

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

The LANCET has the Largest Circulation of any
Medical Journal in Canada.

Original Communications.

LARYNGEAL AND TRACHEAL TUBERCULOSIS.—THE IMPORTANCE OF THEIR EARLY RECOGNITION AND TREATMENT.

BY WALTER F. CHAPPELL, M.D., M.R.C.S., ENG.,
Surgeon to the Manhattan Eye, Ear and Throat Hospital,
New York.

*Mr. President and Gentlemen of the Ontario
Medical Association:*

It has been truly said that just in proportion as the diagnosis is made early, in any form of tubercular disease, just so much greater are the chances for recovery. We must all be more or less familiar with the arrest of pulmonary tuberculosis in its primary stages under favorable climatic influences and suitable medicinal treatment. Tubercular joint and glandular affections are also successfully treated in the early stages of their invasion. Our ever-increasing knowledge of the ætiology and methods of dealing with this field of medicine and surgery, stimulates observers to combat the affection in every situation and in all its various stages. The importance of the more hopeful spirit, now entertained, regarding the prognosis of tubercular affections, will be more fully realized when we appreciate that one of our greatest authorities wrote, that, in his opinion, a cure of laryngeal tuberculosis would never be made. This would indeed be a gloomy prospect, as no case of pulmonary tuberculosis, with a laryngeal invasion, can possibly hope for improvement, unless the laryngeal symptoms can be arrested. The object of this paper is not to deal with the various theories regarding laryngeal and tracheal tuberculosis, but to draw attention to some of the early symptoms, especially those which may be easily recognized without the skill or experience of a

specialist. The percentage of laryngeal to pulmonary tuberculosis cannot be readily estimated, excepting in sanatoria and hospitals, in which this class of cases receives special attention. An examination of the reports of some of the institutions on the Continent, place the percentage as high as thirty.

Dr. Irwin H. Hance, of the Adirondack Cottage Sanitarium, says: "In replying to your question, 'Do you consider that 30 per cent. of tubercular patients develop laryngeal tuberculosis?' I would state, that such has not been my experience. In looking over my notes for the past five years, I should say that 20 per cent. would more nearly represent the percentage among the patients whom I see. This embraces all cases, those who are doing well, and those who are practically hopeless; inasmuch as all cases seen in this part of the mountains are under the best climatic influence, this may account for the low percentage, and I can well understand how, under less favorable surroundings, the number may be considerably increased."

While it is not definitely stated in text books that there are two forms of laryngeal tuberculosis, a more or less acute, and also a chronic, form of tuberculosis of the larynx is recognized by most observers. Instances of the first class are considered by some to receive their bacillary infection through the mucous membrane of the larynx, while it is undergoing some pathological change, or from a general tubercular invasion. The symptoms of these patients are active and pronounced from the first, and give every evidence of a virulent infection which usually proves fatal in from six weeks to six months. The so-called chronic form of laryngeal tuberculosis, in all probability, receives the infection through the lymph channels, and frequently accompanies a systemic invasion, evidenced in some of the visceral organs. These deposits are insidious in their onset and develop slowly, with no marked symptoms until the affection has made considerable progress.

Diagnosis of Laryngeal Tuberculosis.—The means at our command for making a diagnosis are subjective and objective. The former are, of course, only contributory to the latter, and their chief value is in calling attention to the necessity of a laryngoscopic examination.

Subjective symptoms are, odynphagin, dyspha-

gia, dysphonia, dyspnoea, cough and laryngorrhoea. One of the most frequent of these is pain on swallowing, which is often first noticed after taking fruit or anything of a sour character, such as vinegar, wine, salad dressing, etc. The pain may be very trifling at first, as the situation of the tubercular deposit decides its intensity and character. The laryngeal surface of the epiglottis, above the cushion, is one of the most frequent seats of deposit, but ulceration in that situation produces little pain. If, however, the ulceration is on the margin of the epiglottis, painful deglutition begins at once and is very severe. Two patients recently under my care illustrated these conditions very markedly. One of them, a Mr. T—, went to Florida early in January of this year; soon after his arrival, while eating an orange, he felt a slight pain each time he swallowed the juice. This continued during his stay of four months. He called on me the last of May, and stated the character of the pain, and that it was limited entirely to swallowing fruit. A laryngoscopic examination showed a large ulcer on the epiglottis just above the cushion. The drawing, which I pass around, shows the condition very well.

The second patient had a small ulcer in the right margin of the epiglottis and suffered great pain every time he partook of solids or liquids.

The continuous and usually progressive character of tubercular laryngeal pain is also diagnostic. Another suggestive symptom in pulmonary tuberculosis, of a coming laryngeal invasion, is excessive secretion of frothy, watery mucus. Increased cough of a laryngeal character, produced by a tickling or scratchy sensation, may be an early warning. Constant or intermittent hoarseness is also a primary symptom, although it is not always present. It depends on the implication of one of the vocal cords, inter-arytenoid space or arytenoid cartilages. It may also be present in other laryngeal affections. Whenever it occurs it always demands immediate attention. Laryngeal soreness and shortness of breath may also be present, but are not especially significant.

Objective symptoms are, anæmias, localized congestions, tumefactions, ulcerations and erosions. Marked anæmia of the soft palate, pharynx and larynx is usually present. Laryngoscopic examination becomes necessary for further observations.

It seems unfortunate that so few medical colleges make the use of the laryngoscope compulsory for their graduates. Who can estimate how many cases of tubercular, syphilitic or malignant diseases of the larynx might be arrested if an early diagnosis were possible by every practitioner?

A tubercular affection of the larynx may present several different appearances when viewed with the laryngeal mirror, such as

- (1) Infiltrations and hypertrophies.
- (2) Ulceration with infiltrations and hypertrophies.
- (3) Tubercular tumors or neoplasms.

Of these, infiltrations are the most frequent. Their favorite location is the interarytenoid space. At first they have a pearly-gray appearance, due to the presence of the tubercles immediately beneath the epithelium, and may be mistaken for adherent mucus. As time progresses, the infiltrations become more distinct and assume a fine granular appearance of a greyish-yellow color, and resemble shad roe. The water-color, which I have the pleasure of showing this Association, conveys these appearances very clearly, excepting that the infiltrations are on the pharynx. This was taken from a patient who consulted me about the middle of April, 1895. He had a serious laryngeal and pulmonary tubercular deposit. While under my care the uvula and posterior pillars of the pharynx began to enlarge and presented a grayish œdematous appearance. The uvula and soft palate also lost their usual soft elastic feeling and became firm and tense. Two days later small isolated yellow masses appeared in different parts of the soft palate, but were especially numerous on the uvula and posterior pillars. These masses were immediately beneath the epithelium, and when removed and examined by the microscope proved to be tubercular in character. Twenty-four hours later the epithelial covering of some broke down and left small superficial ulcers. Hypertrophies usually precede ulcerations in the larynx and may invade any part of it. When they occur in the arytenoid space they are usually multiple, and either papillary or ridge-like in appearance. The tips of the arytenoid cartilages and the aryepiglottic folds, are also favorite seats of invasion. The well-known club-shaped appearance of the former, and sausage-like formation of the latter, being considered pathognomonic of tubercular

disease. An anæmic larynx with the turban-shaped or hypertrophied epiglottis, is also considered by some as sufficient evidence for a positive diagnosis. The progress of tubercular hypertrophies is often exceedingly slow, and they sometimes remain one or two years without much change. Ulcerations are usually a later manifestation, and may be primary or secondary. The former are superficial, and probably result from a surface infection. The latter are much deeper and are accompanied by a greater loss of tissue. Tubercular ulcers are usually multiple and appear as minute yellow spots dotted over the surface; their multiple character is diagnostic of tuberculosis. The vocal cords and epiglottis are favorite locations for their appearance; they impart a serrated appearance to the edges of the former, and attack the epiglottis on its laryngeal surface. This is a contrast to syphilitic ulcerations which usually invade the lingual surface of the epiglottis.

Tubercular neoplasms of the larynx are very rare. A recent article published by Dr. J. Payson Clarke in the *American Journal of the Medical Sciences* for May, 1895, gives an excellent clinical picture of these growths. They occur in the form of smooth, round tumors of variable size and appearance, some being single, others multiple. They are usually of light gray color and occur on the vocal cords, ventricular bands and in the ventricles. They grow slowly, do not readily ulcerate, and may persist for years.

It is difficult to determine the nature of these growths, as they may readily be mistaken for fibromata or papillomata. The history of the growth, and the general condition of the patient, and lastly the microscope, must then come to our assistance.

In determining the nature of a laryngeal affection which is supposed to be tubercular, we must not alone consider the symptoms referred to in the larynx, but also the general condition and history. This is important, as laryngeal tuberculosis is usually preceded by pulmonary deposits. The microscope should be employed for the detection of the tubercle bacillus. The writer has never seen them absent in tubercular laryngitis. The temperature should also be carefully noted. Some difficulty may be experienced in making a diagnosis when there is syphilitic history, and especially if there is some improvement in a case of laryngeal

tuberculosis from the administration of potassium iodide. Syphilis and tubercle may both be present. It is, therefore, important in doubtful cases to administer the iodide in large doses until improvement ceases.

Having made a diagnosis, a suitable treatment must be selected; before considering this, however, we will glance at tracheal tuberculosis. This is a very unusual location for the manifestation of tuberculosis, and is nearly always accompanied by a laryngeal deposit. This at least has been so in six cases seen by the writer; two in his own practice and four under the care of colleagues. In all, the manifestations were first in the form of good-sized superficial ulcers, with great thickening of the surrounding tissues at the upper part of the posterior wall of the trachea. At first, only the mucosa of the posterior wall is affected, but later the cartilaginous rings are implicated. The chief distinctive symptoms in these cases were the constant burning sensation referred to in the upper part of the trachea and back part of the neck in the region of the spinous process of the seventh cervical vertebra. Severe cough of an irritating spasmodic character, was also pronounced. Owing to the narrowing of the respiratory tract, difficult respiration may also be a prominent symptom.

Treatment of Laryngeal Tuberculosis. — The local treatment of this affection may be, for practical purposes, divided into three methods, viz.: curettement, submucous injection, and topical applications. Of these, curettement has many ardent advocates, of whom Herying of Warsaw, and Krause of Berlin, have probably had the most experience. A number of curettes of various shapes for laryngeal work have been recommended, and Gouguenheim of Paris, has used a pair of forceps for the removal of the arytenoids; this instrument resembles Hooper's forceps for removing adenoid growths from the post nasal space. Curetting has been employed in all stages of the disease, with varying success. In view of the severity of the procedure, and the possibility of re-infection, it would seem best to limit its use to the scraping of the surface of ulcers and for the removal of hypertrophied tissues in the arrested stages of the disease.

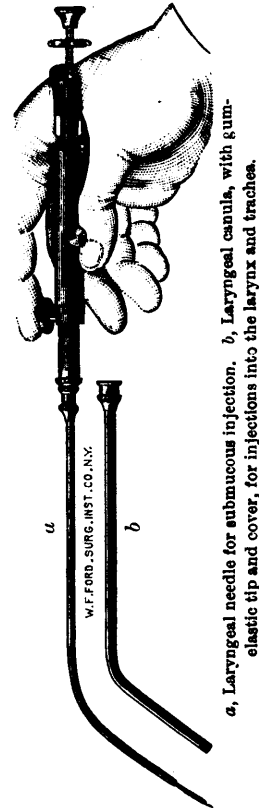
Submucous injections seem to be specially indicated in primary laryngeal tuberculosis, as

the deposits in mucous membranes take place primarily in the mucosa immediately beneath the superficial layers of epithelium. No amount of surface application can therefore reach them while the epithelium is intact. Krause, Herying, Gleitsmann, Magor, McSherry and several others, have strongly recommended the use of lactic acid by the submucous method. Krause began its use from its well-known property in lupus, of selecting the affected tissues for action. It certainly is of benefit in some cases and may be employed in solutions of 10 %, gradually increasing to 80 %. There is always considerable pain following its use, and the œdema which may result is sometimes serious. Dr. Gleitsmann of New York, has recently had a case of this nature. Many of the failures of the submucous method of treatment have, in the opinion of the writer, been due to the imperfect and inaccurate methods employed. The injections have been given by means of a long needle with a laryngeal curve, attached to an ordinary hypodermic barrel. It is easy to imagine the difficulty which may be experienced by the most skilful manipulator, in introducing the point of an unguarded needle to an exact depth, when the hand must be ten or twelve inches from the field of injection.

Even supposing this were possible, the unsteady muscular movements of this region would require so much pressure to keep the needle in position, that the injection must often be made very deeply, and probably below the tubercular invasion. Pushing down the piston would also have the same effect or it may disengage the needle, and the fluid will then simply drop into the larynx or the trachea. To obviate these drawbacks to submucous injections, the writer, in a paper read before the New York Academy of Medicine in February last, has described an automatic syringe, which perfects this method of treatment.

