:

"1. Albuminuria is much less frequent in the United States than in England, Stewart giving thirty-one per cent. as the general average, while ours, conducted on a larger scale, show but two per cent. 2. The brain workers, rather than the muscle workers, show the largest percentage of

albuminuria. 3. The urine of perfectly healthy people rarely shows albumen after food, while those who suffer from albuminuria and oxaluria are very liable to show it. 4. Privation, scanty food and clothing, with insanitary surroundings, increase the liability to albuminuria. 5. Cold bathing does increase the liability to albuminuria, though more notably so in the case of dyspeptics. 6. Severe exercise increases this liability in a very moderate degree. 7. In the large majority of cases albuminuria is not associated with kidney disease. 8. In the matter of life insurance, albuminuria should be looked upon as a symptom only, and acceptance or rejection of the risk should depend on the gravity of the cause. 9. The existence of any such condition as physiological albuminuria is extremely improbable."

The doctor will be supported, we think, by the majority of the profession in protesting against "physiological albuminuria." The term is unscientific, and the idea does not accord with what we have been taught to consider physiological processes, notwithstanding the eminent authorities mentioned above.

VACCINATION AGAINST CHOLERA.

Dr. Gamaleia, of Odessa, has been experimenting for a considerable time on the action of the cholera bacillus upon animals. Lately at a meeting of the Paris Académie de Médecine, M. Pasteur read a communication from him (*Br. Med. Jour.*), in which he states that he has discovered a method of vaccination, which will be to cholera what Jenner's vaccination is to small-pox, namely, preventive of the disease. He found that, contrary to Koch's idea, the cholera germ is inoculable in the lower animals, and that its virulence becomes very greatly intensified by conveying it to pigeons after it has passed through the guinea-pig. "After passing through several pigeons, the microbe acquired such virulence that one or two drops of the blood of an inoculated bird sufficed to kill healthy birds in from eight to twelve hours, whilst an even smaller dose proved fatal to guinea-pigs. If the virus obtained after passing through pigeons is cultivated in nutrient broth and is afterwards exposed to a temperature of 120° C. for twenty minutes, it will be found that there is left in the sterilized culture a toxic substance which produces

characteristic phenomena in animals. If 4 cubic centimetres of the sterilized broth be injected into a guinea-pig, the animal's temperature gradually falls, and death takes place in from twenty to twenty-four hours. Pigeons die in the same way, but require a larger quantity, namely, 12 cubic centimetres injected in one dose. On the other hand, if the same quantity of the sterilized fluid is injected, but in two or more doses given at intervals of a day or two, they do not die, but are found to have become refractory to cholera to such an extent that even half a cubic centimetre of the most intense virus (the blood of an inoculated pigeon) is not fatal to them. Guinea-pigs are still more easily vaccinated by injecting the sterilized broth in doses of 2 cubic centimetres once or twice repeated. Dr. Gamaleia has found this *chemical* vaccine of unfailing efficiency and perfectly innocuous. He admits that he derived the idea of it from a paper of M. Pasteur's on chemical vaccine of rabies, and from Dr. Roux's experiments on septicæmia." Dr. Gamaleia shows his full trust in the efficacy of thus preventing the attack of cholera, by offering to test it on himself, and afterwards going to regions where cholera prevails in order to show whether his discovery will be in man, all he thinks it will be. M. Pasteur's laboratory is to be placed at the Dr.'s disposal, for the purpose of carrying on his experiments.

SIR MORELL MACKENZIE AND THE GERMAN SURGEONS.

