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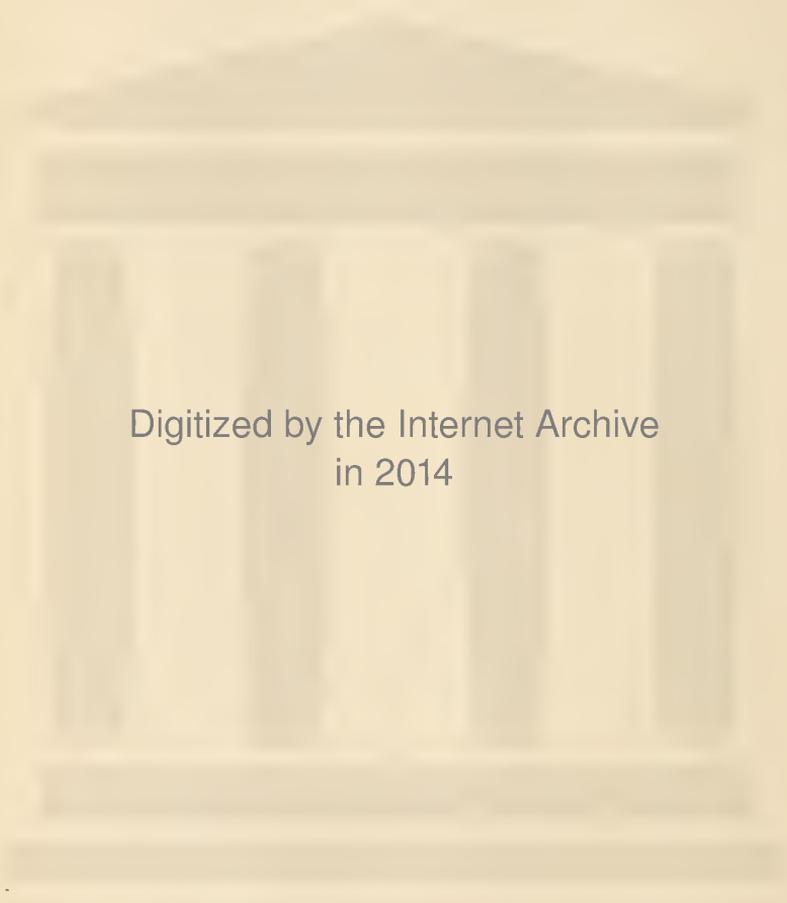
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THE
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*A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS,—IN THREE PARTS:
MEDICINE, SURGERY, DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.*

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MEDICINE.

CONSTITUTIONAL DISEASES.

Elevation of the Arms as an Indication
of Peritonitis.

DR. HENRY A. LEDIARD. (*London
Lancet*):—

There are various circumstances rendering the attitudes assumed by the sick of great diagnostic value. It may be that extreme restlessness, delirium, or fear, may prevent accurate noting of the pulse, temperature, respiration, or even physical examination of diseased organs. Again, deaf-mutism, malingering, a foreign language, etc., may further entail difficulties in diagnosis which might be in some measure overcome by the observance of a well established position pathognomonic of a disease. I have in this short note to allude to one disease and one posture only, which seems to be rarely dissociated at least in the adult, for many years have passed since I was first struck with a posture which I have generally found to be a truthful indication.

On November 19, 1871, a waiter, æt. 22, was brought into the Edinburgh Infirmary, under the care of the late

PROFESSOR SPENCE, whose house-surgeon I then was. The patient had been stabbed in the abdomen, and a foot of small intestine was protruding. On the day following admission the patient was noticed to keep his hands above his head, with the elbows out—*i.e.*, in a position often assumed when one is lying on the grass in summer enjoying the sounds of nature. Subsequently, but within 24 hours, he was observed to raise his left thigh; finally, the hands were constantly behind the head, and the knees completely drawn up. Death occurred on the fourth day from general peritonitis.

In peritonitis following the operations for hernia, gastrotomy, ovariectomy, ruptures of the bowels following violence without external mark, and in puerperal peritonitis, I have constantly observed the position taken by the patient to be similar to that I have described. The rising of the arms is, in my belief, coincident with the commencement of peritonitis, and when the inflammation is at its height the hands will be clasped behind the occiput. The explanation is simple enough: the object being to lift

all pressure from the distended bowels, the respiration becomes thoracic and the diaphragm fixed; by raising the arms the pectoral muscles elevate the ribs, and more room is thereby allowed for lung expansion; the raising of the arms moves the scapulæ upwards and forwards, and the serratus magnus being drawn upon still further, tends to relieve the thorax from pressure, whilst the dorsal position of the trunk, with an extended spine, favors respiratory movement.

It is more than likely that what I have directed attention to has been fully described already; indeed, the position of the arms may have been duly noted by others, but not thought worthy of special remark. In the text-books on nursing I have glanced at, however, I find no notice taken of the elevation of the arms in peritonitis, whereas the drawing up of the knees is not omitted. My opportunities of observing peritonitis in children have been too few to enable me to make any statement.

The Specific Treatment of Typhoid Fever —Disinfection of Excreta.

DR. JOSEPH NEFF (*Medical and Surgical Reporter*):—

In reference to the disinfection of excreta, Dr. Neff was wont to rely upon the sulphate of iron, and was satisfied with it, never having seen a new case contracted from an already existing one, when its use was faithfully carried out, but since a scientific commission has decided that it is not a disinfectant, he is forced to abandon its use. Many very good men rely upon the sulphate of copper. Dr. N. now uses "*Thymolene*," which is composed of the chlorides of zinc, lead, magnesium, sodium, and calcium, with thymol. To this he adds the bichloride of mercury. ℞. Thymolene, Oj.; hydrag. bichlor, gr. lvi.; sodii chlor., $\frac{5}{3}$ ss.; aquæ, ad. cj.

With this he thoroughly cleanses the vessels before use. Half a teacupful is placed in the vessel, kept under the bed, ready for use. After it is used, more of the disinfectant is added to the stool, and it is at once emptied, the closet being well flushed or the privy vault disinfected after every stool. Lately, his attention has been called to a new disinfectant called "*hydronaphthol*," which is odorless, not poisonous, and claimed to be very effective. The formula is C^{20}, H^7, O, H, O . While it will prevent the formation of germs, it has not been proven to have very much germicidal power, for it is not germicidal up even to five times the saturation point of a solution. Instruments might first be washed in a bichloride solution to destroy all germs, when they could be kept indefinitely in hydronaphthol.

The specific treatment of typhoid fever consists in the use of iodine and carbolic acid. Dr. Da Costa prefers thymol. Dr. Neff uses carbolic acid (one drop) and tincture of iodine (two drops) in from one to two ounces of water every two or three hours. Calomel is also recommended by some. A hasty gathering of cases shows 387 cases treated non-specifically, with 69 deaths; for calomel, 223 cases, with 26 deaths; and for iodine and carbolic acid, 259 cases, with 37 deaths. It is to be noted that hemorrhage is more frequent in the cases treated with carbolic acid and iodine than when the treatment is expectant or symptomatic. He has had two cases of severe hemorrhage in cases treated with the acid and iodine, and three or four cases in those without; but the latter cases are so much more common that relatively the proportion is much higher in the former. In the specific treatment we are less apt to have serious complications coming on late in the disease. In one of these

cases there was a sudden fall in the temperature from 103° to 97° ; such a great and sudden fall almost always indicates hemorrhage. In the use of alcohol, Dr. Neff is guided by its effect on the pulse and on the delirium; if, under its influence, a weak and rapid pulse grows weaker and more rapid, it must be stopped, and *vice versa*. As a rule, he does not use alcohol at all in the first week or two, but when its use becomes necessary, he gives it *ad libitum*, not counting the amount, *but to produce effects*. This woman was taking twenty-seven ounces of whisky daily, and as her pulse was weak and she had delirium, it was run up to over two pints daily; under its use she improved, and it was gradually reduced, ounce by ounce, daily. Opium is valuable for the delirium, and it may be combined with camphor, which is a great nerve sedative. We may give one quarter of a grain of the extract of opium, with one to two grains of camphor every two, three, or four hours. He is *somewhat* disappointed in the use of antipyrin; it will reduce, *but it will not hold down* the temperature. In this case, twenty grains reduced the temperature $4\frac{3}{4}^{\circ}$, but in two hours it had already gone up 2° , and again, when the temperature is *knocked* down by antipyrin there is not the expected improvement in the general condition of the patient. He uses this drug to reduce the temperature, and then follows it with quinine to keep it down. Quinine is slower in producing its effects, but they are more lasting; it must, however, be given in large doses—not less than twenty grains in the course of half an hour. Five grains every hour will not accomplish the purpose. If it produces vomiting, suppositories may be used. Dr. N. has rarely seen any unpleasant effects from these large doses. He has given as much as one

hundred grains in twenty-four hours, with only slight impairment of hearing. It is best to give it in the morning, twenty grains at one dose. If the temperature should suddenly rise to 106° , he would give antipyrin, but would not rely solely upon it.