The syringe and needle, which I now present to you, have the point of the latter guarded by a piece of solid rubber ligature, which may be shortened or lengthened according to the required depth of the injection. The rubber guard allows of good firm pressure, without altering the gauged depth of the needle; the suction of the rubber prevents the injection from welling up

around the needle. The piston is arranged to regulate the amount of the injection and also to make it automatic. The latter is important, as no movement of the hand is necessary; consequently the patient is not made to gag, and the field of injection can always be kept in view. The spring in the barrel is stronger than necessary for submucous work, but for injections into the trachea a stiff spring is needed. It is



a, Laryngeal needle for submucous injection. b, Laryngeal canula, with gun-elastic tip and cover, for injections into the larynx and trachea.

an easy matter to throw the fluid to the bifurcation of the trachea with this syringe. During the past two years the writer has employed an oily solution of creasote as a submucous injection for the hypertrophies, infiltrations, and large ulcers of tubercular laryngitis.

The solution best suited to this purpose is:—

R—Creasote (beechwood), } . āā ʒ ij.
 Olei gaultheri, }
 Olei hydrocarbon, ʒ j.
 Olei ricini, ʒ iij.—M.

This makes a clear, non-irritating solution, of pleasant odor and taste, a sample of which I will pass around.

The injections may be superficial or deep, and in any portion of the larynx which may be the seat of invasion. Some judgment is necessary in determining the frequency of the injections; every third or fourth day will be often enough for most cases.

Details of this method may be found in the paper already alluded to, and published in the *New York Medical Journal* for March 30th, 1895. Compared to lactic acid, the oily solution of creasote has many advantages for submucous injection. Its use is not painful, no reaction is produced, and, in early cases, infiltrations and surface epithelial ulcers disappear after a few injections. Long standing hypertrophies may be arrested and much lessened in size, but as the cartilage is often implicated, it is doubtful if they ever resume their normal shape and appearance. In advanced cases where the tissues of the larynx are undergoing rapid necrosis, the patient is usually too weak for the use of the curette. The injection of creasote may then be used to separate sloughing tissue and to stimulate granulations; it at the same time may exert some anæsthetic properties.

Topical applications.—These should be astringent and antiseptic, and are chiefly of service in superficial ulceration and to arrest the hypersecretion of mucus. The drugs most frequently employed for these purposes are creasote, lactic acid, menthol and iodoform.

Creasote is used in one drachm to the ounce solutions of the oily combination already referred to. This may be used as a spray once a day, or applied by an applicator or the laryngeal syringe. During active treatment it is best to keep the trachea and larynx thoroughly bathed in the creasote solution. The castor oil is so tenacious that the solution containing it clings to the mucous surfaces for days after the applications are made.

Lactic acid, when used, should be rubbed into the surface of the ulcer.

Menthol, in oily solutions of 20 grains to the ounce, may be injected into the trachea and larynx with a syringe.

Iodoform is used in powder, or in a 15% ethereal solution.

Conclusion.—1. Every case of pulmonary tuberculosis should be carefully watched for laryn-

geal symptoms, and treatment begun as soon as they appear.

2. If expectoration is very profuse from the pulmonary infection, a spray of creasote should be used as a precautionary measure.

3. No case of laryngeal tuberculosis should be abandoned to cocaine and other temporary sedatives, until all the other methods at our disposal have been tried.

4. Infiltration and ulcerations of a tubercular nature heal under various treatments, and many cases may be arrested if seen early.

5. During active treatment, rest and nourishing diet should be insisted upon, and creasote given internally. Doses of six to ten drops administered by the stomach three times a day, seem to produce as much benefit as larger doses. One of the best methods of taking this drug is that suggested by Dr. Hance, viz.: giving the patient empty capsules, carbonate of bismuth and beechwood creasote, and allowing him to fill the capsules with bismuth and then drop in the creasote, when the cap, already filled with bismuth, is put on.

6. If the treatment has been successful in arresting the active process in the larynx, the patient should then be placed under the best climatic influences.

Treatment of Tracheal Tuberculosis.—This should be instituted early, otherwise the ulcerations will perforate the walls of the trachea, or the cartilages become implicated and constriction of the trachea follow. Oily solutions of creasote and menthol are the best remedies for this affection and should always be given by means of the automatic syringe.

The laryngeal canula will reach the upper part of the trachea, but for deeper injections a silk elastic catheter should be drawn over the canula. After passing this between the cords, the catheter is pushed over the canula down into the trachea, and the injection made at the same time. A silk thread is attached to the ring of the catheter, so that it cannot be lost in the trachea. It is better not to anæsthetize the parts with cocaine before using the injections. The tolerance established after a few injections is far more satisfactory than any anæsthesia, and is more readily attained if the anæsthesia is omitted.

THE USE OF THE STOMACH-TUBE.*

BY GEORGE HODGE, M.D., LONDON.

I do not expect to say anything new in connection with the use of the stomach-tube, but desire simply to bring to the notice of the members of this Association one of the most valuable aids to the diagnosis and treatment of stomach diseases that has of late years been introduced into medicine. Every one of us must, at times, have felt our powerlessness to efficiently treat a large class of gastric affections by means of drugs and diet, which, with the aid of lavage of the stomach, now yield most satisfactory results to both patient and physician. Before proceeding to speak of the uses of the stomach-tube, I would like first to refer to the tube itself and the proper method of introducing it.

The tube which, after a considerable experience, I find gives the most satisfaction, is a soft rubber, varying in diameter from $\frac{1}{4}$ to $\frac{1}{2}$ inch, with the lower end open and having a fenestra near the extremity. Tubes with blind ends should be avoided, as they are difficult to clean. The tube should be about 60 inches in length and may have a bulb near its centre, which serves to suck up the stomach-contents. The bulb may be obtained separately from the tube and attached as circumstances require. The bulb is rarely required, the plain tube answering every purpose. The outer extremity of the tube should either be expanded into a funnel, or have a vulcanite or glass funnel attached. Dr. Attfield strongly recommends an elastic silk tube, which he claims possesses several advantages over those made from india-rubber.

Method of introducing the tube.—There is usually little or no difficulty in introducing the tube, even in the most nervous patients. In very sensitive persons it will be well for the first few times, to paint the posterior pharyngeal wall with a 10% solution of cocaine, a few minutes before attempting to introduce the tube. The patient should be positively assured that there is no danger of suffocation. The tube should not be lubricated with either oil or vaseline, but should be dipped in warm water, immediately before its introduction. It is quite unnecessary to pass a finger into the patient's mouth, to guide the tube. Let the pa-

tient be seated on a chair, opposite a good light, with the mouth open; then pass the tube quickly to the back of the pharynx, and ask him to swallow. As soon as the tube is grasped by the muscles of deglutition, it can be readily passed on into the stomach. In very nervous patients, I have occasionally failed to pass the tube completely into the stomach on the first attempt. In such cases it is well not to attempt too much at the first sitting, as in the course of a day or two the tube can usually be passed completely, without difficulty.

Uses of the stomach-tube.—1st. It is used to obtain the stomach-contents, for purposes of examination by chemical and other means, and thus enable us to determine their nature and the digestive activity of the stomach. In order that an examination of the stomach-contents may be attended with satisfactory results, as uniform a method as possible should be adopted. To this end a test meal should be given, probably the test breakfast recommended by Ewald is as simple and satisfactory as any. This consists of an ounce of white bread and twelve ounces of weak tea without either milk or sugar, and is to be given on an empty stomach. One hour afterwards the stomach-tube is introduced and the stomach-contents obtained by means of abdominal pressure or aspiration. It would be interesting to refer to the examination of the stomach-contents, but as this does not fall within the scope of this brief paper, I pass it by.

2nd. It is used to distend the stomach with air, in order that its position and size may be determined. To do this, the double bulb of a spray apparatus may be attached to the stomach-tube after its introduction, and air pumped in. By this method a suitable degree of distension of the stomach may be readily obtained, without discomfort to the patient. When the stomach is distended we can easily ascertain its position and size by means of inspection, palpation and percussion.

3rd. Its chief use is to wash out the stomach in certain diseased conditions of that organ. The method of doing this is very simple. After the introduction of the stomach-tube as already described, a funnel is attached to it. The funnel is raised above the patient's head and about 20 ozs. of water, at a temperature of 100° F., is gradually poured into the stomach; the funnel is then low-

* Read before the Ontario Med. Assoc., June, 1895.

cred below the level of the patient's abdomen and the contents of the stomach are siphoned out. Fresh water is again poured in and run off, till as much as five or six pints have been passed through the stomach, or till the last washings come away quite clear. Where there is much tenacious mucus, instead of using plain water, a 2% solution of sodium bicarb. may be used.

When is the best time to wash out the stomach? In cases of dilatation the best time is six or seven hours after the principal meal. Ewald says: "In cases of very marked fermentation we can clean the walls of the stomach more quickly and thoroughly by washing out the stomach in the morning before breakfast, when the viscus is empty." How frequently should lavage be employed? In most cases, at least, once daily, and this should be continued for a considerable time—several weeks. This can be easily done, as after the tube has been introduced a few times by the physician, the patient can pass it himself.

In what cases is the tube indicated? In all cases where the food is retained so long in the stomach that abnormal fermentation occurs. This happens in the following diseases:

(a) *Chronic Gastric Catarrh*.—In these cases there is generally a diminution of the secretion of H Cl. which produces a delay in digestion, and a consequent prolonged retention of food in the stomach, with abnormal decomposition and distension of the stomach with gas. I might cite many cases to illustrate the good effects of lavage in this disease, but the following cases will suffice:

W. J. C., who for some months had been much worried in business, came to me in November last, complaining of loss of appetite, oppression in the epigastrium, belching of gas, frequent vomiting, headache, irregular bowels and great depression of spirits. He had been losing flesh rapidly—so rapidly that the presence of some grave organic disease was feared. I advised him to keep quiet, put him on a restricted diet, and prescribed various remedies, in spite of which his condition rapidly grew worse. At last I proposed that I should try the effect of washing out his stomach; to this he consented with considerable hesitation. Marked relief followed the first few washings. I continued the treatment for three weeks, at the end of which time he was able to resume ordinary diet, and return to business.

Mrs. H., a widow, aged 55 years, suffered from various dyspeptic symptoms for years. In October, 1894, she became decidedly worse, and when seen presented the following symptoms:—Nausea, anorexia, vomiting, obstinate constipation and sleeplessness. This patient was dieted, and medicines of various kinds given her for several weeks, till, at last, she could not take even a spoonful of milk and lime-water without vomiting it immediately, in fact, she retched almost constantly, even when she did not attempt to swallow nourishment, and at intervals brought up bile and mucus. Her condition was such that I was obliged to nourish her for several days with egg and milk, *per rectum*. She was very much dejected, tossed about in bed crying out, "I'm so sick, I'll never get better." With great difficulty I persuaded her to allow me to wash out her stomach. The first washing gave such marked relief, that she readily consented to have the treatment continued. Within a few weeks from the time I began the lavage, she was able to eat a good meal of solid food, and relished it as she had not for years before. For six months this patient has continued to wash out her own stomach, at least two or three times every week.

(b) *Dilatation of the Stomach*.—This may be due either to obstruction at the pylorus, or to atony of the muscular coat. If to the former, lavage will prove very beneficial by giving relief to the disagreeable symptoms which accompany this condition, as in the following case:—

J. D., a man passed middle life, was admitted to the London General Hospital in the fall of 1893. For some months he suffered great pain in the epigastrium, vomited frequently; had no desire to take food; suffered greatly with acid eructations, and lost weight rapidly. A tumor of considerable size could be easily palpated on a level with, and to the right of, the umbilicus. On dilating the stomach with air, its lower border could be seen midway between the umbilicus and pubes. Frequent examination of the stomach contents showed the absence of free H Cl. There could be no doubt that this patient was suffering from cancer at the pylorus. To relieve his disagreeable symptoms, his stomach was ordered to be washed out daily. Soon the pain became less, his appetite improved, and he gained a few pounds in weight. Dr. Meek afterwards did a gastro-

enterostomy in this case, with the result, that in the course of a few months after the operation the patient gained over 20 lbs. He lived ten months after the operation.

When the dilatation of the stomach is due to atony of the muscular wall, occurring either as a primary neurosis or accompanying chronic gastric catarrh, not only are the symptoms relieved by lavage of the stomach, but a positive cure is frequently brought about. In this class of cases, more, perhaps, than any other, this method of treatment finds its most useful employment. In the case of Mrs. H., already referred to under chronic gastric catarrh, there was also considerable dilatation of the stomach. This has quite disappeared since she began regular lavage of the stomach.

The stomach-tube will frequently enable us to distinguish dilatation of the stomach due to atony, from the same condition due to cancer. In the former condition, marked and permanent relief usually follows the daily use of the tube; in the latter, the most that can be hoped for, is relief of the disagreeable symptoms. The following case will serve to illustrate this.