It is a pity that so great a man as Sir Morell Mackenzie should have stirred up so unseemly a controversy as the one going on between him and the German surgeons. His fame was surely established on a sufficiently firm basis to enable him to pass over in silence their ungracious, unprofessional and sometimes contemptible remarks. Not only is this generally recognized as true, but it is believed that his hands have been tied by persons of high estate, who, for reasons not entirely understood, have controlled Sir Morell's actions, and have said when he should speak if not indeed what he should say, or rather what he should *not* say. And knowing all this, as well as that no amount of reasoning could convince the prejudiced Germans that he was right and their own countrymen were wrong, would it not have

been more seemly and more politic to have suffered in silence, secure in the esteem and admiration of his own countrymen, and of the whole world, Germany excepted? How many a professional man of low degree has learned thus "to suffer and be strong" under undeserved blame, obloquy and persecution even, only those who are in the profession know.

The question of damages for the learned German professors seems to be *in nubilus*, but we have not heard, nor perhaps shall we soon hear the last of this quarrel.

The surreptitious acquisition of the proof sheets by some smart journals is another phase of the affair which does not reflect credit upon their management; and indeed the whole matter, from beginning to end has, we believe, been a mistake, and one which may be far-reaching in its results, and out of which no good can possibly come. The handling of the German physicians was so rough, that they would have been more than human if they had not struck back with all their power and venom even, and it yet remains to be seen which of the parties to the controversy have the best of it, if indeed any decision ever be reached. But perhaps our readers have had a surfeit of the subject. Certain it is that the daily papers have not spared space to place the points of the contest before the public, and no doubt every one in the profession at least, has his own views on the subject. We shall therefore forbear inflicting our readers, further than this notice of a subject which is attracting so much attention at the present time.

THERAPEUTIC NOTES.

For insomnia and restlessness of typhoid at night, Prof. Janeway recommends morphia sulph. $\frac{1}{2}$ gr. given in hot milk at ten o'clock in the evening, and he has found this of more service than any other hypnotic.

For diarrhœa of typhoid, or in fact any diarrhœa, he strongly recommends salol, thus:

R.—Salol, ̄ij.

Divide in chart No. xii.

Sig.—One every four hours.

This in its passage through the alimentary canal is converted into salicylic and carbolic acids in the intestines, and thus acts as a direct anti-

septic and prevents sepsis of the bowels, and in his experience, is the best internal antiseptic we can use; it is also claimed that it has a decided empirical effect in checking diarrhœa. A case of violent diarrhœa was recently admitted to the hospital, and the first day the movements numbered 24; salol was then prescribed and the second day the number was reduced to three, and on the third day no movement.

Prof. W. H. Thomson begins the treatment of every case of typhoid with bismuth and pepsin and continues it throughout the whole course of the disease, claiming that as the stomach is the seat of parenchymatous degeneration, gastric digestion needs assistance, which is obtained by the pepsin, and bismuth controls gastric disturbances and irritations. During the course of all fevers, the entire alimentary secretions are checked, and thus the system is deprived of its natural antiseptics and as a result fermentation is set up, which causes the diarrhœa. Here the indication is to give intestinal antiseptics and he prefers bismuth, as having given him the best results.

R.—Bismuth subnit., ʒij
Pepsin, ʒj

M. et divide in chart No. xii.

Sig.—One t. i. d.

For vomiting of pregnancy, very good results have been obtained from ʒss-ʒj doses of fld. extract viburnum prunifolium. It has been extensively tried in Bellevue and other city hospitals. In a series of eight cases, in which it was recently given in ʒj doses, a uniformly successful result was obtained. It seems to have a direct action on the uterus itself, thus preventing the reflex irritation which results in vomiting. In some of the hospitals all other remedies have been discarded.

For uræmic dyspnœa, Dr. Roosevelt recommends cobalt nitrite in $\frac{1}{4}$ grain doses, repeated every hour, until the characteristic nitrite headache is produced, and then discontinued.

For the same affection and for urgent uræmic symptoms of all kinds, Dr. Porter gives $\frac{3}{4}$ grain of pilocarpine hypodermically, and claims to get rapid relief. He believes that the drug acts as a vasomotor stimulant and increases blood pressure, and that the lethal effects of the drug are due to the

usage of too small a quantity, which acts in a directly opposite manner, and paralyzes the vaso-motor system and thus causes lowering of blood pressure. Dr. Porter relates several interesting cases, but his views have not been adopted generally.