Remember that diarrhœa may be kept up by too much food, even though the amount ingested may be *absolutely* small, for it may be *relatively* too great. This may be the case, even when the diet is confined to milk. It is essential that the bladder and lungs should be examined at each visit. There may be retention of urine and the stupid, listless condition may be due to uræmia, while congestion of the lungs is liable to occur at any time. Head symptoms, uræmia, coma, and death have not infrequently occurred unsuspectedly in the practice of the most eminent physicians.

Treatment of Typhoid Fever.

DR. W. B. REYNOLDS, concludes an article in *Medical World* as follows :

Just as soon as I *suspect* a patient to have typhoid fever, I immediately order him to bed and put him on a diet consisting of milk, soft-boiled eggs and beef tea or animal broths. I consider the early putting to bed of the utmost importance, and I particularly insist that the patient must maintain the recumbent position until convalescence is well advanced. Absolute rest of both mind and body, with perfect quiet, is strictly enforced. For the distressing headache, generally present in the beginning of the disease, I usually afford relief with the following : ℞. Quiniæ valer. gr. ij.; ext. belladonnæ, gr. $\frac{1}{4}$; ext. aconiti, gr. 1-6. M.—Put in one capsule.—Sig. One every three or four hours.

After this dilute muriatic acid, or the following mixture as recommended by Dr. Bartholow, is ordered, and frequently in mild cases continued throughout the treatment. \mathcal{R} . Tr. iodinii, $\bar{5}$ ij; acidi carbolici (pura) $\bar{3}$ j. M.

Of this mixture I give three or four drops in a wineglassful of cold water, three times daily, after nourishment has been taken.

It will be found refreshing to the patient, and give relief of a disturbed stomach, and in other respects prove beneficial, as the physiological action of these medicines would indicate. I generally prefer, however, when the "typh" element predominates, the acid, well diluted in beef juice or flaxseed tea, and given in ten to fifteen drop doses three or four times daily. Bath of tepid water, or of equal parts of alcohol and water when found more grateful, particularly in debility, are used twice daily. They act favorably upon the skin, prove cleanly and, in a measure, have a slight influence upon the temperature. A limb or portion of the body is sponged at a time, and care is taken that the patient is not exposed too long, or to draughts. The patient is also allowed frequently small quantities of cold drinks, and if not too weak, if he wish it, a little ice in his mouth. Whenever the evening temperature reaches 104° F., quinine in good size doses is administered, on the decline of the fever. Ten grains are given at 6 A. M. and ten at 6 P. M., if necessary. This amount generally will lower the temperature several degrees for the next forty-eight hours, after which the medicine is repeated if necessary. In other cases, when the temperature reaches a higher degree, a large quantity of quinine is given with success in reducing the temperature and most happily with great benefit to the patient. I find

when there is considerable fever, the frequent injection into the bowels of small quantities of cold water, as practiced by my preceptor, the late Dr. Williamson, of this city, proves very grateful to the patient. Stimulants are not required usually until the beginning of the fourth week, unless there is much debility, or the habits of the patient demand their use earlier or throughout the attack. When there is heart failure, stimulants must be administered according to the exigencies of the case, but some cases do well without stimulating at all. When there is excessive diarrhoea, I control it with the following pill: \mathcal{R} . Plumbi acetat.; pulv. camphoræ; pulv. opii.; $\bar{a}\bar{a}$, gr. j. M.—Sig. To be given every four hours.

When the opposite condition continues, I prefer to give small doses of calomel at intervals of two or three hours, unless serious intestinal lesions are suspected, when enemata are considered judicious.

In the more favorable cases of the diseases the above is about all the medicinal treatment required. But quite frequently the various symptoms grow worse; the tongue becomes brown and very dry; there is greater abdominal distention, and ulceration of the intestines; and very great delirium and debility. Under these circumstances the oil of turpentine, as employed by the late Dr. Wood, of Philadelphia, with opium, brandy and other stimulants are to be used with perseverance and good judgment.

Malarial Fever.

Dr. CUMMINGS, in *New England Medical Monthly*.

I send the following treatment for malarial disorders, after having used it in over three hundred cases.

From 40 to 60 grains of potass. brom. are put in about half a glass of water, and at the first symptom of gaping, stretching, occipital or frontal headache, or other sign of an approaching chill, it is taken in three doses, ten to fifteen minutes apart. Immediately after, a capsule containing 5 grains of dextro-quinine, and 1 grain of capsicum is taken, followed in four or six hours by another, and so on until six or eight are taken. This seems to be a permanent stop to the chills.

The above was the original method which gave satisfactory results, but after numerous trials I settled upon the following mixture for the capsules, finding that my results were and are almost always good. \mathcal{R} . Quin. sulph., gr. xij. xvij; p. capsicum; p. zingiberis, añ gr. iv.; p. ex. nuc. vom., gr. ij.; p. ex. xanthoxylum (Keith's), gr. ix. M. et. ft. capsulæ No. ix.—One every five hours.

A typical case of the tertian variety is treated as follows: Paying no attention to the bowels, the bromide solution is kept on hand and at the appointed time is taken, followed by a capsule containing the last formula, varied slightly to suit different phases of stomach, head or neurotic symptoms. The result is usually an absence of the prodromal symptoms up to the time of the fever, which usually makes its appearance in a much less degree. On the next regular day there is an entire absence of all symptoms which continues indefinitely, some cases giving weight and appetite at once. I have found that cathartics given before treatment are detrimental to a thorough action of the formula.

In the irregular forms, or the quartan variety, I order three or four capsules a day until twelve or fifteen are taken, each containing not more than one grain and a half of quinine. This treatment is not applicable for children of tender

age, and I use for them, especially those under one year, the following, with excellent results: \mathcal{R} . fl. ex. jaborandi, ʒ j.; fl. ex. cimicifuga, fl. ex. eucalyptus glob. añ ʒ ij. M. Dose gtt xx to ʒ j in aqua ʒ viij—a teaspoonful once in two hours according to indications.

It would lengthen this article too much to give my opinion as to the action of these formulæ, but I think that every one will see the *modus operandi*, and I think I can say, not boastingly, that during four years practice in a malarious section, I have had reason to use arsenic, iodine, calomel, or any other method, but few times—not more than a half-dozen. Cases of from two to fifteen years' standing, who have relied altogether on large doses of quinine, have according to their own statement received permanent relief.

Treatment of Malaria.

DR. J. F. DAVIS writes substantially as follows to the *Courier of Medicine*:—

The following plan of treatment I have carried out with good success for twenty years in several hundreds of cases of malarial fevers.

First, if the tongue be coated, give one or two of the following pills: \mathcal{R} . Pill. hydrarg., gr. ij.; podophyllin., gr. ¼; pulv. ipecac., gr. ¼. M. ft. pill. no. j. And commence immediately with one of the salts of cinchona. \mathcal{R} . Quinina sulph., gr. xxx.; pulv. capsici, gr. xij.; leptandrin, gr. iv. M. Chart. No. xij. Sig. One every two hours.

I have used quite extensively the sulphate of cinchona, and have found it effective; but the dose must be larger than either cinchonidia sulph. or quinina sulph. I have found leptandrin to be excellent, especially when the tongue is dry and parched. It does not purge, but acts as an hepatic stimulant. I give

bismuth and Davis' powder; the latter is made as follows: ℞. Pulv. opii.; pulv. ipecac., aa ʒj.; pulv. camphoræ, ʒij.; potass. brom., ʒj. M. Sig. Dose the same as the old pulv. Doveri.

If there is much nausea, which is quite common, give one grain of calomel with five grains of bismuth, and have the patient drink mint water which ice in it, and apply in some case a sinapism to stomach. The diet is to be unirritating, but nutritious; patient's clothing to be kept clean by often changing; stimulants to be given freely if any symptoms of failing vitality appear. In a given case of malarial fever my method is to saturate the system with the antiperiodics and keep it up until the fever subsides.

Hydrofluorate of Quinine.

According to Weddel (*Ibid.*), this salt is soluble in water and in alcohol. He has used it in the treatment of hepatic engorgements of malarial origin, in which, he thinks, fluorine and the fluorides have a beneficial action. He has observed the same in rickets and other nutritive diseases of the bone.—*Ibid.*

Anisic Acid as an Antipyretic.