D. S., æt. 44, was admitted to the London General Hospital, on January 8, 1895. He complained of gastric symptoms for several months before his admission to the hospital. When admitted he had pain in the epigastrium, increased by taking nourishment, vomiting, which partially relieved the pain and constipation. Repeated examinations of the urine gave a negative result. All other organs were quite normal. An examination of the stomach-contents, one hour after a test-breakfast, showed the presence of free HCl, the absence of lactic acid, and the presence of peptone. The absorptive energy of the stomach, as well as its motor power, were delayed. I looked upon this as a case of dilatation of the stomach, due to chronic gastric catarrh. The patient was kept quiet in bed, ordered milk in small quantities frequently repeated, and given a mixture containing sodium bicarb., cascara and columba. At the end of a week he felt much improved. Thinking to hasten the improvement, I ordered his stomach to be washed out daily. This caused such discomfort that, after a few days, it had to be abandoned, and at the same time I abandoned my diagnosis and considered the case to be one of malignant disease of the stomach. This opinion

was further confirmed by the fact that, while in hospital, the patient lost flesh very rapidly. As this patient left the hospital after a few weeks, I am unable to report his condition at the present time.

The stomach-tube is strongly recommended in chronic obstruction of the bowels and in the summer diarrhoea of children. I have never used it in either of these conditions, but I can easily understand that it will give relief in both. Of its use in the former, Dr. Martin, in Hare's Therapeutics, says: "It mechanically removes a large quantity of putrid septic matter, which otherwise would be slowly and laboriously regurgitated by violent muscular efforts, thus still further weakening an already debilitated patient. It assists nature in her eliminative efforts, and, almost without exception, produces an immediate improvement in the patient's condition."

THE DIAGNOSIS OF PREGNANCY DURING THE FIRST THREE MONTHS.

BY CHARLES P. NOBLE, M.D.,

Lecturer in Gynæcology, Philadelphia Polyclinic; Surgeon-in-Chief of the Kensington Hospital for Women.

It is a current belief among the profession, which is supported by the authority of obstetrical text-books, that the diagnosis of pregnancy during the first three months is difficult or impossible. It is the purpose of this communication to combat this teaching. In my judgment, a practitioner skilful in making the bimanual examination will be able, ninety-nine times out of a hundred, in cases of suspected pregnancy, between the sixth and twelfth weeks, to definitely determine whether or not pregnancy exists. This statement is based upon ten years' experience. During this time a very large number of such cases have come under observation. My opportunities for seeing cases of early pregnancy have been unusual. During the first five years of my practice I was connected with the dispensary of the Philadelphia Lying-in Charity, where at that time large numbers of women (mostly illegitimately pregnant) came for the purpose of ascertaining whether or not they were pregnant. Thus my attention was early called to the critical study of this subject. During the past five years I have seen the usual num-

ber of cases which come to one in charge of a large hospital service for the diseases of women, in addition to those seen in private practice. While no notes have been kept of the total number of cases seen, it is apparent that the number is quite a large one. My reason for referring to this fact is that it gives emphasis to the statement that, of the total number of patients seen in which a diagnosis of pregnancy was arrived at, I know of not a single instance in which the element of time did not bear out the correctness of the opinion. Of the cases seen, of course, there were certain ones in which a diagnosis was reserved, owing almost invariably to the extreme development of fat, which interfered with a satisfactory bimanual examination. I think, however, that one per cent. would cover such cases.

The one sign above all others which establishes the existence of pregnancy during the first three months is dwelt upon little, or not at all, by obstetrical text-books. My attention was first drawn to this sign by an article written by Grandin, of New York, it being called the sign of Hegar. Dr. Grandin and others were wrong in naming it as Hegar's sign, but they were entirely right in estimating it as a thoroughly reliable evidence of pregnancy. The shape of the unimpregnated uterus is pyriform, flattened from before backward. When the cavity of the womb is occupied by a growing ovum certain changes in the form of the womb and in its structural peculiarities rapidly ensue. As is well known, the corpus and fundus of the womb develop with great rapidity, in order to make room for the growing ovum, while, on the other hand, the cervix grows more slowly, and even toward the end of pregnancy its size has not greatly augmented. Within six weeks after the beginning of pregnancy the ovum has grown sufficiently to cause the corpus and fundus of the womb to assume a distinctly spheroidal shape. As during this time the cervix has altered very little in its form, we have present, to make use of geometrical terms, a spheroidal body posed upon a cylinder. If one will picture this state of affairs he will see that the sphere juts out from the cylinder prominently and in every direction. In other words, when examining the pregnant uterus between the sixth and twelfth weeks, the uterus will be found enlarged to correspond with the period of the preg-

nancy; the corpus and fundus will be found as a spheroidal body, and the corpus can be easily made out as jutting boldly out from the cervix in front, behind, and at each side. In my experience this sign is of the utmost value and absolutely reliable. The judicious practitioner, however, will not neglect to make use of corroborative signs and symptoms. The spheroidal body of the womb will be found softened, and as it is held between the two hands in bimanual examination a feeling of semi-fluctuation can easily be made out. This softening and semi-fluctuating feel should be found in all cases.

What conditions should be confounded with pregnancy by giving rise to the same or similar signs as those described? These, I think, are practically two: 1. Hæmatometra, due to an imperforate cervix. The practical man will realize that this condition will seldom embarrass him in making a diagnosis of pregnancy, as the average practitioner meets with it not more than once in a lifetime. Moreover, the history of the case would put him on his guard with reference to it, as hematometra occurs either as the result of a congenital defect, and is then found in young girls about the age of puberty, whose history is sufficiently characteristic to at least make the practitioner watchful; or it occurs later in life as the result of atresia of the cervical canal, brought about by inflammatory conditions of a destructive nature. These cases likewise are very rare, and their history is quite suggestive. 2. Certain cases of intramural fibroid tumor, in which, owing to pelvic congestion, the walls of the uterus become quite soft. But here also, in my experience, the conditions are not typical. The uterus is not uniformly enlarged, it projects perhaps anteriorly and not posteriorly, the semi-fluctuating feel cannot be made out, or some other evidence is present, to make the examiner aware that he is not dealing with pregnancy.

So far as I know, these are the only conditions which at all simulate an early pregnancy.

It is well to say a word about conditions which prevent the examiner from making out this characteristic sign of pregnancy. It will be readily seen that if pregnancy occurs in a womb which already contains a fibroid tumor, that the sign is not available. This is equally true when the pregnant uterus is jammed in between tumors of

the ovary. Extreme development of adipose tissue may prevent its recognition, on the one hand by making the abdominal hand unavailable, or on the other by preventing the examining finger from reaching high enough up *per vaginam* to make out the form and consistency of the uterus. It will occasionally happen also that pregnancy takes place in a womb bound down by adhesions, in a pelvis in which the structures are distorted as the result of former inflammatory processes. In such cases the development of the pregnant womb is frequently atypical. All the conditions described have been encountered, and my remarks concerning them are based upon experience. In such cases the examiner usually finds enough to awaken his suspicions, but not enough to form a positive diagnosis, and thus is obliged to reserve his opinion.

Certain other corroborative evidences of pregnancy are very valuable during this period. The violent discoloration of the vagina, most marked beneath the urethra, frequently appears as early as the sixth week, and is usually well developed as early as the third month. To an experienced observer, who has been accustomed to note the difference between the slight blueness due to pelvic congestion and the intense discoloration which is present in pregnancy, owing to the changes in pelvic circulation, this sign is of great value.

Evidences of pelvic congestion, such as velvety softness of the vaginal wall, marked pulsation in the vaginal and uterine arteries, unassociated with inflammatory conditions, have a definite corroborative value.

Softening of the cervix has a certain but very slight importance, by no means commensurate with the stress which is placed upon it by writers and practitioners. The cervix often becomes soft and pulpy as the result of pelvic congestion unassociated with pregnancy; and, on the other hand, a cervix which is the seat of cicatricial or chronic hyperplastic changes will not become softened until the latter months of pregnancy. Therefore, in my judgment, very little dependence should be placed upon its condition.

About the fourth month the pregnant womb rises out of the pelvis. It is evident that when this takes place the valuable sign which we have critically discussed is no longer available. At this time, and until the foetal heart-sounds can be

heard, the sign of Hegar, namely, the extreme softening of the lower segment of the uterus as contrasted with the firm cervix, is of the greatest value. These two signs, it will be seen, are complementary to each other. The sign we have discussed in this paper is of value prior to the ascent of the womb from the pelvic cavity, the sign of Hegar from that time until the foetal heart can be heard.

The statements contained in this paper have purposely been made emphatic, in the hope that they will attract the more attention on the part of the profession. I have not hesitated to be emphatic, because my experience has been sufficient, and has extended over such a period of time as to convince me of the absolute truth and reliability of the evidences of pregnancy under discussion.

Selected Articles.

DIFFERENTIAL DIAGNOSIS BETWEEN PSEUDO TABES, SO-CALLED, A FORM OF MULTIPLE NEURITIS, AND TABES DORSALIS.

During my term of service in the Clinic of Professor L. C. Gray, Department Mental and Nervous Diseases, New York Polyclinic, the comparative frequency with which patients suffering from multiple neuritis, presenting the symptom-complex of pseudo tabes, have been sent to us for the purpose of diagnosis, has led me to think that this very interesting pathological condition has not been established in the minds of a certain proportion of medical men as an entity, or if so established is not well understood. The hope that what follows will be of use in aiding such to make a correct diagnosis, and a deep interest which I have in the subject itself, have prompted me to present this paper to the association. My clinical experience with the two diseases named in the title uphold me in this hope, and I pray that this will be an excuse for any trace of egotism which may be apparent in what I have said.

In the beginning let me state that this paper is written entirely from a clinical standpoint, with reference essentially to the differential diagnosis between pseudo tabes, or tabes periphica, and tabes dorsalis, and the other aspects of the diseases will not be touched upon, save for such reference to the pathology and prognosis as may be necessary, as the subjects to be dealt with

exhaustively will require much more time than we have at our disposal.

Multiple neuritis was first described by Jackson, of Boston, in 1822, and Huss in his description of a case of chronic alcoholism, in 1852, really described a case of multiple neuritis, though he was not aware of the pathology of what he was describing. The literature, however, upon that form of multiple neuritis which upon casual observation, bears such a strong resemblance to locomotor ataxia has been scarce, and it is as late as 1884 that Dejeune clinched the matter, so to speak, when he reported two cases with autopsies, in the *Archives de Physiologie*. If my memory serves me right he made a diagnosis of locomotor ataxia in one of these cases during the lifetime of the patient. Any one who has observed such cases will readily understand how easily a casual observation will make us confound one with the other, for those symptoms which are most easily observed, viz. : ataxia, Romberg's sign and loss of knee jerk, are common to both, but he will also understand how a careful examination will dispel doubts, and convince us that in the vast majority of cases a correct diagnosis can be made.

Let us then enumerate the conditions which we have in pseudo tabes, or as Dejeune has called it tabes periphica, then the conditions which we have in tabes dorsalis, pointing out those which are peculiar to, or are most frequently observed in, each disease, then those which are common to both and are what will warrant us in differentiating one from the other. Of course in this enumeration we must not expect to find in any one patient suffering from either of the respective diseases all the conditions presented under the respective heads, but in any patient we will find a majority of those ascribed to the disease from which he is suffering.

Taking up first pseudo tabes we have

1. Ataxia.
2. A very much diminished or lost patellar reflex.
3. Romberg's sign.
4. Muscular weakness.
5. Flabbiness of the muscles.
6. Slight diminution in the size of the muscular masses.
7. Comparatively rapid progress of the disease. This, however, is not of very great value only in conjunction with other symptoms.
8. Pains—of a dull, aching character, gradual in onset and persistent. Though they may in rare cases, be sharp and lancinating. Feeling of cold, numbness, tingling, most marked in the tips of the extremities and then gradually diminishing toward the trunk; muscular tenderness.
9. Impairment of sensation—The tactile and heat senses being most impaired, the latter sometimes being abolished. Even warm objects pro-

ducing the sensation of cold. In some cases retardation of the pain sense, in others hyperalgesia.

10. An impairment of the general health, with anæmia and emaciation.

11. Tropic changes, more particularly apparent in the skin at the tips of the extremities.

12. The peculiar gait which I have called the foot-drop gait, in which the patient lifts the feet higher than normally, as though it is an effort to raise the toes and anterior part of the foot, and then letting it down with a cat-like hesitancy, as though uncertain as to the character of the object with which it will come in contact.