THE LESLIE FUND.

The following letter, sent us by Dr. White, of Hamilton, explains itself:

37 Main St. W., Cor. Park, Hamilton,
20th Oct., 1888.

JAMES WHITE, Esq., M.D.,

8 Cannon St., Hamilton.

DEAR DOCTOR,—Allow me to thank you for \$461, which has been handed to me by you, for the purpose of contributing towards defraying the legal expenses incurred in defending the persecution lately raised against me. While I regard this practical proof of feeling as given in support of a cause, rather than personal, I am at the same time deeply sensible of the heartfelt sympathy manifested to me by a great many of my professional friends, not only in this city, but elsewhere.

I thank you personally for all your kindness, and thus through you, those who, regardless of their own time and trouble, espoused my cause and assisted me in it with their wise counsel, their sympathy and their moral support.

I am, yours sincerely,

JAMES LESLIE.

THE USE OF CALOMEL IN PNEUMONIA.—Dr. McManus, in the *Medical Record*, gives the result of the treatment of sixty-two cases of pneumonia by early large doses of calomel. His statements are rather startling, especially the dose, which would generally be considered heroic. He says:—

My method is to give from thirty to sixty grains of calomel at the first dose; and in every case, unless it be given too late in the disease, it will bring down pulse, temperature and respiration in from six to eighteen hours.

I do not believe it to be of any use to give it after the fourth day of the disease; and I think at or near the crisis it will do harm. I cannot help thinking that if I had been able to give the next to the last case I have described the calomel two days earlier, he would not have run on to fibroid phthisis. And I cannot help believing that I

diminished that man's chances to whom I gave the twenty grains near the crisis. Further, it does not seem to act so well in cases where the patients have been chronic drinkers. It does them good—diminishes pulse, respiration and temperature—but their convalescence seems to be much slower. It may be urged that all of my cases were not true pneumonia; but I think I could hardly make a mistake in all of sixty-two cases. I have given it, with good effect, in two cases of pneumonia occurring in the puerperal state; and I have given given it in one case of pneumonia in a pregnant woman, and had the pleasure of seeing her recover promptly without aborting. I afterwards delivered her of a healthy male infant, three months after her attack of pneumonia.

DEATH WITHOUT DISEASE.—Stories of death having taken place without injury to the organism, and simply by the effect of the imagination have been long familiar, but have been regarded as more or less apocryphal. That of the negro who was condemned to be bled to death by a sham council, and who without being at all injured was led to believe he was bleeding by warm water being poured over his arm, and by the remarks of the by-standers, he being blind-folded, is perhaps typical of all such cases. It is said that the man *actually* died. He was told he was dying, and when the beholders lifted the bandage from his eyes they were horror-stricken to find that he was indeed gone.

In this connection the following from the *Med. and Sur. Rep.* will be of interest:—Boston papers tell of "the singular death, at Danvers, of Miss Emma Felch. She was taken ill some months ago and, from the fact that her mother died of cancer, she became possessed with the idea that her sickness was from the same cause. Her physicians could find no indication of cancer, but she asserted she had one, and located it. She refused food, saying it distressed her. At her desire, after she died, an autopsy was held, and no cancer could be found. It was decided that her disease was purely sympathetic."

This points a moral as to faith cure, the use of infinitesimal doses, etc.

THE CAUSE OF ECLAMPSIA AND ALBUMINURIA:—The etiology of this dread condition of the pregnant woman may be considered as yet, *sub judice*.