This substance (*Ibid.*), obtained by the oxidation of oil of anise, takes the form of colorless prismatic crystals, soluble in alcohol and in ether. It has antiseptic properties, also an antipyretic action analogous to that of salicylic acid. It should be used with caution, as large doses injected into the veins of various animals have caused epileptoid convulsions.—*Ibid.*

Tubercular Meningitis Cured by Iodoform.

A Swedish physician, DR. EMIL NILLSON, alleges that he has cured an undoubted case of tubercular menin-

gitis by frictions on the shaved scalp with iodoform ointment (1 to 10). The patient was a boy, aged 8, whose mother had a family history of phthisis, and four of whose brothers and sisters had died from tubercular meningitis. The symptoms in this child's case were similar to theirs—headache, torpor, convulsions, strabismus, and pyrexia. He was at first treated with calomel and iodide of potassium, but did not improve; and, after having been under treatment a week, became distinctly worse, being unable to take food or medicine. The pallor of the face, which had preëxisted, gave way to flushes of the cheeks. The child threw himself out of bed, and presented severe clonic spasms of the limbs and of the facial muscles. The head was then shaved, and iodoform ointment rubbed in, an oil-skin cap being put on. The friction was repeated three or four times in the day, and the next day there was a decrease in the convulsive movements, the sleep was calmer, and spasmodic contractions, which had previously been excited by the slightest noise, now ceased to be so. Consciousness shortly afterward returned, and the child's face became of a more natural color. This, however, was accompanied by a severe coryza, redness of the lips, and irritable cough, the breath smelling strongly of iodoform. The ointment was discontinued, and syrup of iodide of iron given. The unpleasant symptoms rapidly disappeared, and the child was soon running about in good health.—*British Medical Journal*.—*Med. Med. Journal*.

Elegant Tonic.

An elegant tonic is: Tr. ferri chlor., 1 ounce; glycerini, ½ ounce; liq. ammon. acet., 2½ ounces. M. Teaspoonful before meals.—(Dr. A. F. Wright.)

This makes a beautiful cherry-red

mixture, not at all bad tasting. The liq. ammon. acet. must be fresh and strictly neutral, because if there be an excess of ammon. carb. there will be a sudden and disagreeable bubbling over, and a precipitation of the iron as a carbonate.—*Indiana Pharm.*

The Treatment of Acute and Chronic Pleurisy in the New York Hospitals.

Dr. SOLLACE MITCHELL (*Ther. Gazette*). Provided a case is seen in the first few hours of the disease, the treatment is as follows :

Opium is given in some form, preferably Dover's powder, or hypodermically in Magendie's solution ; the effect of the drug being twofold, for besides relieving the patient's pain and nervous manifestations, it checks, to some extent, the determination of blood to the inflamed pleuræ.

The bowels are opened by means of a saline purgative ; mustard poultices or turpentine stupes are applied to the chest.

The pain caused by the movements of the lungs in inspiration is greatly relieved by strapping, with strips of adhesive plaster, the affected side, thus mechanically lessening the movements of respiration. Tr. aconite is given in ℥ 1-2 doses every fifteen minutes for two hours, and afterwards q. 2 h. until pulse shows signs of becoming feeble. For the first twenty-four hours quinine is administered in gr. x. q. 6 h. If the disease now passes into the stage of effusion, the patient is put upon a diuretic, consisting of : ℞. Sacch. alb., potass. bitart., āā ℥ i ; aquæ, Oi. M. Sig. ℥ i ad lib. The saline cathartics are kept up, and a local application of some form of iodine is made. Another form of local application, which is a favorite in some of the divisions of the hospital, is to cover the affected chest-

wall with punctate cauterizations by means of a Paquelin's cautery, applications being renewed every other day.

Tonics are given and continued on into the third stage, the formula usually prescribed being : ℞. Strychniæ sulph., gr. i ; liq. potass. arsenitis, ℥ ii ; cit. ferri et quininae, ℥ iv ; glycerinæ ; aq. cinnamomi, āā p. e. ad ℥ viii. M. Sig. ℥ i after meals, and with this is often given whisky ℥ i t. i. d.

The cough which so often attends pleurisy is allayed with : ℞. Morph. sulph. ; potass. cyanid. āā gr. ii ; syr. toltan., pruni virg., āā p. e. ad ℥ ii. M. Sig. ℥ i p. r. n. Blisters are rarely applied to the chest, as they cause the patient considerable inconvenience, and interfere with the physical examination of the chest from day to day.

Paracentesis is performed in the sixth interspace mid-axillary line, if the effusion is so great as to cause much dyspnoea ; the fluid is withdrawn slowly, stopping at the moment the patient begins to cough or feel other unpleasant symptoms. The effusion, they believe, is never changed to a purulent one by mere tapping ; but this is either due to unclean instruments, or the fluid was destined from the start to become purulent.

In the chronic form of this disease the patient is put upon tonic treatment, diuretics, and mild cathartics. Counter-irritation is kept up. One of the most effective, and at the same time least objectionable, methods to the patient, is the use of what is known in this hospital as Corson's paint, the formula for which is : ℞. Ol. tigllii, ℥ ii ; ætheris, ℥ iv ; tr. iodinii co., q. s. ad ℥ ii. M. Sig. Paint with camel's hair brush every morning.

This produces a beautiful crop of pin head blisters, with very little annoyance to the patient. Aspiration is resorted

to when the fluid does not become absorbed. At first a few drachms are removed by means of a hypodermic syringe, the idea of this being, that if nature is assisted in the elimination of the fluid even to this small degree, afterwards absorption goes on rapidly. Theoretical as it seems, the practice of this simple procedure often brings about a successful issue, and further aspiration is not called for. Still, cases do occur where more radical methods must be employed, and then paracentesis is performed. Resection is rarely practiced, and is confined to one or two of the divisions of the hospital; the other divisions treating the cases of empyema by means of free incisions and two rubber drainage tubes, after first giving simple aspirations a fair trial.

Where drainage tubes are used, the pleural cavity is washed out daily with either a 1 to 5000 solution of bichloride of mercury, or with Thiersch's solution, which is: \mathcal{R} . Acidi boracici, $\bar{5}$ ss; acidi salicylici, 3 ss; aquæ, oii. M. This solution is preferable, as not the slightest harm can ever come from its use, no matter how much may be retained. Tonics and fresh air form an essential part of the treatment. For the night-sweats which so often occur the following is given: \mathcal{R} . Atropinæ sulph., gr. $\frac{1}{120}$; acidi sulphurici arom., \mathbb{M} x; aquæ, q. s. ad 3 i. M. Sig. 3 i at bedtime, and repeated if necessary.

In St. Luke's Hospital a patient with acute pleurisy is put upon fluid diet. This consists of milk, if agreeable to the patient; otherwise, rice or oatmeal gruels are used. Morphine is given in gr. $\frac{1}{12}$ to $\frac{1}{8}$ doses, the indication being to relieve pain. The bowels are opened by a mild cathartic, preferably a saline, and occasional small doses are given throughout the disease.

Bleeding is never practiced. As a local application to the chest, they depend upon the tr. iodine painted on twice daily, and also upon the iodide of potassium ointment, which is a very satisfactory way of applying iodine, and is much pleasanter to the patient than the tr. iodine, which, if continued long, produces vesication.

After effusion has taken place,—and this has usually occurred when the patient is first seen,—a diuretic is prescribed. The favorite ones with the visiting physicians are the citrate and acetate of potassium and spts. ætheris nit. More recently favorable trial has been made of glonoin \mathbb{M} i doses three times a day, and also of caffeine in gr. v doses, t. i. d. As an antipyretic, antipyrine is no longer used. For a time it was given trial, but gave way to hydrochinon, which is another of the synthetic antipyretics similar to antipyrine. Hydrochinon is given in gr. xv to xx doses, repeated as often as may be necessary.

Occasionally, when the effusion is very great, they have recourse to tr. physostigma to produce diaphoresis.

As soon as the effusion has ceased and absorption begins, the patient is put upon tonics, such as whiskey, cod liver oil, Trommer's extract of malt, citrate of iron and quinine, nux vomica, and tr. chloride of iron.

In chronic pleurisy the same medication as regards diuretics and cathartics is employed, together with the local application of the ointment of iodide of potassium. Iodide of sodium is given in preference to the potassium salt, beginning with gr. v doses t. i. d. and rapidly running up to gr. xx t. i. d. Aspiration is done, first trying the effect of the removal of a small amount of the fluid. If no effect from this, then paracentesis is performed in line of inferior

angle of scapula, and the most of the fluid withdrawn. In the suppurative form of pleurisy the staff speak highly of resection and the use of two drainage tubes, with daily irrigation with 1 to 5000 solution of bichloride of mercury. A case just discharged from the hospital was treated in this manner, and cure resulted without any perceptible deformity.