13. Oedema, more or less marked, in dependent portions.

14. Alteration of the normal response to electrical currents—To Faradism a diminished response is given, the amount of diminution varying in different cases, in some, however, being completely lost. Diminished response to galvanism. And then as ætiological factors we have

15. Excessive ingestion of alcohol, particularly when taken in the form of spirits.

16. Exposure to cold and dampness—The exposure being constant and gradual, as in working or living in damp cellars or basements, or as in one frequently exposed to bad weather, rather than a sudden, violent and shocking exposure to cold and wet.

17. The prognosis is favorable. Under proper treatment it usually ends in recovery unless complications or intercurrent diseases end the patient's life. A fatal result may, however, ensue from the implication of the nerves supplying the respiratory or heart muscles.

And next enumerating the conditions with which we meet in tabes dorsalis, we have

1. Ataxia.
2. Lost patellar reflex, though it is occasionally present, or may be lost and then partially restored temporarily.
3. Romberg's sign.
4. No loss of muscular power except in the very late stages of the disease.
5. The girdle symptom.
6. Gradual onset of the disease though occasionally a case progresses very rapidly.
7. Argyll Robertson pupil (myosis), no response to light, and frequently a sluggish response to accommodation.
8. Primary optic atrophy.
9. Pains which are peculiar and violent. Stabbing, boring, "lightning" and "vagabond" pains. Vagabond being a term used by Prof. L. O. Gray to denote that the pains, like the poor wanderer in actual life, have no permanent place of abode. Possibly also because they are hard to be borne by those upon whom they inflict themselves.
10. Impairment of sensation. Retardation of

the pain sense as a rule much more marked than in pseudo tabes. Impairment of muscular, temperature and tactile senses. Subjective sensation of heat, cold, numbness, tingling, etc.

11. Impairment of, or loss of control over, bladder and rectum.

12. The peculiar gait. The lower extremities in locomotion being jerked quickly forward and outward, the foot then is brought back with a snappy jerk, the heel or the sole of the foot striking the ground suddenly and violently.

13. The different crises.

14. The sudden onset of paralysis, as of the ocular muscles, one of the extremities or a hæmi-plegia, which is frequently more or less transitory in character.

15. Diminished response to Faradism, but not so marked as in pseudo tabes.

16. Trophic changes.—Charcot's joints (so-called) perforating ulcer, loss of nails and teeth occasionally.

And as ætiological factors we have

17. An antecedent history of syphilis in a very large percentage of cases.

18. Sudden and violent exposure to wet and cold.

19. Trauma.

And further,

20. The prognosis is absolutely unfavorable.

Let us now present the conditions (symptoms, ætiological factors, etc.) which are really common to both the diseases—We have ataxia: Loss of patellar, reflex and Romberg's sign.

Those which bear a decided, though by no means a perfect, similarity to each other, are: The onset of the disease. This, however, is usually rapid in pseudo tabes, very rarely so in tabes dorsalis.

Impairment of sensation, which is always less decided, except that for heat, in pseudo tabes, particularly the transmission of the sensation of pain, and the muscular sense is not impaired in pseudo tabes, while it is markedly so in tabes dorsalis. The electrical responses are more diminished in pseudo tabes. Exposure to cold and wet—a comparatively mild, though constant exposure extending over a long period of time is more apt to be followed by pseudo tabes. A sudden and violent exposure is more apt to be followed by tabes dorsalis. Excessive ingestion of alcohol. This is one of the most frequent of the exciting causes of pseudo tabes, although we not infrequently have a history of excessive use of alcohol in true tabetics.

Those conditions which are present in both, but which are entirely dissimilar are

The Pains.—The character of the pains is so markedly different in each that a mistake ought not to be made.

The Gait.—This is distinctly different in each,

and I consider this one of the most valuable of the differential points. While I do not believe in snap diagnosis, I do think, however, that when one sees a patient afflicted with either disease walk across the room it ought to be sufficient to put him on his guard.

If now we consider, in addition to these, the ocular involvements, the loss of control over bladder and rectum, the different crises, the different paralyzes (more or less transitory), and the girdle sensation, all of which we have in locomotor ataxia, we ought to make a correct diagnosis. The remembrance of the overwhelming predominance of syphilis in true tabetics will also aid us very much.

There are times when it is much more difficult to differentiate than at others, viz., when the pseudo tabes has been caused by excessive ingestion of alcohol, which, by the way, is one of the most frequent causes of the disease. At these times we have the morning vomiting to distinguish from the gastric crises. This, however, should not be so difficult if the patient is observed constantly and closely, for the morning vomiting of drunkards usually comes on at about the time of rising and, unless an impression is made on it by treatment, keeps up with a persistent regularity day after day, while the gastric crises may come on at any time, persist in a most obstinate fashion for a comparatively short time only, then disappear, not to appear again for weeks or even months. In addition to this in alcoholics there may be an impairment of the functions of the bladder and possibly some ocular involvement, but corroborative symptoms will always clear the matter up.

To my mind the prognosis in these respective diseases is of peculiar interest, and as the prognosis is directly dependent upon the diagnosis, I feel that I must speak of it.

The peripheral neuritis, simulating tabes, the pseudo tabes, so-called, is curable. Tabes dorsalis is incurable. Herein, gentlemen, is "the milk in the cocoanut," herein lies the incentive to put forth our best efforts in coming to a conclusion as to the character of disease. What pleasure and satisfaction there are in telling a patient he can be cured! If any could have witnessed with me the happy looks and sometimes tears of joy, which have come to some poor sufferers who, medically speaking, had been knocking around, from pillar to post, with here a doubtful prognosis and there an unfavorable prognosis—if any could have seen this when the true prognosis had been told them, the satisfaction derived therefrom would amply have repaid for all the hard work expended in the study of these troubles. And, on the other hand, although it may not be such pleasure to tell a man that he cannot be cured, yet it is a vast deal of satisfaction to acquaint the family and friends

of a patient, those who are directly interested in and responsible for him, with his true condition, even though we do not deem it wise to immediately make the sufferer cognizant of the fact that he will never recover.

I do not wish to unnecessarily prolong this paper by the recitation of the histories of many cases, so I will only present the histories of two patients in each category.

The patients are all from the clinic of Professor Landon Carter Gray, Department of Mental and Nervous Diseases, New York Polyclinic, where I hold the position of lecturer.

Case I.—W. G., age 65 years; native of England; clerk in wholesale liquor house; family history is negative; worked for seven years, immediately preceding the development of his illness, in a basement under which there was no subcellar, and which was damp. Denies syphilis, and there is no evidence of syphilitic infection. Has not touched alcoholic beverages for 15 years, but before that might have taken three or four drinks of whisky daily. About two years ago commenced having the sensation of numbness and cold in his feet, and weakness in lower extremities below the knees, which have been persistent. About the same time, or shortly afterward, noticed that he had difficulty in locomotion, his gait was unsteady, unsteadiness increased on closing eyes. Would stumble over projections in the pavement and several times fell down from this cause.

Condition at time of Examination.—Ataxia of lower extremities, also slightly of upper. Romberg's sign present. Knee jerk barely perceptible, even when reinforcement is used. Pupils respond to light and accommodation. Muscular power diminished. Walks with the "foot-drop" gait. Muscular and temperature senses normal. Tactile slightly impaired and pain sense diminished. No bladder or rectal symptoms. Ophthalmoscopic examination reveals nothing abnormal. A markedly diminished response to Faradism.

Upon these facts and the absence of the corroborative symptoms found in true tabetics a diagnosis of pseudo tabes (peripheral neuritis) was made. I may also add that this patient has been under treatment for two and a half months, and there are already signs of improvement.

Case. II.—W. P., age 42 years; native of United States; occupations, street car conductor and bartender; family history, mother died of dropsy; had what he says was a chancre 15 years ago, suppurative buboes following. As there were no subsequent evidences of syphilis, the sore was probably a chancroid. Had drunk to excess for a long time, usually whisky. About a year ago his lower extremities became swollen and œdematous; difficulty in locomotion, would stumble and sometimes fall when at work or when walking on the street. Had stabbing pains below the knees,

sometimes severe, more frequently not. Frequent vomiting.

Present State.—Ataxia of upper and lower extremities; Romberg's sign present; knee jerk abolished; pupils respond sluggishly to light and accommodation. Diminished muscular power. Muscular, tactile and temperature senses normal, pain sense slightly delayed in great toe only. No bladder or rectal symptoms.

Mental Condition.—Very forgetful; ideas much confused; delirious at times. No ophthalmoscopic examination was made. Diagnosis.—Alcoholic pseudo tabes (peripheral neuritis). This patient was sent to our clinic in November for a diagnosis. He was immediately afterward placed under treatment in a hospital in a neighboring city, and I was informed by the house physician a few days since that he has entirely recovered.

Case III.—A. J., came to the clinic for the first time in November, '93, age 32 years; native of Ireland; occupations, retail liquor dealer and surface car conductor. Mother died at 38 from some pelvic tumor; father still living and in good health at 70. Patient acknowledges contracting syphilis about 12 years ago. About one year before coming to the clinic, while a conductor on a surface car, was laid up with what was diagnosed as rheumatism. The pains were sharp and snapping in character, lasting three days, and were relieved by morphia. Three similar attacks occurred in the following three months. At about the end of the third or the beginning of the fourth month, one cold night, he got a severe wetting by the bursting of a fire hose, and was obliged to remain in his wet clothes for several hours. During the fourth month had repeatedly, upon waking in the morning, severe stabbing pains just above each knee. To use patient's exact language: "It seemed as though some one had stuck a knife in me and then when it was well in had given it a twist; they were terrible." They would last about four minutes, actual time, and would then be immediately succeeded by shooting and jerking pains commencing at the back of the neck and going down to the toes. At about the fifth month first noticed that he did not have control of the left leg (he says more exactly the left shin), when trying to run. At about the eighth month had an attack which he describes as trembling and jerking in lower extremities, after which the muscular inco-ordination became well established. The pains ceased being so frequent, though he has continued to have severe attacks at varying intervals.

Condition at time of examination.—Markedly ataxic gait; ataxia of upper extremities also. Romberg's sign well marked. Knee jerks abolished. Pupils respond to both light and accommodation, though apparently sluggishly. Temperature and muscular senses imperfect; tactile

sense much blunted, condition of pain much delayed. Attacks of stabbing, boring and vagabond pains in lower extremities at times. Impairment of control of bladder. Sexual power lost. No ophthalmoscopic examination was made. Diagnosis, *tabes dorsalis*.

About a year after this examination, while sitting in a chair reading, patient had a peculiar sensation on right side of back of head as though some one were rubbing it. This occurred three times in succession, each time worse than before. He became agitated, scared, and was helped into bed, when a left ptosis was first noticed. This ptosis is not so marked as at first, but is still present.

Case IV.—L. S., age 50; native of Germany. First came to the clinic in 1890. Contracted syphilis thirty years ago; has had nocturnal headaches and insomnia. Trouble first attracted notice by "rheumatic pains" in lower extremities, then bladder became involved and the girdle sensation developed.

Condition at time of Examination.—Very markedly ataxic gait, also ataxia of upper extremities. Romberg's sign present; knee jerk abolished. Argyll Robertson pupil; optic atrophy; had diplopia ptosis in early stages. Severe stabbing and vagabond pains. Impairment of tactile, pain, muscular and temperature senses. Trophic eruption over posterior surfaces of legs. Ankles enlarged at times. At times is excitable and emotional. Diagnosis.—*Tabes dorsalis*.

About two years ago had a left hemiplegia, which still persists.—E. Gaillard Mason, M.D., in *Gaillard's Med. Jour.*

THE EMPLOYMENT OF CARDIAC SEDATIVES IN HEART DISEASE.

The writer desires in this article to call attention to the treatment of heart disease in its various forms by the use of drugs utterly different in their physiological and therapeutical effect from digitalis or other cardiac remedies of a *stimulating* character. He refers chiefly to the use of aconite, veratrum, viride, and gelsemium, and, while he is well aware that these drugs have been largely used for such a purpose by others, he is also confident that they are not employed by as many of the profession as so useful a method deserves.

We are inclined to believe that a diseased heart needs stimulation rather than sedation. It has often seemed to me that those who use nitroglycerine for its stimulant power over the heart were in reality getting good effects because it acted as a sedative.