Of the many theories advanced none seem to account for all the facts observed under them, and so cannot be looked upon as satisfactory. Santos, *Archiv für Gynak.*, has made a study of fifty-three cases in Buda-Pesth clinic, and has concluded from such study that the albuminuria is caused by a reflex irritation of the sympathetic and renal nerves due to the increasing distention of the uterus, and the irritation of the uterine nerves by this distention, and subsequent contraction. He considers it physiological in pregnancy, and diagnostic of pregnancy. This accounts for the more frequent occurrence of albuminuria in young women, in whom reflexes are most easily excited. Any condition heightening the general reflexes favors albuminuria. Santos regards eclampsia as an "acute peripheral epilepsy," whose genetic zone is the uterus. Upon this basis he readily explains the action of narcotics, and rare cases in which eclampsia occurs without albuminuria.

ERGOT IN INCONTINENCE OF URINE IN CHILDREN.

—A writer in the *Med. Analectic*, says: I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children; and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any conditions of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant from one to three years old, 5 to 10 drops; and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued uninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased.

LACTIC ACID IN THE DIARRHŒA OF TUBERCULOSIS.—We have recently noted the good results obtained from lactic acid in certain diarrhœas of children. It has been found valuable also in the diarrhœa attending phthisis. The idea seems to have been suggested (*Lyon Méd.*) by the good results obtained by the administration of this drug in other tubercular troubles, notably ulcer of the larynx and tongue. It has been found necessary

to administer it in doses of from 90 to 120 grains in divided doses during the twenty-four hours. The gastric disturbances and roughness of the teeth caused by this amount may be obviated by adding half a drachm of chlorodyne to the solution. Excellent results have been reported in nine cases.

FOR SEAT WORMS.—The following mixture is said (*Med. News*) to be highly efficient:

R.—Tinct. rhei. gtt. iij.
Tinct. zingiberis gtt. ij.
Magnesii carbonatis. ʒ iv.
Aquæ ʒ iij.—M.

This amount to be given three or four times daily, according to the effect produced.

The rhubarb may act as a vermicide or as an agent which simply detaches the worms. In either event it causes the expulsion of great numbers of them and induces regular bowel movement.

BIRTH PALSIES.—In a clinical lecture by Gowers (*Lancet*) birth palsies are divided into peripheral and cerebral. The former are generally of the facial nerve and of the nerves supplying the arms. They are not of a severe nature and recover spontaneously. Cerebral palsies occur most frequently after first and difficult labors. Extravasation of blood over the cortex, or at the base of the brain, is the usual condition, resulting in death or tedious recovery. In diagnosis, symptoms of severe injury or defective development of the nervous system are present, without history of definite onset. Chronic spinal disease is rare in children. In birth palsies, reflexes are excessive; in muscular diseases, they are not increased. Prognosis: tendency to slow improvement. Treatment by drugs, by electricity and tenotomy is useless. Rhythmical gymnastic training, with hygiene, is of value.

PUERPERAL PERITONITIS, DRAINAGE.—Dr. Woodword (*Boston Med. and Surg. Jour.*) reports a case of puerperal peritonitis, which came under his care about six weeks after labor. There was a large amount of pus in the abdomen, an abscess having burst into the abdominal cavity thirty-six hours before labor. He performed laparotomy, evacuated a large amount of offensive pus, and irrigated the cavity with hydronaphthol, 1-1100, introduced a drainage tube and dressed the parts antiseptically. He frequently irrigated the cavity with warm water. The patient recovered.

NASAL ECZEMA.—This affection is said (Herzoy, *Archiv. Fur. Kind.*), to be found in persons with a strumous diathesis. Chronic rhinitis is present in all cases. The junction of the skin and mucous membrane is most attacked. The disease is peculiarly intractable when it attacks the inner side of the point of the nose. It is frequently followed by furuncles. Erysipelas frequently accompanies it. The crusts should be softened and removed. Yellow mercury oxide ointment, or equal parts of lead ointment and vaselin accurately applied to the affected part, give good results. The chronic rhinitis also needs treatment.