So pleased are they with this method of treating empyema that they employ it in almost every case.

At St. Vincent's Hospital pleurisy in its acute form is treated by local applications to the side affected of hot poultices of flaxseed and mustard, dry cups, and, later on, co. tr. iodine and co. iodine ointment rubbed in twice daily. Morphine is given to relieve the restlessness and pain, and a simple cough mixture if necessary.

Stimulants are employed from the first, and given as the pulse indicates. In chronic pleurisy blisters are put upon the affected chest-wall. Iodide of potassium is given internally in increasing doses, beginning with gr. v t. i. d. Aspiration is performed if resolution is slow.

Empyema is treated by aspiration, and never by resection, claiming that they get good results from simple aspiration, while they have seen terrible deformities left over after resection of ribs.

Presbyterian Hospital. A patient admitted with acute or subacute pleurisy is cupped, and then blisters are applied; diuretics and antipyretics given, also stimulants if necessary.

As regards the antipyretics used, after experimenting for some time with kairine, antipyrine, thalline, and hydrochinon, they have gone back to antipyrine, and give it without any fear of serious consequences, claiming that they have never seen any bad effects

from its use, and do not consider it necessary to give alcoholic stimulants, nor digitalis in combination with it.

Quite frequently a rash resembling that of scarlet fever has been noticed to follow its use.

Antipyrine is given here in gr. xx doses, repeated every hour until three have been taken.

Paracentesis is performed as soon as any marked dyspnœa is present, and the operation is repeated as often as it may be necessary in the course of the disease. Tonic remedies, such as quinine and iron, are given.

For chronic pleurisy, iodide of potassium, blisters, Paquelin's cautery, tonics, and aspiration, if necessary, are used.

In empyema they have obtained very good results from resection of ribs, and patients are left with scarcely any deformity. A patient just discharged cured had three ribs resected, and is left without any deformity. The cavity is washed out daily with a very weak solution of carbolic or boracic acid.



DISEASES OF THE NERVOUS SYSTEM.



Stretching of the External Nasal Nerve in Neuralgia of the Ciliary and Trifacial Nerves.

Dr. CHARLES STEDMAN BULL, says: Lagrange (*Arch. d'Ophthalm.*), draws the following conclusion from his own observations and experience: 1. Stretching of the external nasal nerve acts beneficially on ciliary neuralgia. 2. The pain can be cured in every case without reference to visual troubles resulting from grave lesions of the deep structures of the eyeball. 3. This special effect produced by stretching the external nasal nerve, may be explained by the relations of this nerve-trunk to

the ophthalmic ganglion. 4. The stretching may act in two ways; either by reflex action or by the production of an actual solution of continuity between the sensitive root of the ophthalmic and the trunk of the nasal nerve. 5. In neuralgia of the trigeminus, stretching of the external nasal nerve is of no special value.—*New York Medical Journal*.

Cause of Neuralgia Headaches.

The London *Lancet* says that the pain of neuralgia headache experienced by women, is generally located in one or more branches of the second cervical nerve, very commonly those terminating in the scalp of the occiput. The nerves of the scalp are irritated by the hair drawn tightly back and put on the strain, not as a whole, in which case the strain would be spread over a large area of the surface, but by small bundles of hair, which are pulled back and held in place by hair pins. Relief is often consciously experienced as a result of removing the hair pins, but this has only a temporary and partial effect. The injury done is lasting in its consequences.—*Medical World*.

[We have frequently made similar observations, and have recommended a different mode of wearing the hair, so as to obviate the above mentioned cause. In judiciously selected cases, the result was highly satisfactory, and always without the ingestion of medicines.]

A. H. P. L.

Nervous Diseases Attributable to Errors in our System of Education.

DR. N. N. SHIPMAN (*Indiana Medical Journal*). The school-room is the place where the most impressible portion of our lives are spent, and it should be a place as faultless in its construction, and as perfectly adapted to the

purposes for which it is designed as human ingenuity and skill could make it. I quote from good authority when I state to you that one of the most fruitful sources of disease in children is impure or confined air, and that it produces a deleterious effect upon the delicate organism of children by acting *immediately upon the nervous system*. Children compelled from day to day to breathe an atmosphere thus poisoned and vitiated by their own exhalations cannot be expected to develop into anything like nature intended that they should, and will ultimately fall victims to that terrible disease which has for centuries baffled the skill of the profession in every land.

A class of twelve young ladies in a New Hampshire academy only a short time ago lost eight of their number by consumption soon after completing their course of studies. No longer ago than last March a young lady by the name of Ellison, near the city of Chicago, committed suicide because she was not able to keep up in her studies. Had a little judgment upon the part of her teacher or professor been displayed and lessons assigned her according to her capacity to learn, the brief paragraph announcing her tragic end would never have been written.

Many of the spinal troubles met with among children are frequently the result of faulty constructed seats or desks together with the enforcement of rules that compel them to maintain unnatural positions for indefinite periods.

The hours of study, too, in my opinion, are much longer than they ought to be, and especially in the lower grades. The long-continued strain that is imposed upon little children often produces hyperemia of the brain, thereby causing vital injury to the nervous system. The health of the child should

always be considered of the very first importance; the cultivation of the intellect, however desirable, should be a secondary matter.

The great diversity of character and idiosyncrasy in children precludes the possibility of a rule or law that would apply with equal advantage to all children, hence the necessity of great care and superior judgment being exercised in the classification of children. It should not be done with a view so much to their ages or advancements in their studies as to their aptness or capacity to learn. Great injustice is done sometimes to those children whose minds are less active than their companions in the same class when they are required by an inflexible rule (that carries with it punishment or disgrace if they fail) to keep up in their studies.

The remedy lies in the agitation of the subject, and to the profession the people must look; and for their failure to speak out will be held responsible, and in a great measure justly so.

DISEASES OF THE URINARY ORGANS.

Albuminuria, Its Causes and Varieties.

SENATOR, in the *Berliner Med. Wochenschrift*, enumerates the following conditions liable to determine the presence of albumen in appreciable amount in the urine:

Disturbances of the renal circulation. High pressure, if the urine be concentrated, should produce albumen. This condition is actually found to obtain by muscular action, on account of perspiration and loss of fluid by the lungs, and though not so accurately, by elevation of temperature.

Passive hyperemia acts in itself similarly to increased arterial tension, but the distended veins in the medulla of

the kidneys press together the urinary tubes, leading to obstruction of the passage of urine and edema of the kidneys. The consequence is:

a. That albumen transudes from the interstitial capillaries into the urinary tubes.

b. The urine exerting pressure upon the glomeruli produces a diminution of pressure from the glomeruli, and leads to a relative increase of excretion of albumen. To this cause of albuminuria is allied that caused by blocking of the urinary tract, manifested when the impediment is removed, or when the obstruction is not complete.

c. The condition of the filtering membrane, as in inflammation, fatty degeneration, and amyloid change. Not only does albuminuria result from an increased permeability, but the degenerated membranes and epithelium themselves appear in the urine as albumens, and this may explain the fact that in the urine albumens may have a different relation to each other from what exists in the blood. The substance of the epithelium appears to contain a body intimately allied with globulin.

d. The composition of the blood may cause the appearance of albumen, e. g., from an excess of nutriment, from increased dissolution of albumen, or from excessive secretion of water elsewhere, etc. It is held by Rosenbach, that the composition of the blood is constantly regulated by the action of the kidneys, and that inassimilable albumen is excreted by the kidneys. Albuminuria not caused by inflammation this author designates as "regulatory." His idea, though important, is not free from objections.

Finally, as Stokvis and Lehman have pointed out, the excretion of albumen can act injuriously on the kidneys.

e. Mention has already been made

of the influence of temperature in connection with changes of pressure.

The author further remarks that the forms of albuminuria may be clinically divided into two classes, pathological and physiological, although no exact line of demarcation distinguishes them. Among physiological albuminurias may be mentioned that of the new-born, which is probably due to the suddenly increased pressure in the glomeruli, taken in connection with the probably increased destruction of the blood corpuscles.

Albuminuria can exist in a healthy man for years without any sign of ill-health, and then cease.

Fürbringer, too, has found this condition in children, in whom chronic nephritis is very rare.

The author, in this connection, alludes to the albuminuria due to mental perturbation and to that caused by cold baths.