There is no doubt that digitalis is much

abused in heart disease. We see it prescribed for the patient in whose chest a cardiac murmur exists, without any effort on the part of the physician to determine whether it is really needed. In other words, digitalis is used as if it would grow a new valve and so remove a murmur by stopping a leak, when in reality the murmur must always exist. The object to be attained is the preparation of the heart so that it can make up for the leak by greater and more accurately adjusted effort. In many instances a condition of nervous flurry seems to seize upon the heart muscle which is exposed to the irritation of a leaky valve. These nervous flurries are divisible into two classes: *first*, those in which the demands of the system are greater than the heart can meet, and in which the heart fails because it cannot stand the strain; *second*, those in which the heart is able to meet the demands made upon it upon ordinary occasions, but becomes nervously upset. Just as in one case a firm fails because it cannot meet its obligations, and in another case it fails because at the critical moment its members lose confidence and go to the wall. The first class need rest and digitalis; the second class need rest and aconite. In other words, the first must have aid or perish, the second need quiet confidence to weather the strain. The two following cases illustrate these varieties of cardiac difficulty:

J. A.—, a merchant, aged 48, married, and healthy till three years ago, when he had *la grippe*. A close questioning recalls to his mind that at the age of 21 he had rheumatic fever, and that his physician told him that his heart was "touched." Ever since having *la grippe* he has had some shortness of breath on exertion and some feeling of cardiac palpitation or oppression. Three months ago he noticed that his feet were slightly swollen and that he had difficulty in getting on his shoes. The urine was decreased in amount. Indigestion now came on, and the gastric distress increased his cardiac difficulty.

Physical examination showed a loud mitral murmur, systolic in time, with a very feeble, distant and difficult apex beat. The heart sounds were feeble and distant, and the pulse irregular, soft, and easily extinguished. There was marked increase in the area of cardiac dulness. The urine contained traces of albumen, but no casts. These signs, with the symptoms already detailed and the feeble appearance of the patient, seemed to indicate the use of digitalis, which was accordingly given with a little nux vomica three times a day—with very good results, the swelling, indigestion, oppression and palpitation all passing away.

The second case was that of a man who had developed a mitral regurgitant murmur after an attack of rheumatism three years before. He had no œdema, but some cyanosis, which increased

very markedly on exertion. There was also some shortness of breath, but the dominant or most annoying symptom was palpitation and a sense of swelling or bursting of his heart on exertion or after a full meal.

The extremities were often cold and clammy, and his mental state was that of great fear lest his heart should suddenly stop beating. Physical examination showed a forcible apex beat not greatly diffused, a well marked murmur with a clear second sound, a somewhat irritable pulse, and a full artery not easily compressed. The area of cardiac dullness was somewhat increased, but not as greatly as in Case 1; and the impression produced was that of a powerful heart with a leaky valve in which compensation, so far as muscular power was concerned, was complete, but in which nervous compensation or adjustment was poor. Aconite in the dose of one minim of the fluid extract three times a day, and rest in bed, produced a very rapid improvement.

In the first case the heart was feeble and needed aid. In the second it was strong and using its strength ineffectively, and was in need of steady or confidence. To have given aconite in Case 1 would have been wrong; and while digitalis might temporarily have steadied the heart of Case 2 it would ultimately have failed and caused the compensation to be excessive.

So much for these two varieties of cases.

There is a third variety, in which the heart often receives digitalis without good effect at all, and rapidly gains under aconite. These are the cases which have excessive compensatory hypertrophy coming on naturally or as the result of severe labor followed by easier methods of earning a living. The following case illustrates this class:

A man, aged 18, was brought to the Jefferson Medical College suffering from aortic obstruction, and, as a result of this, dyspnoea on the slightest exertion, marked cardiac arrhythmia, with palpitation, some giddiness, and a tendency to nose-bleed. He stated that in the early part of the year, and for several years preceding, he had been a deck-hand on a coastwise vessel, where he performed hard manual labor, notwithstanding the cardiac disease which was present, and of which he knew nothing. During this time he suffered from no symptoms indicating cardiac disorder. In other words, compensatory hypertrophy was complete. Because of the exposure incident to the work, he was forced, under the advice of a physician, to earn his living on shore. He was unsuccessful in trying to secure employment, and a prolonged period of muscular inactivity followed. As a consequence of this, the cardiac hypertrophy, which had hitherto been compensatory, was now excessive, and he suffered from marked cardiac palpitation, with disordered circulation in the

extremities, and from a considerable amount of cough. Very early in the study of the case it was recognized that these disorders were due to the excess of cardiac hypertrophy, and not to failure in compensation, and, as a consequence, that a cardiac depressant was indicated rather than a cardiac stimulant in the shape of digitalis.

He was given from one to two minims of the fluid extract of aconite three times a day, and during the continuance of this treatment was purposely confined to his bed. At the end of the week so much improvement had taken place in his condition that he was allowed to rise and go about the ward, as he wished; and after four weeks, the medicine being continued during this period, he was so well that he was discharged from the hospital with no other evidence of cardiac disorder than physical examination would show.

A very important portion of the treatment of these cases by the use of aconite is rest in bed, as prone as possible. This fulfils the necessary requirements of sedative treatment, and enables you to push the aconite more actively than if the patient were moving about.

Next to aconite as a remedy of value in these cases stands, I think, gelsemium, and after this veratrum viride.

There still remain two classes of cases to be briefly mentioned, namely, those who have one or two forms of so-called functional cardiac disorders as the result of athletic exercise or severe toil. In the one set the heart possesses all the signs of dilatation, feebleness, and failure. In the other there is to be found a great hypertrophied organ thumping away in a chest which seems too small for it. In both, muscular effort results in palpitation and dyspnoea, sometimes in præcordial pain. In the first, digitalis is useful; in the second, aconite or gelsemium find their place.

In the cases where an excessively rapid pulse is present constantly, or only at times, veratrum viride, is the better drug and gelsemium seems to surpass aconite.—H. A. Hare, M.D., in *Medicine*.

URIC ACID DIATHESIS.

In a recent paper upon this subject, Dr. John F. Barbour very aptly remarks: "Uric acid has now come to be regarded as one of the great poisons, fully comparable in its evil effects upon the human body to syphilis and tuberculosis, but far more insidious and slow in its action than either of these." We entirely agree with Dr. Barbour in his startling statement. It is remarkable that, notwithstanding the fact that uric acid is thus regarded by these members of the profession who have made a careful study of this subject, and have, by experience, learned their inability to cope with chronic disease in many of its forms

without a recognition of the important relation of this toxic agent to many pathological conditions, so little is said and done in relation to the prevention of this hydra-headed malady—uric acid intoxication.

We may properly summarize a few of the interesting facts bearing upon this subject, which are admirably presented by Dr. Balfour in his excellent paper:—

Vigouroux asserts that neurasthenia is of gastric origin, and adds: "All neurasthenic patients, without exception, are arthritics. . . . There is no distinction to be made between those affected with simple neurasthenia and the neuro-arthritics. The word 'neurasthenia' of itself implies the idea of arthritism."

Bouchard asserts that the uric acid diathesis is one in which there is a retarded nutrition, or insufficient disassimilation, a pathological state which exists under the following conditions:—

"1. When, after the ingestion of a certain amount of food, the organism requires a considerably longer time to return to its original weight than is required in the normal state.

"2. When the amount of food necessary to support life—the living ration—is below the normal.

"3. When the weight of the body increases under the normal amount of food.

"4. When, under the living ration, the amount of excreta is less than normal.

"5. When, during abstinence, the diminution in the bodily weight is less than normal.

"6. When, during abstinence, the amount of excreta is less than normal.

"7. When there appear in the excreta incompletely elaborated products, uric acid, oxalic acid, the other organic acids, and the volatile fatty acids.

"8. When one or more of the proximate principles accumulate in the body, the alimentation remaining otherwise normal.

"9. When there is a greater lowering of the temperature during repose and abstinence, and particularly during sleep, than is found in the normal state."

The proposition in relation to the loss of weight is, of course, true only in cases in which there are no serious stomach or liver complications, in which there will naturally be a diminution in weight.

The diminished oxidation and consequent effort of the system to protect itself from the consequences of a lowered temperature are explained, according to Bouchard, by the vascular spasms by which pallor, cutaneous anæsthesia, and sensations of cold, so common in these cases, are produced.

Rockwell, in his preface to the last edition of Beard's classical work on "Neurasthenia," remarks that the chief cause of disturbances in the nervous system is poisoning "by the abnormal products of

digestion that enter the blood and circulate freely through every tissue of the body." Our observation exactly agrees with that of Dr. Rockwell. We are glad to see statements of this sort coming from the pens of experienced and thoughtful physicians. The ideas of neurologists are undergoing very important modifications at the present time, and it may be expected that within the next few years quite a revolution will occur in the therapeutics of nervous disorders. The writer thinks it safe to predict that within ten years of the present time the greater share of tonics, hypnotics, rejuvenants, carminatives, nervines, and allied drugs will be eliminated from the armamentarium of the neurologist, and that *materia alimentaria*, together with careful regulation of the exercise and regimen of the patient, will almost completely displace the *materia medica* which still occupies so large a place in the treatment of so-called nervous maladies. The idea that every outcry of the nervous system is a demand for medication of the nerves is a most stupendous error. The nerves are the only means through which any organ of the body can express its condition. Pain, hyperæsthesias, anæsthesias, and paræsthesias, are much more frequently the expression of a disorder in some other structural tissue than of a diseased condition of the nerves. Dr. Chapman, many years ago, said: "Pain is the cry of a hungry nerve for better blood." The fault is not with the nerve, but with the blood. Then why should the cry be stifled? Feed the nerve instead of narcotizing it. Rest the weary nerve instead of exciting it to the further expenditure of its wasted energies. Purify the blood and stimulate the nutritive processes when retarded nutrition and disassimilation are the causes of a state of systemic poisoning.

Bouchard, in the publication of his work on auto-intoxications, and in the prosecution of the laborious researches upon which the work is based, laid the foundation for a revolution in therapeutics which we are glad to see has already begun.—*Modern Medicine and Bact. Review.*

DIABETES.

At the Académie de Médecine M. Robin spoke at great length on the treatment of diabetes. He said: Outside pancreatic diabetes, which forms a distinct class, two theories as regards the pathology of diabetes have been received with equal favor by medical men, hypersecretion of sugar and its non-consumption from a debilitated organism. Hence the two very divergent symptoms of treatment, one having in view the prevention of sugar-production by moderating the powers of nutrition, the other, the acceleration of its consumption by stimulating the general organ-

ism. Before treating a patient, a choice should be made between these two theories. He had previously demonstrated that there existed in a true case of diabetes an exaggeration of all the chemical acts of the general nutrition accompanied by a special suractivity of certain organs, as the liver and the nervous system. Consequently, it was this fact of the suractivity of the nutrition in general and the hepatic cells in particular, governed by a continued direct or reflex nervous excitement, which should be the pivot of the rational treatment of diabetes. It follows thus that the agents to be employed should be chosen amongst those which moderate the nutrition and the nervous system. However, when the patient is found in an advanced stage of the malady, it will be necessary to substitute the debilitating treatment for tonics and other stimulants. M. Robin said he would not insist on the *régime* and hygiene of diabetic patients, as they were already known, but he would add that as these patients have a tendency to demineralise (*déminaliser*) it would be necessary to add to the food those elements which are wanting to the organism. As to chloride of sodium, it was quite easy to recommend the food to be more salted; in the case of a loss of potash, green vegetables, such as cabbage and chicory, could be ordered, and where there existed an insufficient amount of phosphates the administration of glycerophosphate of lime and of magnesia would supply the want.

No diabetic patients could dispense with exercise, which should be gradual and moderate.

The medical agents comprised three groups. The first, antipyrine. The second, arsenic, codeine, alkaline waters, sulphate of quinine. The third comprises valerian, opium, belladonna and bromide of potassium. As to cinchona and cod-liver oil, they form adjuvants to the three groups. Each group corresponded to a stage of treatment to which he gave the name of alternating treatment.

In the first stage he gave antipyrine at the dose of half drachm daily, either pure or associated with bicarbonate of soda, or again, with Vichy water. He remarked that antipyrine should not be prolonged beyond five days, as otherwise it produced albuminuria. It followed, consequently, that if the patient were already albuminuric, the drug was counter-indicated, while in the pancreatic form of diabetes its action was of no value. If after four days of the administration of antipyrine the sugar had not diminished by 10 to 15 per cent., it was useless to return later on to this agent.

Second stage.—Here quinine, preparations of arsenic, codeine, and carbonate of lithine entered into line. He was accustomed to proceed in this manner: About eleven o'clock in the forenoon he gave a wafer containing 8 grs. of quinine, renewed

it for five days, suppressed it for four days, and re-ordered it for another six days. Before the two principal repasts he prescribed a wafer containing—

Arsenate of soda, $\frac{1}{2}$ gr.
Carbonate of lithine, iij. gr.
Codeine, $\frac{1}{2}$ gr.
Ext. of cinchona, viij. gr.

Third stage—At the end of fifteen days of the above treatment that of the third stage was commenced, consisting of opium, belladonna, bromide of potassium, and valerian. During eight days M. Robin gave the two first agents as follows:

Ext. belladonna, $\frac{1}{10}$ gr.
“ opium, $\frac{1}{2}$ gr.
“ valerian, ij. gr.

Powdered cinchona, qs.

For one pill.

During the first and second days he prescribed a pill every six hours; the third and fourth day, every four hours; the fifth and sixth days, every three hours; the seventh and eighth, every six hours; and the ninth and tenth, every eight hours. If the patients experienced an intolerance for opium or belladonna, the above pills were replaced by bromide of potassium, at the dose of 20 grs. three times a day. During this period the patient was also given Vichy water and tonics.