FOR CHRONIC PHARYNGEAL CATARRH.—The following is recommended (*Brit. Med. Jour.*) for the above complaint :

R. Menthol (in fine powder), ʒ ss.
Ammon. chlorid., ʒ jss.
Pulv. acid. boric., ʒ j. M.

Pinches of this may be taken frequently into the nose in the form of snuff, and drawn back into the throat, this method being especially indicated when there is atrophic rhinitis (ozæna) also present.

AMENORRHŒA.—Professor Parvin prescribes (*Am. Med. Dig.*) the following in some cases of amenorrhœa in anæmic subjects, and the result, in many cases, has been gratifying :

R.—Ferri sulph. ex.,
Terebinth. albæ,
Pulv. aloes, āā gr. j.—M.

Ft.—Pil. 1. Sig.—One t. d.

The quantity of aloes may have to be reduced.

NEW DRUGS.—Dr. W. Ellis, in the *Am. Pract. and News*, in a paper on "New Drugs," says that antipyrine in doses of grs. x to xx, or antifebrin in doses of grs. iii to x, will relieve the worst case of neuralgia or migraine, in from twenty minutes to one hour, without any bad after effects. Another use of these drugs is in the treatment of chorea, which is cured in one quarter or one eighth the time required by the usual remedies. M. Legroux treats all his cases of chorea by gr xv. t.i.d. Dr. Thor, of Bucharest, says that vii to xxx grs. of antipyrine, just before retiring for the night, is superior to any other method of treatment for nocturnal enissions and sexual neurasthenia, and Dr. J. P. Griffith, of Philadelphia, gives antipyrine the first place in the treatment of whooping-cough.

SAPRÆMIA.—Dr. Wm. S. Gardiner in the *Med. Reg.*, says that four objects should be kept in view in the treatment of Sapræmia, viz.: (1). To keep the cavity of the uterus clean, which he does by antiseptic intra-uterine injections of corrosive sublimate, 1 in 4000, at the temperature of the body; and by keeping in a drainage tube when the temperature is high. (2.) Secure tonic contraction of the uterus by xv to xx ᵐ doses of fl. ext. of ergot every two or three hours, the dose being regulated by the effect. (3.) To control the temperature, and he finds antipyrine the most suitable remedy to reduce excessive body heat. (4.) To support the patient by nutritious diet.

DELIRIUM TREMENS.—Dr. L. B. Anderson, V. a., *Gaillard's Med. Jour.*, in writing of the pathology and treatment of delirium tremens, refers to cases not affected by hypnotics, as opium, potassium, bromide, etc. These are cases resulting from very excessive, prolonged drinking, and which result in exhaustion and collapse from the excessive and long-continued cerebro-spinal irritation. They are laboring under torpid liver and distension of the gall-bladder, with black, viscid, acrid bile. A twenty gr. dose of calomel relaxes the ducts, enables the bladder to discharge its contents, excites the functions of the acini, relieves the blood of its vitiated freight, and unloads the bowels, and the patient becomes enabled to sleep in a few hours. A teaspoonful of cayenne-pepper, and then x grs. every hour, while awake, gives the same result in the majority of cases.

DIPHTHERIA AND CROUP.—Dr. Galicier, of Versailles (*Am. Pract. and News*), lauds the use of sulphuret of calcium, in large doses, in the treatment of diphtheria and croup. He also associates digitaline and quinine with it. To a child one year old, he gives sulphuret of calcium from one to two centigrams per hour, digitaline and the arseniate of quinine from one-half to one milligram per hour. For a child of two years, sulphuret of calcium two to four centigrams per hour, digitaline and arseniate of quinine from one to two milligrams. After the age of 4 years, sulphuret of calcium five centigrams, digitaline and the arseniate of quinine from one to two milligrams. They are administered in the form of granules. A case that is cured in 8 to 15 days, by the ordinary treatment, is cured thus in two or three days.