Pathological albuminuria includes the following :

1. That present in non-febrile diseases, in which the composition of the blood is specially concerned, and in which the kidneys do not participate to any extent ; in anemia, leukemia, and pseudo-leukemia ; in scurvy, in icterus, and in certain cases of diabetes. Nothing is found in the urine indicative of renal disease.

2. Albuminuria in non-febrile nervous diseases, in epileptic seizures, delirium tremens, cerebral apoplexy, neurasthenia, migraine, Basedow's disease, etc., and allowing for other existing causes, numerous cases exist where the albuminuria is traceable only to the nervous condition.

3. Febrile albuminuria. In this condition there is a combination of favoring causes, such as high temperature, febrile changes in the circulation and in the composition of the blood, with con-

sequent disturbance of the nutrition of the kidneys, and, lastly, concentration of urine.

4. Albuminuria in passive hyperemia.

5. That due to the blocking of the urine.

6. The albuminuria of pregnancy due to various causes, disturbance of the lesser circulation, passive hyperemia due to abdominal pressure on the vessels, and constriction of the ureters.

7. That due to diffuse inflammation and degeneration of the kidneys (acute nephritis, subacute, chronic and amyloid degeneration).

8. That depending on circumscribed affections of the kidneys, such as infarcts, abscesses, and tumors.

In conclusion, the author insists on the necessity of constantly remembering that the treatment of each individual case of albuminuria varies with the exciting cause.

The Elements of Prognosis in Bright's Disease.

Dr. AUSTIN FLINT read a paper with this title, before the Medical Society of the County of New York. (*N. Y. Med. Jour.*)

The author considered some of the elements of prognosis in cases of chronic Bright's disease. What were some of the conditions requisite for latency? 1. The kidneys must not be damaged beyond a certain degree. 2. The important organs of the body, other than the kidneys, must be capable of performing their respective functions satisfactorily. 3. The laws of health relating to alimentation, exercise, etc., must be observed. Suppose these conditions to be fulfilled, and a lesion of the kidneys to exist which diminished their functional ability one-half, and the disease was not progressive; life and health would be compatible with the existence

of chronic Bright's disease for an indefinite period. In order that chronic Bright's disease should be well tolerated, the treatment should relate to accessory conditions required for bringing about toleration, those conditions relating to other organs of the body and to general hygiene. The kidneys in this condition were incapable of meeting an additional demand on their functions. Should the patient fail to observe the accessory conditions mentioned, the inefficiency of the kidneys would become manifest in headache, misty vision, nausea in the morning, impairment of the appetite, and general debility. Examine the urine in such a case, and evidence would be found of chronic Bright's disease which had probably existed for years, the progress of the renal affection at length rendering the organs incapable of performing their functions properly, which caused attention to be directed to the state of the kidneys. It was important, in determining whether the kidneys eliminated excrementitious matters sufficiently not to endanger the health, to make a thorough examination of the urine, not alone with regard to the presence of albumen and casts, but also as to the amount of urine eliminated daily, its specific gravity and the proportion of the salts. The quantity of the urine might be increased while the specific gravity was so low as to involve great danger from uræmic toxæmia. Suppose the examination of the urine in a case of chronic Bright's disease showed renal adequacy; how should that fact influence the treatment? In this way, that diuretics, sudorifics and hydragogue cathartics, would not be indicated; indeed, inasmuch as their influence was debilitating and opposed to the accessory conditions for health just mentioned, they were contra-indicated. Was the degree of renal adequacy, as

determined by an examination of the urine, reliable in judging of the absence of danger from toxæmia? This question was to be answered in the negative. In some cases of Bright's disease the quantity of the urine was decreased for a long period without serious consequences. The explanation lay in the fact that the excrementitious matter was eliminated vicariously, or its effects upon the system were counteracted by other agents. On the other hand, slight inadequacy, without vicarious elimination and counteracting agents, sometimes led to serious consequences. The prognosis after coma was always grave, yet we meet with cases repeatedly in which life was preserved for a long time. Of acute pulmonary œdema the same might be said as of uræmic coma. In his experience the most serious consequence of Bright's disease was dyspnœa, or renal asthma, apparently due to toxic effects upon the respiratory centre. He had never known such a case to end in recovery, but he had known life to be prolonged for several years after dyspnœa from pulmonary œdema occurring in the course of chronic Bright's disease.

Recapitulating, Dr. Flint said that subacute diffuse nephritis, having the same seat and characters as acute Bright's disease, exclusive of acuteness, occurred not only after scarlet fever and other fevers, but irrespective of these; and when it occurred as a primary affection, or in connection with other diseases, it was liable to be overlooked, or, if recognized, to be mistaken for the chronic form. Further, acute or subacute diffuse nephritis not infrequently occurred as an intercurrent affection in the course of chronic Bright's disease, and rendered the prognosis temporarily more serious. The disappearance of symptoms and the presence of health did not necessarily indicate that the

chronic disease was not still in existence. Again, a susceptibility to the causes of inflammation of the uriniferous tubules, irrespective of the existence of chronic Bright's disease, was to be recognized as an individual peculiarity.

DISEASES OF RESPIRATORY ORGANS.

Yerba Santa and Grindelia Robusta in Acute Bronchitis.

Dr. E. STEUVER, in the *Medical News* commends these remedies as follows, viz :

About four years ago, shortly after their introduction, and while treating a number of cases of bronchitis with very indifferent success by means of the old orthodox cough mixtures, I began using the above remedies. At first I used yerba santa alone, and obtained very satisfactory results. About that time the medical journals contained numerous reports of the singularly beneficial effects obtained by grindelia robusta in asthma, and it occurred to me that it would be a valuable addition to a cough mixture, especially when designed for the relief of the very annoying cough attending bronchitis, a cough which, while the person is up and moving around during the day causes almost no inconvenience, but as soon as the recumbent position is assumed, commences with greater or less severity and continues sometimes for hours, depriving the sufferer of much needed repose, and proving a source of annoyance both to patient and physician. Accordingly, I began using the following, viz: ℞. Fl. ext. grindeliæ robustæ; fl. ext. yerbae santæ, ää f ʒ j.; syrui tolutanæ vel. simplicis, q. s. ad f ʒ iij. M. Sig. ʒ j to ʒ ij every hour or two when needed for cough.

This combination gave very satisfac-

tory results in the great majority of cases; indeed, in some instances it acted like a charm, instantly controlling the cough and relieving the tickling in the throat and bronchial tubes.

I have now used the preparation about four years in a large number of cases, and have obtained very gratifying results. In one instance I administered it to a medical friend, who was suffering from an attack of so-called "mountain fever," accompanied by bronchitis and harassing cough; and so prompt was the relief afforded, and so highly pleased was he with the remedy that he has used it almost exclusively as a cough mixture in his practice since that time. I have repeatedly used the preparation for cough and irritation of the bronchial tubes in my own case, and it always afforded prompt relief.

Many other cases might be cited with the same results, but enough has been said to indicate its field of usefulness. While I have not noticed so decided an amelioration of the cough due to chronic bronchitis or phthisis pulmonalis, as of that due to acute bronchitis, still in many cases considerable relief is obtained. I have now under treatment a lady about 70 years old, suffering from an aggravated chronic bronchitis, the symptoms of which were markedly alleviated by this preparation. Whether our high altitude (6,730 feet above sea level), and light, dry atmosphere, have anything to do with the results obtained, I am unable to say; but if the preparation yields as good results in a lower altitude and damper atmosphere as I have obtained from it here, it will confer a real benefit, if used in properly selected cases.

The preparation is free from any unpleasant effects, such as headache, constipation, etc., which frequently follow the use of cough mixtures containing

opiates. I have noticed no unpleasant effects following the use of small doses, but when large doses are administered temporary nausea may supervene.

Chronic Nasal Catarrh.

Prof. AGNEW says he has cured cases of chronic catarrh accompanied by profuse discharges by douches of sage tea. Other remedies had been tried in vain. —*Weekly Med. Review.*

DIGESTIVE TRACT.

The Treatment of Dysentery.

Dr. THOMAS BUCKLER, of Baltimore, (*Boston Med. and Surg. Jour.*) refers to a method of treatment which he believes may serve to reduce the mortality of this very serious disease.

The principle of this treatment consists in the use of wet, saline purgatives, whereby *idiopathic dysentery is converted into a symptomatic diarrhœa*. The saline, acting on the exhalents, unloads the engorged glands, mucus ceases to be secreted, and a profuse watery discharge takes its place. To accomplish this, half an ounce of Rochelle salts—tart. potass.—and sodium, or a like quantity of Epsom salts (sulphate of magnesia), or Glauber's salts, sulphate of sodium, is sufficient. As soon as the action of the salt is over, give 20 drops of Sydenham's tincture of opium, 8 of black drops, or a grain of powdered opium. This usually closes the case. If, after the effect of the anodyne passes off, tormina, tenesmus, and the voiding of mucus from the bowels are renewed, then the remedies, as directed above, are to be repeated, and in forty-nine cases out of fifty nothing more is required to be done.