M. Robin treated in this manner 100 patients, who emitted nearly 4 oz. of sugar in twenty-four hours, and the result was as follows:—

1. Complete cure in 24 cases, in a space of time varying from three months to two years.
2. Incomplete cure in 25 cases. The urine of the patients contained from four to ten ounces of sugar. The glycosuria disappeared completely, but re-appeared under the influence of moral emotion, or when the patient neglected to follow the *régime* imposed.
3. In 33 cases the improvement was very manifest; the sugar never disappeared completely, but fell to one ounce and under.
4. In the remaining cases (18) the result was *nil*.

As to the duration of the treatment, it varied, lasting from a few weeks to several months. In a large number of cases it was renewed and suspended several times.—*Paris Correspondent Med. Press.*

ANTIVENIN, THE LATEST CONTRIBUTION TO SERUM-THERAPY.

According to the *Press and Circular*, June 12, Dr. Thomas R. Fraser, professor of materia medica in the University of Edinburgh, has made a very significant announcement regarding his original work with serpent poisons. Early in the month

of June Dr. Fraser read a paper before the Royal Society, showing that animals may be immunized against the venom of the cobra as well as other serpents. He also showed that antidotal properties inhere in the blood serum of such immunized animals. Dr. Fraser opened his paper with a historical account of the beliefs and traditions of the Hindoos and others, that poisonous serpents are self-immunized by some result of the absorption of their venom.

Since the year 1889, Dr. Fraser has been in receipt, from different parts of the globe, of supplies of snake poison, especially of the Indian cobra, and with this had performed many experiments on animals in the hope of producing immunity. The result he obtained passed his most sanguine expectations.

Continuing its abstract of Dr. Fraser's paper, the *Press and Circular* says:

"Experimenting on rabbits, among other animals, he first satisfied himself as to the amount of the poison which constituted the minimum lethal dose. He then proceeded to inject quantities below this amount, and found that he could gradually increase them to *fifty* times the dose originally fatal. But not only that, for a buck rabbit, which he exhibited, and which was then in about the one hundred and fiftieth day of treatment, had gained enormously in weight, from 2,000 to 3,000 grams, and had increased greatly in strength, and especially in virile power. Again, he found that the mixture of 1-240 cc. of serum obtained from a rabbit immunized to thirty times the minimum lethal dose with cobra venom averted a fatal result on injection, while the injection of a similar serum half an hour after the injection of a venom which otherwise proved fatal in one hour, promptly stopped the symptoms which had already commenced, and saved the life of the animal. He called this protective serum by the name of 'Anti-venin.' He also mentioned as an interesting fact that the rabbit above referred to had received during the months of treatment *enough cobra poison to kill two horses*, or about two hundred and eighty rabbits if unprotected. Not only are Dr. Fraser's results of the greatest value for the treatment of snake bite in India and other tropical countries, but, as he himself remarked, they possess a deeper significance in accentuating, as they do, the wonderful progress made in serum-therapy during the last few years, and are an earnest of still more wonderful discoveries yet to be made in the same direction. It appears also that immunizing an animal with the venom of one kind of serpent *protects it from the poison of other species.*"

In conclusion, it may be said that Dr. Fraser is well known for his original investigations concerning calabar bean and the other ordeal poisons of West Africa. We may confidently predict that

his findings will be confirmed.—*Jour. Am. Med. Assoc.*

MEDICAL NOTES.

In severe cases of *Hæmoptysis*, Prof. Hare says that great danger arises, in that a traumatic pneumonia may be set up, due to the extravasated blood.

The general phenomena that present themselves upon the beginning of the *Flow of Milk*, according to Prof. Parvin, are headache, restlessness, thirst, loss of appetite, and at times a rise of the temperature.

Prof. Keen says, in *Prolapse of the Rectum*, sometimes much relief is obtained by injecting, before going to the closet, from ʒvij to ʒviiij of warm water, and afterward an ounce of cold water, allowing to remain.

According to Prof. Parvin, menstruation is absent as a rule during *Lactation*, but ovulation may occur; but it is not very common for women to conceive while nursing, and if they do conceive, lactation gradually ceases.

Cocaine, Prof. Hare says, can be used to a great advantage in diagnosing hypertrophied *Nasal Catarrh* from tumors or bony or cartilaginous growths, in that it contracts the hypertrophied nasal tissues and not the other growths.

Cases of *Rheumatism*, Prof. Hare says, are often greatly relieved by the use of the following ointment:

R.—Veratrini,
Hydrarg. iodidi virid., . . . āā ʒj.
Petrolali, ʒj.—M.
Sig.—Apply over joints affected.

In a case of *Stomatitis*, Prof. Hare says if the kidneys are not acutely inflamed the following prescription is very valuable:

R.—Potassii chlorat., ʒj.
Tinct. myrrhæ, gtt. xx.
Elix. calisayæ, fʒiiij.—M.

Sig.—Teaspoonful in water every four hours.

In cases of *Chronic Nasal Catarrh* where the mucous membrane is congested and irritable, Prof. Hare says a solution of equal parts of distilled extract of hamamelis and water sprayed in the nose often does very well, but first the nasal cavities must be well cleaned.—*Coll. and Clin. Rec.*

A DANGEROUS COSMETIC.—A four-ounce bottle of a certain face-bleach, *Lancet Clin.*, examined by the State Board of Health during November, was found to contain twenty-seven grains of corrosive sublimate.

DISTRIBUTION OF HAIR ON THE HUMAN BODY.

—J. Hutchinson, *Archiv. Surg.*, says: It is well known that hairy men are tolerably common, hairy women exceedingly rare. Both in men and women at puberty hair makes its appearance in the axillæ and on the genitals, and its luxuriance is in some relation to the vigor of the individual. In men at this time hair grows on the face, trunk and limbs; at times also in the ears and nose. The eyebrows of women are always restrained, while in men they often grow very heavy. The scalp hair of women is much more abundant and long than of men. This may be because women have no hair on the face. Hairy men are usually bald men, and so very often are bushy-bearded men; any protracted or debilitating disease in a young person may be attended by a general growth of weak hair over the body. As a rule, the more perfect the sexual health in a male the more luxuriant the sexual hair, and the reverse in women. The pubic and beard hair are usually the same color, while the body hair may be of a different color. Hairy individuals are usually dark-skinned.—*Med. Brief.*

ACUTE GONORRHOEA.—

R.—Salol, ʒ j.
 Olei gaultheriæ, ʒ j.
 Olei santali, ʒ v.—M

Et ft capsulæ No. xx.

Sig.—One capsule three times a day.

R.—Morphiæ sulphatis, . . . gr. iij.
 Zinci sulpho-carbolatis, . . . g. x.
 Glycerinæ, ʒ ss.
 Aq. camphoræ, ʒ jss.
 Aq. dest., ʒ vj.

Sig.—For local use only. Inject three times a day, as directed.

Use a half-ounce, cone-pointed, hard rubber syringe; wash out the urethra by injecting a number of syringefuls of hot water. Inject one syringeful of the above solution, and repeat the treatment for three successive days. After that time, night and morning.—*Med. Sum.*

THE TREATMENT OF MELANCHOLIA AND OF INSOMNIA.—The nineteenth annual report of the Medical Director of the New Jersey State Hospital, at Morris Plains, for the year ending October 30, 1894, contains an interesting statement of the results of certain therapeutic observations. It was found that the administration of deodorized tincture of opium three or four times a day in doses of from between five and ten to between sixty and eighty minims, then gradually diminishing the dose, in the treatment of acute melancholia was attended with varying results, marked improvement appearing in some cases, none in

others, and positive harm resulting in a third group. All in all, a favorable opinion is expressed as to the usefulness of this mode of treatment in states of mental depression. The attendant sluggishness of the bowels will be satisfactorily overcome with small doses of cascara. The means of inducing sleep employed, in the order of their usefulness, were as follows: Judicious exercise in the open air, paraldehyd, trional, a mixture containing in each fluidram sodium bromid 15 gr., chloral hydrate 15 gr., tincture of cannabis indica 4 ℥, tincture of hyoscyamus 4 ℥, glycerol 15 ℥; sulphonal, and chloral.—*Med. News.*

LATE SUPPERS.—The old tradition that to eat anything just before going to bed was sure to produce indigestion and render sleep impossible, is now happily exploded. It is not good, as a matter of fact, to go to bed with the stomach so loaded that the undigested food will render one restless, but something of a light, palatable nature in the stomach is one of the best aids to quietude and rest in bed. The process of digestion goes on in sleep with as much regularity as when one is taking violent exercise to aid it, and so something in the stomach is a very desirable condition for the night's rest. Some physicians have declared, indeed, that a good deal of the prevalent insomnia is the result of an unconscious craving of the stomach for food in persons who have been unduly frightened by the opinion that they must not eat before going to bed, or who have, like many nervous women, been keeping themselves in a state of semi-starvation.

Nothing is more agreeable on retiring for the night than to take a bowl of hot broth, like oatmeal gruel or clam soup. It is a positive aid to nervous people, and induces peaceful slumbers. This is especially the case of cold winter nights, when the stomach craves warmth as much as any other part of the body. Even a glass of hot milk is grateful to the palate on such occasions, but a light, well-cooked gruel is better, and in our climate, during the colds months of winter, should be the retiring food of every woman who feels, as many do, the need of food at night.—*N. Y. Tribune.*

AN EFFICIENT ANTI-PRURITIC.—Aside from its value as an antiseptic and antimycotic in parasitic affections of the skin, and as a stimulant in chronic dermatoses, losophan has been shown to possess decided anti-pruritic properties. It is, therefore, deserving of a trial in chronic cutaneous diseases attended with marked itching, such as prurigo, pruritus ani and vulve, some cases of chronic eczema, etc. The itching in these cases is sometimes so intense as to rob the patient of his night's rest, and even to make life a burden. Descottes has reported a case of pruritus in which

after other remedies had been tried in vain the distressing itching was relieved by an ointment of losophan. Waugh mentions several cases of pruritus ani and vulvae in which a like favorable result followed the use of a 3 per cent. ointment, although previous treatment has been unsuccessful. Saalfeld also recommends its employment in prurigo and pruritus. The results to be obtained from losophan, however, depend to a great extent upon the method of preparation of the ointments. It should always be thoroughly dissolved in oil before being added to the ointment base. It is rarely necessary to exceed the strength of 5 per cent.; and finally it should not be employed in acute cases attended with marked cutaneous irritation.—*Times and Reg.*

THE TREATMENT OF CHRONIC SCROFULOUS OTORRHOEA.—M. Isaia (*Revue Internationale de Médecine et de Chirurgie Pratiques*) gives the following formulæ for the treatment of this condition:

R.—Balsam Peruvianæ,
Alcohol, of each, ʒiiss.
Cocaine hydrochlor., gr. viii to xv.—M.
Sig.—For external use.

Or this,—

R.—Balsam Peruvianæ, . . . ʒi, gr. xv.
Glyc., ʒiiss.
Cocaine hydrochlor., gr. vii to xv.
Sig.—For external use.

Or this,—

R.—Balsam Pervianæ,
Balsam Tolu, of each, ʒss.
Alcohol, ʒi to ʒiiss.
Cocaine hydrochlor., gr. xv to xxx.
Sig.—For external use.

These formulæ are used in the following manner: after the external auditory canal has been thoroughly cleansed with a solution of resorcin, of boracic acid, or simply a salt solution, the canal is made insensible with cocaine, and a few drops of one of the above solutions are then instilled into it, or a tampon previously saturated in one of these solutions may be introduced.

In the hands of Dr. Isaia, of Naples, these solutions have generally given good results, but they should not be employed where there are any excoriations, since the balsam are liable to set up an irritation that may result in a painful inflammation.—*Therap. Gaz.*

LYCETOL—THE NEW URIC ACID SOLVENT.—Known chemically as di-methyl-piperazine-tartrate, described by Dr. Hermann Wittzack, of Frankfort-on-the-Main, Germany, is (according to *Ephem. Mat. Med., Phar. and Therap.*) chiefly recommended for gout. Theoretically, it has the same solvent action on uric acid as piperazine;

but the tartrate of the lycetol splits up into CO₂, which alkalizes the blood and keeps uric acid in solution. It also produces diuresis, which hastens elimination. From 1.0 to 2.0 grams (15.4 to 31 grains) is the daily dose. The addition of sugar to a solution gives it an agreeable lemonade taste for continued use. It is said to break up the regular periodical attacks of gout, and does not produce disturbance in the general system.