DYSENTERY.—Surgeon Major Dobie, of India (*Am. Pract. and News*), treats dysentery by small doses of ipecacuanha, with Dover's powder and cannabis Indica, repeated often enough to produce nausea, and to check the irritability of the rectum and the tenesmus. Locally, he uses an enema of nitrate of silver, consisting of six grs. to six ounces of water. The patient may retain it or not; as a rule he does not. One enema generally allays the symptoms for the day. The bowels have rest, the stools become feculent, and a warm bed and diet complete the cure.

LOTION FOR PIGMENT SPOTS OF THE SKIN.—The following is given by Unna (*Le Clin.*) as useful:

Oxide of bismuth,
Rice starch, āā 2 grs.
Kaolin, 4 grs.
Simple glycerole, 10 grs.
Distilled rose-water, q. s.

Put this mixture on the pigmentary spots and let it dry. Bathe carefully before making the application.

SALICYLATE OF BISMUTH.—This remedy has been found (Ehring, *Archiv. Für. Kind.*) very useful in the gastro-intestinal catarrhs of children depending upon fermentation. It combines the astringent properties of bismuth with the disinfectant properties of salicylic acid. The formula used by Ehring is:

R.—Bismuth salicylat., ʒj.
Glycerini, ʒss.
Aq., āā ʒiv.—M.

S.—ʒj, more or less, according to age, every two hours.

PIGMENTATIONS IN PREGNANCY.—The following is said to be useful (*Jour. Cut. and Genito-Urinary Dis.*):

R.—Cacao butter,
Castor oil, āā ʒiiss.
Oxide of zinc, gr. v.
White precipitate, gr. ij.
Essence of rose, gr. ij.

M. S.—Apply morning and night.

REMOVAL OF PROF. OSLER.—Dr. Wm. Osler has resigned the Chair of Clinical Medicine at the University of Pennsylvania, having accepted that of Practice of Medicine at the John Hopkins

University, of Baltimore. This change will, we trust, be as satisfactory to the learned professor as he can wish. His many Canadian friends congratulate him, and wish him God speed in his new field of labor.

The management of the Medical Library Association are to be congratulated on having brought their labors to a completely successful issue. The rooms at the College of Physicians and Surgeons, will be open on and after Nov. 1st from 10 to 1 a.m., and from 2 to 6, and 7.30 to 9.30 p.m. The supply of literature already on hand is considerable, consisting of about 1000 volumes and 5000 pamphlets; while there will be found on the tables eighteen or twenty weekly or monthly journals on various subjects, connected with the science of medicine.

CONVULSIONS IN CHILDREN CAUSED BY OPIUM.—It has been proved (Roth *Bull. Méd.*) that very small doses of opium may cause fatal convulsions in infants. The foetus may be affected, as shown by Roth, who gives a case in which a pregnant woman distinctly felt almost unendurable foetal movements after rather large doses of opium. He thinks therefore that opium should not be used to prevent abortion.

FOR INFANTILE CONVULSIONS.—The following mixture is recommended (*Jour. de Méd. de Paris*). Tincture of musk, tincture of castorium, sulphuric ether, each ʒ2 minims; paregoric, 8 minims. Six drops are given each hour in a teaspoonful of sugared water or a teaspoonful of milk. The doses are less frequently repeated as improvement takes place.

HICCUGH.—It is said that the best means of stopping hiccough is to take a very deep inspiration and hold the breath as long as possible. If the breath can be kept past a rising singultus the trouble is, as a rule, over.

MR. LAWSON TAIT read a paper at the Brit. Gyn. Society, in which he brought forward such an amount of evidence to show that removal of the ovaries and appendages has no effect on the sexual appetite, so that surgeons need not now hesitate, on this ground, to remove them when they are obviously diseased.

Books and Pamphlets.