But where the vaso motor nerves are

paralyzed by blood-poison, the mucous and sanguineous discharges, instead of stopping under salines, go on more profusely than before their use; and in rare cases, the tormina, tenesmus and discharges become more active; the pulse gets small, frequent, and sometimes thready; the extremities become cool, as does also the sweaty surface of the trunk; the patient often, in a squeaky voice, complains of great weakness, and if the stools are examined they will be found to be nothing less than the product of a "bloody flux," all, or nearly all, the mucus having disappeared from them.

In this emergency, a grain of pulv. nucis vomicæ may be given to a child, and 5 grains for an adult, with the best results. Dr. Buckler has never ventured to give more than 5 grains on two consecutive days. Strychnine, in this condition, does no good, being taken up from the stomach into the circulation; but given in the form of the powdered nut, the remedy gets down into the intestines, and the strychnine being slowly dissolved out, is used at the place where it is wanted.

In some cases the patient may be suddenly seized with slight chilliness, followed by tormina, tenesmus, and great weariness. The pulse small, feeble, and frequent; the skin cool, covered with an oily sort of sweat, and the stools, altogether the most characteristic sign of this peculiar form of dysentery, were mucus, having the exact color of hickory ashes. In this formidable condition, according to Dr. Buckler, nothing is required but to give 5 grains of capsicum every three hours. By the time, or before six of these pills have been taken, a profuse flow of bile will come away, changing entirely not only the character of the stools, from gray mucus to bile, but improving the condition of the pa-

tient so much that return of strength and convalescence are at once established.

There is still another form of disease commonly regarded as dysentery, and treated for it, because the patients have sanguinolent stools, containing the coloring matter of blood, but without a trace of mucus. Of these, Dr. Buckler has seen *five* cases, all of which were from malarial regions. The first, having some spots of purpura hemorrhagica on different parts of his body, gave him the key to the treatment of it, and in all the others in which there was no sign of petechiæ or of subcutaneous extravasated blood to be found, except in two, there was icteric coloring of the skin and whites of the eyes. They all recovered rapidly under 10 grains of bicarbonate of potassium, given every four hours, with the juice of limes or lemons, while effervescing, and potato paste for food. In other words, they took the usual remedies for purpura hemorrhagica, and the allied disease, scurvy. If the jaundice in these cases is deep, they might also take with advantage, at bedtime, 15 grains of benzoate of sodium, with 10 grains of the extract of taraxacum.

For dysentery, solids are, as a rule, better than liquids—properly cooked cold rice, boiled fish, and tender beef, mutton, or chicken, roasted, rather than ice-water, beef-tea, chicken and mutton broth, or milk.

Cases malarial in their origin should be removed and kept supplied with pure, fresh air.—*Ther. Gazette.*

DISEASES OF CIRCULATORY ORGANS.

The Distribution of the Blood in the System.

DR. SPEHL has instituted a series of investigations having for their object an

inquiry into the amount of blood contained in some of the principal organs during life, also to establish, experimentally, the invariableness of these quantities or their fluctuation in correspondence to various states of these organs; in the latter case to ascertain when and how they vary within physiological limits; and finally to draw certain practical deductions from his observations. The results obtained by the author may be briefly given as follows (*London Medical Record*):—

Lungs.—1. During inspiration these contain about one-thirteenth of the total amount of blood. 2. During expiration about one-eighteenth. (These experiments were made on rabbits.) 3. These values are not influenced by varying pressure in the heart during normal respiration. 4. An insufflation of compressed air in the trachea, the external pressure remaining the same, drives the blood contained in the lungs out, so as to reduce its ratio to one-sixtieth. In connection with his study of these organs, the author has also investigated the effect upon the pulmonary circulation of residence in and ascent to high altitudes, and has come to the following conclusions: (a.) During a sojourn in a rarefied atmosphere, the division of the blood is physiological, and consequently the same as at sea level. (b.) During ascent there is a tendency to congestion of the lungs, and, *ceteris paribus*, this congestion is the more marked and persistent the more rapid the ascent may be.

Brain.—During the waking state this organ contains, on an average, one-eighth of the total mass of blood, during sleep the one-twelfth.

Muscles.—These contain more blood during contraction than during repose. One-sixth to one-tenth of the total mass are the extreme figures found.

THE
AMERICAN MEDICAL DIGEST.

1886.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fracture in the Vicinity of the Elbow.

DR. A. J. How concludes an article in the *Eclectic Medical Journal*, as follows :

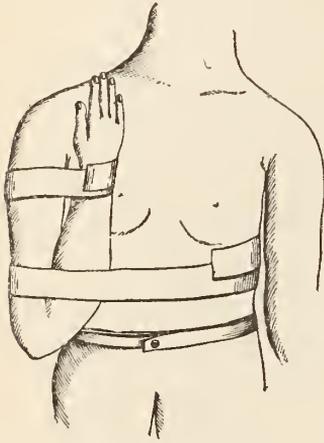
Anchylolysis of the elbow of a few weeks' or even months' standing can be broken up, and a valuable result promised. In some instances reanchylolysis is difficult to resist, yet in a majority of cases passive motion will prevent re-consolidation. I have, while patients were under full anæsthesia, broken up dozens of elbow anchyloses. It does not require very great force to break the adhesions. I have started the breaking up process across the knee, using my hands to impart the force. As soon as the breaking is started, I extend it by imparting modified strokes of the hand upon the forearm while the arm is steadily held in a fixed position. The repeated shocks imparted gradually overcome adventitious bands and articular adhesions. While the breaking up process is going on the snapping of yielding tissue can be distinctly heard.

There is little danger of breaking sound bones. If the surgeon feels that the force imparted is to endanger fracture he should abandon all efforts to overcome the anchylolysis. However, an anchylosed limb in a bad attitude, might be improved by a fresh fracture.

The accompanying diagram quite well represents the dressing employed, and the attitude the limb is to take during treatment. I have managed fractures about the elbow in this way at least fifty times, and in all cases with good results and great satisfaction. The forearm is flexed, and the wrist is bound to the upper part of the arm with a strip of rubber adhesive plaster two inches wide. Another strip is to surround the arm and the chest. By this method the fragments are held in apposition, and no motion between them is possible. The thorax becomes a support—a splint—to the broken arm. The thick part of the forearm presses the shaft of the humerus back or into position, and muscular action pulls favorably upon the small fragments. The hand is not restrained in its motions. In a word, the dressing is simple, and not onerous. The patient endures it without com-

plaint; and the results are admirable. If the rubber adhesive plaster be good, and well put on, it will stay in place, and rarely need renewing. Common adhesive strips will yield to perspiration, and become loose. Every practitioner of medicine and surgery should keep a stock of rubber plaster at command. The same kind of material is needed to make fast to a leg when extension is to be made.

The usual way of dressing fractures about the elbow is to employ angular splints, and to keep the joint in a state of semi-flexion, but the apparatus is un-



scientific and unsatisfactory. If the fracture be supracondyloid, it is often difficult to keep the fragments in apposition except the forearm be brought into extreme flexion; and no angular appliances will allow of such an attitude. A badly treated fracture of the internal condyle may result in paralysis of the ulnar nerve; and an unskillfully managed fracture of the lower end of the humerus is in danger of being followed by injury to the median nerve and consequent atrophy of the forearm, with partial paralysis of the hand. Recently a lad ten years old was brought to me six weeks after sustaining an injury of a crushing character of the elbow.

As nearly as I could ascertain there had been a comminuted fracture of the lower end of the humerus. The fragments had united, and complete ankylosis existed. The hand was cold, and functionless, and the forearm was atrophied. With the patient under chloroform, I used force and overcame the ankylosis. Daily movements restored a useful articulation and put an end to atrophy. Pronation and supination had been restricted in range, but were restored by forced manipulation. Some deformity continued, but not enough to be ordinarily observable. A year ago a man came to my office with an arm in heavy dressing. The patient brought a note which read as follows: "The bearer's arm speaks for itself. There is transverse fracture of the humerus through the flattened shaft just above the condyles. The lower fragment stands forward and I cannot keep the fragments in apposition with any kind of a dressing. The angular splint now upon the arm fails to do what is required of it." I took off the dressing, found the fracture as described, also the persistent displacement. Carrying the forearm into forced flexion, *adjusted* the fragment and overcame all deformity. After removal of the patient's shirt, I bound the arm in the attitude depicted in the diagram. In thirty days from that time the limb was strong and useful, with no deformity.