BROMIDIA.—The steadily increasing use of Bromidia by the profession in all parts of the world demonstrates its great value as a hypnotic. If human testimony is worth anything at all, then Bromidia must unquestionably be the best and safest of all sleep producers. Dr. Federico Tommasi, of Maggranico, Italy, on July 24, 1893, writes: "Although, as a rule, I do not approve of specialties, still when I find an ideal one, both as regards therapeutic combination and pharmaceutical preparation, easily administered, prompt and certain in action, I value it. Bromidia fulfils all these conditions. I have obtained especially gratifying results by its use in two cases—one, heart disease, the other, acute lumbago. In both cases it promptly relieved the pain, produced tranquil sleep, with no disagreeable after-effects."

PHOSPHATE OF SODIUM IN MORPHINE HABIT. M. J. Luys reports the case of a physician who had been accustomed to take about seven grains of morphine daily. Small doses of sodium phosphate were given subcutaneously with glycerine and water, and as they were gradually increased, the morphine was progressively diminished. In two months the morphine was discontinued entirely, and then the doses of sodium phosphate were progressively diminished, and finally stopped altogether in two weeks more. There remained no desire for the morphine.—*N. Y. Med. Times.*

Two cases of *aneurism at the root of the neck*, both right-sided, and, presumably, carotid, have been under treatment in the clinic of Dr. S. Solis-Cohen. The treatment has consisted of rest and the administration of *hydrated calcium chlorid*, in doses of about a dram a day. Marked improvement can be demonstrated in one case, as was likewise observed in a case of *innominate aneurism* under Dr. Cohen's care at the Philadelphia Hospital two years ago. In the other case no change can yet be noticed.—*Phil. Polyclinic.*

NEVER give stimulants in a case of profuse hæmorrhage. The faint feeling or irresistible inclination to lie down, is nature's own method of circumventing the danger, by quieting the circulation and lessening the expulsive force of the heart, thus favoring the formation of a clot at the site of injury.—*Clinique.*

Improved Method of Administering Blaud's Pills.

Blaud's Pill (FR. PHARM.) Capsules

MANUFACTURED BY

Duncan, Flockhart & Co.

(Chemists to the Queen)

EDINBURGH.

These Capsules are made in three sizes, equivalent respectively to 1, 2 and 3 Blaud's Pills, and their advantages may be shortly summed up as follows:—

1st. Their small size. Owing to the special process adopted by D., F. & Co., these Capsules are not much larger than the ordinary Blaud's Pills, while owing to their softness and flexibility they are much more easily swallowed. This advantage will be appreciated by all who have to take large quantities of these Pills.

2nd. They are so prepared that, while they retain indefinitely the full efficacy of fresh Blaud's Pills, they have no tendency to become hard and insoluble by keeping, a difficulty which is met with in the case of the Pills.

GUARANTEED STRENGTH.

WE guarantee our Capsules to be equal respectively in Ferrous Carbonate to 1, 2 and 3 freshly-prepared Blaud's Pills. They have also this distinct advantage over Pills, that they neither oxidize nor harden.
—D., F. & Co.

These Capsules are put up in boxes of 2 dozen and 100 each, with or without Arsenic.

Can be ordered through any Wholesale or Retail Druggist.

Duncan, Flockhart & Co.'s Canadian Agency:

R. L. GIBSON,

30 Wellington Street East, - - - TORONTO.

When writing please mention this journal.

Anti= Diphtheritic Serum.

THIS
ANTITOXIN

IS PREPARED IN

Our Own Bacteriological Department

BY EXPERT BACTERIOLOGISTS.

Every precaution known to the science has been taken to insure its
reliability.

\$3.50 PER VIAL.

Each vial contains 1000 normal Antitoxin units, the full curative dose
for average cases.

Directions for injecting the Serum accompany each vial.

Correspondence upon this subject respectfully solicited.

PARKE, DAVIS & COMPANY.

WALKERVILLE, ONT.

THE CANADA LANCET

A Monthly Journal of Medical and Surgical
Science, Criticism and News.

✉ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address, DR. J. L. DAVISON, 12 Charles St., Toronto.*

✉ *Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to ARTHUR A. ADAMS, Gen. Business Manager, 11 Colborne Street, Toronto.*

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; Canadian Advertising Agency, 60 Watling St. London. 5 Rue de la Bourse, Paris.

TORONTO, AUGUST, 1895.

Editorial.

THE REGULATION OF PROSTITUTION.

Repugnant as the licensing of prostitutes is, to the minds of Christianized and civilized communities, much may be said in its favor, especially from a utilitarian point of view. Now, if there be one thing certain, in all the shifting and uncertain affairs of this globe, it is the fact that sexual instinct and passion is a constant quantity; otherwise, this poor old world would be in a few years devoid of animal life; for if there be anything that is horribly repugnant, not only to human beings, but, if we may judge by their acts, to the lower animals, it is the performing of the sexual act without that wonderful, not understood, not understandable factor, passion.

Our sense of decency throws a veil over this most important function, physiological in the broadest sense though it be. Sentiment will not permit even the thought of the *personal*, in the command to replenish the earth, even when it is done decently and in order in the married state. Our home life, our education, our relation to our wives, mothers, sisters, makes us shudder at the contemplation of this factor so potent, so universal, so ubiquitous, so necessary to the race. But play the ostrich as we may, veil it as we may, shut it out from our minds as we may, leave our young, ignorant and innocent of it as we may, still there remains the bottom fact, the irrefutable fact,

that passion, animal passion pure and simple, keeps the race in existence.

Now, how may this gigantic force be best directed? It is certainly one of the most necessary instincts in the animal creation, as well as one of the most constant. So that its management and guidance, is of paramount importance. Our moral and social laws are so strictly constituted that were they obeyed we should have no difficulty whatever. Unhappily the old Adam will crop out, however careful the early training may have been, however jealously guarded, by society, by husband, wife, brother or sister the *possessed* one may be. Why will it crop out? Because by a law, known to creation long before any human system of ethics was promulgated, it was made a necessity for the continuance of the animal world, and we may be sure that so long as the animal world shall exist, that law will have full force.

The result, however, of our moral laws, running counter, as they do, to this deep-rooted instinct, is what is called illicit intercourse. The medical profession from its peculiar relations as well to the individual as to the family, has the best opportunity of becoming acquainted with the amount of illicit intercourse which obtains. True, the erring ones do not make a confidant of the doctor till something goes wrong; then he is appealed to to save the participants in the social crime, from the consequences of their act.

Did the world at large know the amount of illicit intercourse indulged in, even in our best educated, most godly (*sic*) communities, we trow there would be such a revulsion of feeling among the strong-minded women and weak-minded men, who have opposed, and still oppose, the regulation of prostitution, as would cause them to be among the first to cry out for protection to our young women. The word prostitute is a horrible word to most people. "Licensed prostitution," sounds like the authorities saying that intercourse outside the state of marriage is *right*.

No, but it exists, just as hunger, thirst, weariness, death and disease exist, and none of these are right, if one may judge by the universal struggle to avoid them; so we must make the best of it, recognize it, and regulate it for the good of humanity.

For altogether, outside of sentiment, comes the

utilitarian side of the question. The amount of disease engendered by unlicensed prostitution in all cities and towns is appalling. In great centres, where poverty drives the sufferers to hospitals and dispensaries, and in the army, this is clearly shown. But the evil exists no less in smaller and wealthier communities, where the sufferer consults his private physician and his case is not tabulated in the hospital or government returns.

There is no need for us to enlarge upon the actual money loss to the community, to the suffering, both physical and mental, endured both by the guilty and the innocent, nor to the impaired vitality of the whole race; these matters are well known to every physician.

We are inclined to pride ourselves upon our superior virtue as compared with many European countries, and especially France. The cold-blooded Englishman is supposed to be more continent than his hot, impetuous Gallic neighbor. Perhaps he is, but the outcome of his cold blood, and *absence of regulation of prostitution* shows in 1895, the year in which venereal diseases were most prevalent in the French army, the number of cases of venereal diseases to the 1000 strength, as 74.5 in the French army, to 139.4 in the English army. In 1885 the rate in the British army was 274.4 per 1000; that of the French army for the same year was 52.1 only.

Many other figures could be quoted to show that wherever clandestine prostitution exists the disease rate is high, and that where prostitution is regulated the disease rate is low. The Russian army shows this notably, as compared with the British force. Dr. Commenge, a well-informed and reliable writer on the subject, has concluded that: 1. Venereal diseases are always far more numerous in countries where there is free trade in prostitution than in those where regulations are in force. 2. The regulation of prostitution serves to attenuate the virulence of the venereal diseases and to hinder their progress. 3. The results now adduced are in accordance with the resolutions of the Académie Médecine voted in 1888, when the attention of the authorities were drawn to the dangers of prostitution and to the necessity for safeguarding the public health.

It may be said that these remarks will not apply to Canada. Do not let us deceive ourselves. Canadians are better clothed, better fed and better

housed than are Europeans. The animal forces are, man for man, stronger with us. How then are we more virtuous? Do not let us be deceived.

We are not more virtuous, we are not more continent, but the facts are not known.

Would it not be well, therefore, both from a sentimental as well as a utilitarian point of view, that there should be some regulation of the matter? Many an innocent girl would be spared, many a blighted home would be free from stain and sorrow, many a death and an incalculable amount of disease would be avoided if we could but face the *facts* and look upon the matter in a sensible way.

THE ARTIFICIAL FEEDING OF INFANTS.

This subject must continue to be one of paramount importance to the profession. It would seem strange that more uniform and decided views should not be held by medical men in regard to a matter of so vital importance to one of the most interesting of all the classes of our *clientèle*. Nature is very kind, and it is marvellous what effort she will on occasion put forth to conserve the offspring of mothers, who are not physiological enough even to suckle their young, one of the most necessary of all the functions for the preservation of the race.

It may be conceded that the diet of an infant is the most important of all the conditions of its environment. Good air, proper clothing, baths, and cleanliness are all of importance to the welfare of a child, but none of them, nor all of them together, rank in importance with the diet.

In countries like our own, with a long heated term, and a corresponding frequency of infantile alimentary troubles, it is especially important that clear and decided views shall be held, not only by the profession, but, so far as possible, by the general public on the artificial feeding of infants. Cow's milk is the standard food, and perhaps with proper supervision is the best that can be had. It must, however, be diluted, which while it brings the amount of casein near to that of mother's milk, as also the salts, leaves only one half the proper amount of fatty material, and for too small a proportion of sugar. Many devices have been resorted to, to overcome the difficulty, some

of which answer very well in large institutions, and wealthy families where any or all appliances may be had for the asking; but they will not do with the poorer classes, where artificial feeding is much the more common.

Sterilized milk promised a few years ago to take the place of mother's milk, and to get rid of many of the objectionable features of plain cow's milk. But in addition to its being difficult, if not impossible, to procure in every day practice, doubt is now beginning to be thrown upon its value as a food. Some competent observers, among them Dr. Barlow, hold that its long-continued use may produce scurvy. So that, for two good reasons, sterilized milk cannot take its place as an ordinary standard food for infants. All things being considered then, we shall not be able to do better than hold fast to that which we know to be good.

Among the various compounds suggested for the purpose of assimilating, as nearly as possible, cow's to mother's milk, none will be found better than "Meig's Mixture." This consists of: Milk one part, cream two parts, lime water two parts, solution of sugar of milk three parts. This solution is made by adding $17\frac{3}{4}$ drachms to one pint of water. This Meig's mixture can be readily prepared by the ordinary nurse, which, after all, is one of the great desiderata from a practical standpoint.

Another recipe for the nurse is: Good cream, one and one-half fluid ounces; milk, one fluid ounce; water, five fluid ounces; milk sugar, three and three-eighths drachms.

The old idea that mother's and cow's milk should not be taken at the same time is erroneous. If the mother cannot supply enough nutriment for her child, give cow's milk to supplement her supply. This is better than cutting off the breast supply at once, and, indeed, may make all the difference in a few weeks, between tolerance or intolerance, on the part of the child's digestive apparatus, of a total diet of cow's milk.

SIMCOE MEDICAL ASSOCIATION.—The thirteenth regular meeting of the Simcoe District Medical Society was held in the Council Chamber, Barrie, last Thursday, the Vice-President, Dr. W. A. Ross, in the chair. These members were pre-

sent and took part in the discussion: Drs. Ardagh, Arnall, Clutton, Dunn, Evans, A. Harvie, J. Harvie, Heaslip, Hanly, Howland, Little, Lehmann, McCullough, McCarthy, McClinton, Morton, W. A. Ross, A. Ross, Raikes, Stephenson, Stephen, Wallwin, West, Wells; and Drs. Peters and Primrose, of Toronto, who were present as guests of the Society.

Dr. McCullough, of Alliston, read a paper on "Sciatica," which was discussed by Drs. Norton, Stephen and Peters.

Dr. Lehmann, of Elmvale read a paper on "Morphœa," and exhibited a patient with the disease.

Dr. Peters, of Toronto, presented a patient on whom he had operated for impermeable stricture.