A TEXT BOOK OF PHARMACOLOGY, THERAPEUTICS AND MATERIA MEDICA. By T. Lauder Brunton, M.D., D.Sc., F.R.S., etc. Lecturer on Materia Medica at St. Bartholomew's Hospital, etc. Adapted to the U. S. Pharmacopœia by F. H. Williams, M.D. Third edition. Philadelphia: Lea Bros. & Co., 1888. \$5.50, cloth; \$6.50, leather.

This classic on materia medica has so rapidly run through its second edition as to leave little time, says the author, for improvement. Suffice it to say that it is incomparably the best and most scientific work on the subject in the English language, or, so far as we know, in any language. It would be futile to attempt to point out the many new excellencies of this most excellent book, but we may simply mention that the physiological action of drugs is illustrated by new engravings in such a way as to render the author's meaning clear; that the action of microbes upon the living organism is presented fully and yet tersely, and that the latest views regarding the action of anæsthetics on the nervous system have been introduced. Dr. Brunton is so well and so widely known as an indefatigable worker in the domain of pharmacology that any further notice would be superfluous.

A DIALOGUE AGAINST THE FEVER PESTILENCE. By William Bullein, from the edition of 1578, collated with the earlier editions of 1564 and 1573. Edited by Mark W. Bullein and A. H. Bullein. Pp. 145, paper, 10s.

AND

THE ANATOMIE OF THE BODIE OF MAN. By Thomas Vicary, Serjeant of the Surgeons to Henry VIII., Queen Mary, etc.; Master of the Barber-Surgeons Company, etc., etc. The edition of 1548, as re-issued by the Surgeons of St. Bartholomew's in 1577. Edited by F. J. Furnivall, M.A., etc., and Percy Furnivall. Pp. 336, paper, 15s. London: N. Trübner & Co., 57 and 59 Ludgate Hill.

These works of the Early English Text Society are extremely interesting to the medical man, illustrating, as they do, the condition of medical science at the time they were written. No one need expect to gain much knowledge of the germ theory of disease, or of laparotomy from their perusal, but we guarantee that many a pleasant half hour will be spent by any professional man

into whose possession they come, in conning the quaint sayings and conceits of those old worthies of medicine.

MANUAL OF OBSTETRICS, GYNÆCOLOGY AND PEDIATRICS. By Kenneth N. Fenwick, M.A., M.D., M.R.C.S. ENG., etc.; Prof. Obstetrics and Diseases of Women and Children, Royal College of Physicians and Surgeons, Kingston; Surgeon to the Kingston General Hospital. Pp. 267. Cloth, \$2. Toronto: Carveth & Co.; Kingston: Henderson & Co.

In the preface the author says:—The object of this book is to furnish an outline of the main facts in Obstetrics and the Diseases of Women and Children, and includes a synopsis of the physical signs of Diseases of the Chest and Diseases of the Skin. It is really a syllabus of my sessional lectures, with such additions and alterations as I thought would make it more valuable for reference in emergencies. While seeking to meet the wants of medical students in general, and my own class in particular, the work does not pretend to originality, nor does it aim at supplanting the larger text books on the subject, which are not always within the reach of every medical student.

IN January, 1889, there will be issued from the press of A. L. Chatterton & Co., New York, a new quarterly, entitled "The Journal of Ophthalmology, Otology and Laryngology." It will be edited by George S. Norton, M.D., assisted by Charles Deady, M.D. Subscription price, \$3 per year. The Journal will be devoted to original articles upon the three specialties.

THE FIFTEENTH ANNUAL REPORT of the Secretary of the State Board of Health of the State of Michigan, for the year ending June 30th, 1888.

Contains much useful information. The State Board of Health is to be congratulated in having so scientific and earnest a worker as Dr. Baker for its Secretary.

Births, Marriages and Deaths.

On the 29th October, Dr. Alexander Forin, to Winnifred Fair, both of Collingwood.

At Newmarket, Ont., Oct. 15th, Stanley Scott, Esq., M.D., aged 50 years.