Two years or more ago, I was in consultation, asked to diagnosticate a recent lesion of the elbow. The callipers showed the two condyles to be wider apart than were the two in the normal arm. The injured limb was apparently shortened, but could be lengthened by pulling upon it. Crepitation was elicited, and either condyle could be rocked upon its base. I diagnosticated the injury as fracture of both condyles, with

the wedge-shaped shaft extending below the articulation, and in front of it. With the display of extending and flexing forces the forearm was carried up and pressed against the arm, as displayed in the picture. The adhesive strip dressing maintained the attitude and helped secure a union without deformity. Passive motion after the twenty-fifth day prevented ankylosis. No other attitude of the limb would restore its normal aspects, and no other dressing would maintain the fragments in proper relation with one another.

Children who so often suffer from forcible separation of one of the epiphyses of the lower end of the humerus endure the adhesive strip dressing depicted in the diagram, and no other appliance contributes to a satisfactory result. It is rare for the rubber plaster to come off, though the patient perspire freely. I recently treated with success a child who, in falling from a wagon, sustained diastasis of the lower end of the humerus, the line of separation being through the conjugal cartilage. The forearm was held in a forcibly flexed position for twenty-six days. At the expiration of that time I released the limb of all appliances, and instituted passive motion of the joint; and soon the little patient used both arms alike.

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**Treatment of Fracture of the Femur
without Splints.**

DR. J. J. MULLEN, M. D. (*Therapeutic Gazette*):—

R. H., aged 5 years and 4 months, fell a distance of eight feet. He struck on his feet. His left foot came in contact with a stone, and the result was a transverse fracture of the femur in the lower third. There was great swelling, heat and pain.

The heel of the fractured leg rested on the instep of the sound leg.

The deformity was so manifest and crepitation so distinct, that there could be no doubt of the correctness of the diagnosis. I had a bed of common boards constructed in the following manner: I selected a corner of the parents' bed-chamber; nailed a board to the wall, which was left ten inches clear at either end. To this legs, head, foot, and sides were attached. Bottom boards were nailed in place, our bed, when completed, being higher at the foot than at the head. It was five feet long and two feet wide. This we covered with four comforts cut to the proper size. Upon this we placed the patient.

I had a hole bored in the head-board, and one at the foot, for extension and counter-extension.

Sand bags of proper dimensions were now ready. I placed the patient under an anæsthetic; applied adhesive plaster in the manner described by Dr. Van Slyck; reduced the fracture; then measured the sound and disabled limbs and found scarcely any perceptible difference in length. I placed the sand bags in position, and gave the patient 20 drops syrup of Dover's powder. He rested fairly all night. On the third day traumatic delirium supervened. It yielded to bromide of potassium and chloral hydrate. On the ninth day the swelling subsided; the patient now slept, and had a good appetite. His bowels, which were not moved for the first five days, were now moved regularly every morning. I saw the patient every day for the first fifteen days, and measured the limbs. The provisional callus was abundant at this time, and repairs progressing elegantly. The twenty-sixth day after the accident I placed the limb in a plaster-of-Paris dressing, which the patient wore for ten days. He is now able to walk a little without aid of any

kind. There is neither shortening nor deformity of any kind. The result is as happy as could be desired, and I shall always remain an ardent advocate of this mode of treating fractures of the femur in patients of this age.

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**Treatment of Fracture of the Thigh in
Children by Means of the
"Steadle-Splint."**

S. WILSON HOPE, in the *British Medical Journal*: By the steadle-splint, or crib-splint, is meant the using a steadle, bedstead, or crib, for the purposes of a splint, namely the extension and counter-extension; and any further appliance for setting, or coaptation, may be omitted, with good results. One method of using it which answers very well, is this: From an ordinary bandage cut such a length as, when folded in the middle, will reach from the lower ribs of the child beyond the top cross-piece, forming part of the framework upon which the mattress rests; whether it be the framework of an iron bedstead, of a crib, or of an old wooden steadle. Take two such lengths, and lay them singly, not doubled, along the sides of the child's chest; and pass round the chest, under the arm-pits, and over the bandage-lengths, an ordinary rib-roller. On bringing up on the outside of the roller the other ends of the bandage-lengths, there is on each side of the chest a loop of bandage, with the rib-roller lying in the loop. Let the upper and the under portion of the bandage be secured separately by thread or safety-pins to the upper edge of the rib-roller, and at such points that the under part goes under the shoulder, and the outer part over the shoulder, without dragging. Adjust the child's head and pillow, and fasten the bandage-length to the top cross-piece, which forms part of the framework upon which the mattress rests. And one has only to

raise the feet of the bedstead upon bricks, when the arrangements for counter-extension are complete. Cover the ankle thickly with wadding, and, having taken a loop-length of bandage, long enough to reach from the angle, beyond the bottom cross-piece, forming part of framework which supports the mattress, tie the bandage round the ankle, with the knot at the back, above the heel; make extension, and secure to the bottom cross-piece. All that remains is to keep the foot in position by means of bandage-lengths passing round the foot, and fastened to the side-pieces of the framework; and the thigh is set. The main use of such a plan as this is that, in whatever out-of-the-way house one finds a child with a broken thigh, there, also, is the steadle-splint.

But, besides, the following points might be mentioned in its favor. 1. It avoids all trouble consequent upon perineal bands in children. 2. The counter-extending bands over the shoulder check both forward and turning over movements during sleep, as well as when awake. 3. In permitting the omission of special setting splints and all bandaging, it adds to the comfort at the time and throughout the treatment.—*Md. Med. Journal*.

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Hip Diseases in Childhood.

DR. WRIGHT, in *Archiv Pediatrics*:

As a matter of fact it is probable that without injury true dislocation of the head of the femur out of the acetabulum very rarely occurs. Several conditions may exist and give rise to the appearance of dislocation. First, the head of the femur being entirely destroyed, the truncated upper end of the bone is drawn upwards by the muscles attached to the trochanters, so that the upper border of the great trochanter rises above Nélaton's line, here, as the

head of the bone no longer exists, true dislocation can hardly be said to have occurred. In other cases the rim of the acetabulum is destroyed and the head of the femur, which is also more or less eroded, is then drawn upward by muscular action; here there may be, but usually is not any, new bone formation around the acetabulum; this constitutes the so-called "travelling acetabulum" or "dislocation of the acetabulum" (Sayre). Other instances again occur where the floor of the acetabulum is perforated, and the upper end of the bone projects through the perforation into the cavity of the pelvis, or rather into the space between the inner surface of the acetabulum and the thickened pelvic tissues. In certain cases the upper epiphysis of the femur is left behind in the acetabulum and the shaft is drawn upward, and usually backward on to the dorsum.

The first of these conditions is by far the most common, and is especially likely to occur, when with great destruction of bone is combined much adduction and rotation in; here there is a greater strain thrown upon the softened capsule, which either gives way or becomes stripped off the margin of the acetabulum, so that the end of the bone is not really outside the capsule but is still invested by it, or rather what remains of it; this fact was described by Brodie, though he seems to have considered it a dislocation and describes it as such.

There is no doubt that in a few cases of advanced hip disease some slight injury or strain has caused the head of the bone or its remains to be displaced, usually on to the dorsum, but sometimes on to the pubes, as in a case of Brodie's and another case which was verified post-mortem by A. Cocchins, in 1754. Portal records three cases into the obturator foramen from disease. Bonnet, however, who quotes him, throws some doubts upon his observations. Humbert de Morley is also cited by Bonnet as having reduced by gradual means eight cases of dislocation from disease with good results. Bonnet reduced one but it recurred; he recommends gradual reduction by extension. De Morley's cases were probably merely cases of extreme adduction. Erichsen thinks that in addition to the causes mentioned above, the head of the bone may be pushed out of the acetabulum by a "fungous fibro-plastic mass" in that cavity; he says it may occur without suppuration, and in that case a new joint may be developed, while if pus is formed, no attempt at new formation of a joint will be found.

The conditions in which dislocation, so-called, may occur are described somewhat differently by different writers.

Brodie says that synovitis may sometimes end in dislocation, apparently from softening and destruction of the capsular ligament (*vide* Case 11, Brodie). Bonnet observes that in abduction there is a tendency to obturator dislocation, while adduction and rotation inwards tends to result in dislocation upon the ilium and absorption of the upper and outer part of the acetabulum.