Dr. Primrose, of Toronto, read a paper on "Surgical Treatment of Tuberculous Glands."

After adjourning to a luncheon provided by the Barrie members, at the Queen's Hotel, the Society proceeded to elect the following officers for the ensuing year:

President, Dr. McCarthy, of Barrie; 1st Vice-President, Dr. A. R. Harvie, of Orillia; 2nd Vice-President, Dr. Little, of Churchill; 3rd Vice-President, Dr. W. Lehmann, of Elmvale; 4th Vice-President, Dr. J. W. S. McCullough, of Alliston; Treasurer, Dr. E. D. Morton, of Barrie; Secretary, Dr. Raikes, of Midland.

HÆMATURIA.—James W. Osborn, M.D., of Bealton, Ont., Canada, writing to the Editor of *Medical World*, Philadelphia (July Number, 1895), says: "Regarding my obstinate case of hæmaturia, I told you in a previous communication of my patient's restoration to a fair degree of health after a siege of anæmia, emaciation and prostration, but that the hæmorrhage, though more moderate, was still going on. I have now a still more favorable report for you. Having failed to obtain the tannate of soda recommended by Dr. Hutchins, San Francisco, from my druggist, or in the city, I ordered a bottle of Sanmetto, thinking by the time she had given it a fair trial I would be able to get the tannate of soda elsewhere. She had only taken the Sanmetto a week, in drachm doses three times a day, when the hæmaturia disappeared. This was about three weeks ago, and it has not returned unless within a day or two. This is certainly worthy of note, as the hæmor-

rhage, notwithstanding her great improvement, had never subsided entirely for more than a day, and that only once, in a period of about eight months. While we cannot be sure of the proper hoc from the post hoc, in a single instance, it certainly looks as if the Sanmetto has been of service to the vis medicatrix nature. I have just received a letter from an old friend in the profession, who has used Sanmetto with decided benefit to a patient afflicted with hæmaturia."

THERAPEUTIC BRIEFS.—*Coll. and Clin. Rec.*, Dr. Cantrell, Polyclinic, believes that scarification is the best treatment for *Acne Rosacea*. He freezes the part with a rhigolene spray or ethyl chloride, and freely scarifies with a five-bladed knife. This treatment gives prompt relief.

Sir Benjamin Ward Richardson, *Asclepiad*, 1894-95, in *Medical News*, April 20, calls attention to the occurrence of *Cramps* in the lower limbs in cases of *Diabetes*. They are rare by day and most common at night. They are very painful although not of long continuance. They occur principally in the muscles of the calf of the leg, but they may also involve other leg-muscles and, at times, even distant muscles. In conjunction with this condition there is sometimes a painless motion or twitching of the leg-muscles, observable mostly in the early morning after good sleep, and lasting two or three hours, but passing away during the day. These movements may number thirty or forty in the minute.

Chloralamid succeeds in arresting night-sweats in over half the cases. Thirty to thirty-five grains were given at bedtime. Agaricin gave still better results, controlling the sweating in three-fourths of the trials. One-twelfth grain in pill-form at bed time.

NEW AND SPEEDY METHOD OF DILATING A RIGID OS IN PARTURITION.—At a meeting of the Obstetrical Society of London, Dr. Farrar, *Lancet*, gave the details of two cases in which he had used a 10 per cent. solution of cocaine as an application to the rigid os. In one case he had applied the cocaine after endeavoring vainly to relax the cervix by means of chloral, bromide of potassium and morphia, and the most persistent attempts at digital and mechanical dilatation, with and without chloroform. He decided upon incising the os,

and used the cocaine to this end. After five minutes he introduced the finger as a guide to the scissors, and, to his surprise, found the os widely dilated. In the second case, a primipara, forty-eight years of age, he used every effort, as before, to produce relaxation, and waited three days before making the application of cocaine, which was immediately successful. In four minutes the os had yielded. He considered the dilatation to be due to the cocaine in both cases. Dr. Armand Routh said that Dibbs, of Shankin, had recommended cocaine as relieving the pains of the first stage of labor, and that Mr. Head Moore advised cocaine and boric acid pessaries in cases of rigid os. He himself had found it useful. The president, Dr. G. E. Herman, said that two cases were rather a slender foundation upon which to base a conclusion, but if Dr. Farrar's results were confirmed by further experience, he would have made a valuable addition to our obstetric resources.

MERCURIC CHLORIDE IN THE TREATMENT OF RHUS POISONING.—I would call attention to the value of corrosive sublimate in the treatment of dermatitis venenata. Dr. Witmer, in *Phila. Polyclinic*. Permit me to cite a case. D. L., aged 28 years, is very susceptible, direct contact with the plant not being necessary to induce a violent eruption. He has yearly attacks of a severe type, frequently lasting for six weeks. He applied for treatment in the early part of May, with the typical eruption on the face and fingers. The patient was given onethirty-second of a grain of mercuric chloride every three hours. Within four days the eruption had entirely disappeared. The topical applications consisted of lead-water and laudanum during the acute stage; of hot water, frequently applied, during the stage of exudation, and of a two per cent. carbolated petrolatum ointment during the stage of desquamation. This case is of interest owing to the rapid convalescence of the patient during a time when the toxic plant (rhus) is particularly virulent.

THE TREATMENT OF LOCOMOTOR ATAXY.—The use of suspension as a method of treatment in locomotor ataxy is scarcely ever heard of now; many observers claimed for it that it relieved the tightening pains, which form one of the most trying symptoms to the patient, but we believe that,

through its employment, several persons met their deaths by hanging, *Med. Times*. A French physician, Blondel, has suggested and carried into practice a method whereby the advantages of suspension can be obtained without any of its dangers. He has treated a case of locomotor ataxy in a syphilitic man of twenty-nine, who suffered from intolerable tightening pains, as follows:—The patient lay on a bed with the thighs flexed on the abdomen (knees and chin), and the legs upon the thighs. A cord passed round the neck and under the knees enabled him to keep in this position for five minutes. This was repeated every night for eight days, when the pains ceased, to return one month later, when the same treatment was carried on for five nights. The man has had no recurrence, although two years have passed since the treatment. This method seems to bring about the same result as suspension—a slight elongation of the spinal cord. Certainly, it is free from danger, and is decidedly worthy of trial.

A CONSTANT SIGN OF COMMENCING MENINGITIS.
—This consists in the inharmonious movements of the chest and diaphragm, *Times and Reg*. It exists from the beginning, and may serve to reveal its cause even in insidious cases, but requires careful searching. The chest and abdomen must be bared, but not suddenly, or the hyperesthetic skin will take on accidental movements from the action of the air. In the first period of meningitis may be seen irregularity of rhythm and inequality of the amplitude of development of the chest. Another sign is the irregular type of respiration and dissociation of the movements of chest and diaphragm. The respiration is effected by the lower respiratory muscles of the chest. Looking at the umbilical region, instead of the normal elevation with each inspiration, there is either immobility or depression. These movements are not connected with the Cheyne-Stokes type of respiration.

TUBERCULOUS ADENOID VEGETATIONS OF NASOPHARYNX.—M. Lermoyez, *Ann. des malad. de l'oreille, etc.*, alludes to some experiences with adenoid growths in the naso-pharynx, which, on examination proved to be not lymphatic, but tuberculous in structure. In such cases the removal of the growths gave only a temporary relief; a

return soon followed. In one case a rapid development of tubercle of the lungs followed the operation. The writer proposes in all cases where there may be a suspicion as to the tuberculous nature of the adenoid growths to forestall the operation by a histological examination of a test portion and to complete the operation finally by galvano-cautery in order to hinder the entrance of germs into the opened blood vessels. The subject is quite important, but the writer's material was so scanty that further investigation in this direction are earnestly desired.

CHLOROFORM IN PHTHISIS.—Dr. Cuthbert, writing to the *Lancet* says: In reference to Dr. Lee's communication in the *Lancet* for June 15th, I also have noticed good results following chloroform in phthisis and in cases apart from operation, in which, of course, there is room for a fallacy to creep in. In one case the evening rise of temperature disappeared for eight or ten days after each administration. Moreover, I have so often found high fever decline after its use in non-surgical cases that I have resolved to try it in any case of hyper-pyrexia that becomes intractable—pulse permitting.

TO REMOVE NITRATE OF SILVER STAINS.—Hahn recommends the following mixture for this purpose: bichloride of mercury, chlorate of ammonia, each 5 grams, distilled water, 40 grams. The stains are touched with a piece of cloth dipped in this mixture, and then rubbed. The spots, even if of long standing, disappear almost instantly, on woollens, cotton or linen. Stains on the skin may be removed by the same method. They first assume a yellowish-white color and then completely disappear.

PRURITUS.—

R—Mentholis, gr. xx.

Zinci stearitis cum bismutho, ʒ i.—M.

Sig.—Ointment. Apply locally.

J. W. SNOWDEN, M.D., A.E., San Jose, California, on April 12th, 1895, writes: Your Bromidia acts like a charm. I believe it a safe, effectual and reliable hypnotic.

ASTHMA.—Nocturnal attacks are said to be guarded against by hypodermic injections of small doses of strychnia and atropia in combination.

Books and Pamphlets.

IMMUNITY, PROTECTIVE INOCULATIONS IN INFECTIOUS DISEASES AND SERUM-THERAPY. By George M. Sternberg, M.D., LL.D., Surgeon-General U. S. Army, etc. New York: Wm. Wood & Co. Toronto: Vannevar & Co. 1895.

The author is dealing with what is perhaps the most burning scientific question of the day. Although the treatment of diphtheria with anti-toxin has not proved so entirely successful as we all at first hoped for; yet its partial success is an earnest of what we may yet look for in the treatment of all infectious diseases by similar means. Every practising physician and surgeon must be interested, and deeply so, in serum-therapy, and therefore, Dr. Sternberg's work is timely. There have been recently opened up, by bacteriologists, a vista of possibilities in specific treatment, unsuspected a year or two ago. So that every doctor should be *au courant* of this new branch of scientific medicine.

Dr. Sternberg comes to the work very fully equipped. His official position gives him enormous advantages in the study, and his thorough scholarship and scientific attainments peculiarly fit him for this work. And his book is quite as good as we could expect. The science is new, but everything of interest bearing on the subject is here set down.

It is a book no doctor, who wishes to be abreast of the medical progress of the time, and we may say of the most important branch of that progress, can afford to do without.

THE YEAR BOOK OF TREATMENT FOR 1895; a Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers & Co. Toronto: Carveth & Co. 1895.

This is the eleventh issue of "The Year Book of Treatment." It comes in its old form, so that those of our readers who know it require no information; but for those who do not, we may say it is a *résumé* of the medical literature of the last year; a sifting of the wheat from the chaff, which will, to a considerable extent, enable the busy practitioner to keep abreast of the progress of the times in all that relates to the treatment of disease. Among the contributors to the present volume we note the names of Dudley W. Buxton,

Reginald Harrison, Malcolm Morris, Edmund Owen, Henry Power, and many others whose writings are well known to the medical world.

A MANUAL OF THE MODERN THEORY AND TECHNIQUE OF SURGICAL ASEPSIS. By Charles Beck, M.D., Visiting Surgeon to St. Mark's Hospital, etc. With 65 illustrations and 12 full-page plates; pp. 306. \$1.25 net, cloth. Philadelphia: W. B. Saunders. Toronto: Vannevar & Co. 1895.

The medical and surgical practitioner has heard so much about the whole science having been revolutionized since asepsis came to the fore, that he may think he knows all that is worth knowing about the subject. He may, and probably does know, a deal about it; but he wants to read Dr. Beck's book, to understand to what vast dimensions the "science" of asepticism has grown.

While the book is in the main practical, theory has not been omitted, where it can make plain the technique of modern wound treatment.

We should like to see a similar work on Medical Asepsis, as we believe much could be said on that subject which would be of inestimable value to the physician, as this is to the surgeon.

DOSE BOOK AND MANUAL OF PRESCRIPTION WRITING. By E. G. Thornton, M.D., Ph.G., Demonstrator of Therapeutics, Jefferson Medical College, etc. Philadelphia: W. B. Saunders. Cloth, pp. 338. \$1.25 net.

This book is a very convenient one for students of medicine, as well as for both young and old practitioners, who can profitably use it as a book of reference.

It gives the composition and strength of all official preparations, U.S.P.; solubilities, incompatibles, doses both apothecaries and metric. It also considers the grammatical construction of prescriptions; numerous examples of properly constructed formulæ, and, what should be of great advantage to the student, and to many a practitioner, if we may judge by the Barbarizing we so often hear, the proper pronunciation of all the terms used in pharmacy.

FOR PIMPLES AND BLACKHEADS.—It is said, *Druggists' Circ.*, that a lotion made by dissolving one drachm of salicylic acid in three ounces of alcohol, applied to these little nuisances, will prove very useful in ending in their removal.