March (of Albany) and Sayre altogether deny the occurrence of dislocation except possibly as an extreme rarity (*vide* Lund's case).



The figure shows the position of the limb in the third stage of the disease simulating sciatic dislocation.

Barwell lays stress on the organic shortening or contracture of muscles produced by cicatricial changes in their fibrous rather than their muscular elements, which render their recovery impossible, and hence prevent the restoration of the limb to its former length. He quotes Liston and Bauer as to the rarity of true dislocation, and says he has seen two cases, in both of them malposition of the pelvis had diminished and so the apparent shortening was less.

Holmes mentions a case where by mere distention of the capsule with rupture of the ligamentum teres, but no suppurative or disease of bone dislocation occurred. Dr. Hueter, quoted by Holmes, describes four conditions causing displacement of the trochanter upward: "Separation of the epiphysis, and a sort of fracture of the neck of the bone;" "enlargement of the acetabulum;" "subluxation—true pathological dislocation." He (Hueter) believes the neck of the femur very commonly lengthens as the result of inflammation, and the head of the bone may be detached from the shaft and united to the acetabulum by fibrous tissue or cartilage without necrosis.

Mr. Holmes is satisfied of the occurrence of this elongation of the neck, otherwise I should have been inclined to attribute the projection of the trochanter, by which it is characterized, as due to pushing outward of the head of the bone by effusion or granulation tissue within the joint.

Cæsar Hawkins excised one case where the head of the bone lay on the dorsum ilii immediately under the skin, and Mr. Holmes mentions another case in St. George's Hospital Museum where the head lies just beneath the anterior superior spine.

I have in one instance found the head of the femur superficially almost un-

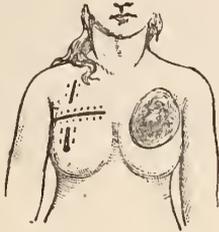
altered, lying upon the upper rim of the acetabulum, the limb being adducted and rotated in. I have also had under my care a remarkable case of obturator dislocation, coming on gradually as the result of strain and ligamentous softening, the dislocation was reduced and the joint is quiescent, though it has not regained its mobility.

An Improved Method of Operating for the Removal of the Breast.

DR. HAL. C. WYMAN (*Detroit Lancet*):—

Tumors of the breast requiring removal, are of such frequent occurrence, that it would appear a waste of time to describe any particular method of treating the wounds. But a large experience in the management of these cases, convinces me that some methods are a great deal better than others. I hold that the more quickly the wound can be healed, the better for the patient. Who has not noticed the immediate and marked improvement that takes place in the patient when the wound has healed by first intention, even when the system is infected with cancer and the only hope is to stay, for a brief time, the march of the consuming malady? I have seen the good results of the method I am about to describe, in so many otherwise hopeless cases, that I feel it my duty to encourage my professional brethren to adopt the same method. The plan is to adopt means to insure a union of the wound by first intention, and to this end I know of no surer means than to drain the wound thoroughly by means of a large tube ($\frac{1}{4}$ inch) laid in the bottom of the wound and carried down beneath the integument and brought to the surface through a smaller wound two inches below the wound through which the breast was removed. The original incision is then closed by interrupted

sutures. If tension is excessive the drainage wound is enlarged in a direction that will best favor the release of strain. In some instances I have found it necessary to make a two-inch incision



REMOVAL OF THE BREAST.

two inches above the proposed line of union, and to close it by sutures passed through its remote angles. In every case where a removal of known or suspected malignant tumor of the breast is performed, I deem it of profound importance that the wound be healed just as quickly as possible—for the security of mind it gives the patient, if for no other reason. In some cases of unquestioned malignancy, where it is deemed advisable to operate, for the sake of cleanliness and to prevent further purulent infection, union by first intention becomes imperative. The method above referred to I have tried repeatedly, and have been myself astonished at the results obtained in the closure of wounds of unusually large size. The subcutaneous drainage which is inserted by the method above described, and the facility with which untoward tension upon sutures may be remedied, gives the best possible means for securing early union of wounds after amputation of the breast. The subjoined diagram is an exact representation of a case operated upon less than ten days ago, which is now healed and the patient is about the house looking after the affairs of her family.

A New Instrument for Removal of Polypi.

DR. J. W. PENN, M. D., in *Washington Medical News* :—

About the first of last April, Dr. H. came to my office to consult me and my partner, Dr. G. W. Penn, in regard to an obstruction of one of his nostrils, which he thought was caused by the presence of a polypus.

Upon examination we found that the doctor's opinion as to the cause of the trouble was correct, and agreed that he should return in a week or ten days and have it removed.

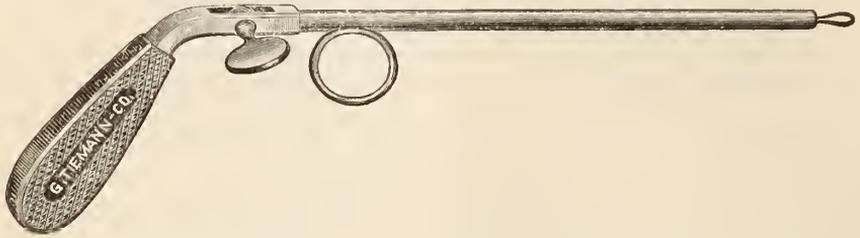
In the meantime I improvised a small ecraseur for the purpose, by cutting about eight inches off the shaft of a heavy silver male catheter, and moulding upon one extremity a curved hand-piece of white metal, resembling the hilt of a small pistol. I then cut a slot at the junction of the hand-piece with the tube, and drilled a hole through the walls on each side of the slot, through which a pin was passed resembling a violin pin, or "fiddle screw." I then drilled two very small holes through the pin to receive the ends of an E violin string, which was doubled and passed through from the opposite end of the tube, thus completing what I termed *Penn's cat-gut* ecraseur.

When Dr. H. returned I placed him in a large arm chair in front of a window and readily exposed the polypus by expanding the nostril with a small speculum, and without any difficulty threw the loop around its pedicle and removed it; but behind it was another which was removed in the same manner, and another and still another, until five were removed, all distinctly pedunculated, about five-eighths of an inch in length by three-eighths in transverse diameter.

The operation was attended with no pain, nor followed by any considerable amount of irritation, neither has there

been up to the present time any indication of a return of the growths.

I was so well pleased with the operation of my little invention that I sent a drawing and description of it to Messrs. George Tiemann & Co., and had them make one, which is a truly beautiful little instrument, and one that I think surgeons will find to be both convenient



PENN'S CAT-GUT ECRASEUR.

and efficient in removing small tumors from the nose, fauces, rectum, and uterus.

The peculiar advantages which might be claimed for it are that, while it has sufficient strength, it is at the same time light, easily manipulated, will reach to any desired depth, is perfectly simple in its structure and operation, and best of all the cat-gut is concealed in a tube so that the instrument cannot pinch, or in any way injure the tissues with which it comes in contact.

Treatment of Frozen Persons.

Medical men have always differed as to whether the best medical treatment of frozen persons was by a gradual or rapid application of heat. "To settle the matter," says *Knowledge*, "Laptchinkski has made a series of very careful experiments upon dogs, with the following results: Of twenty animals treated by the method of gradual resuscitation in a cold room, fourteen perished; of twenty placed at once in a warm apartment eight died, while of twenty immediately put into a hot bath all recovered." The experiments will

probably influence the practice of medical men in Russia and northern Europe, where the question of the best means of restoring life in persons suffering from excessive cold is of frequent occurrence every winter.—*Medical Summary*.

[Since learning of the above, or some other similar experiments, about three or four years ago, we have treated with

uniformly marked success every case of frost-bite, of various degrees, that happened under our observation, by ordering the hot plunge bath or douche. For instance, if a foot was frozen to stiffness and almost total insensibility, it was immediately submerged in water, so warm that the hand at a normal temperature could not tolerate the heat. In case of frost-bitten ears, cloths wrung out in hot water were at once applied. The feeling is one of intense gratification, and usually is only momentarily preceded or interrupted by an acute stinging pain. It is by far the most preferable method of restoration.]

A. H. P. L.

Structures to be Included in the Sutures in the Operation for Fixing a Floating Kidney.

DR. L. H. DUNNING, of South Bend, Ind., after thoroughly discussing this subject, and after having examined slaughtered animals immediately following death, and after having once performed the operation (nephrorraphy), concludes as follows:

1. The kidney has a normal range of motion.
2. The operation for fixing a floating

kidney should comprehend and permit, so far as possible, this normal range of motion.

3. The capsule should be left unbroken, and, if possible, free from adhesions.

4. Stitching the capsule ignores the fact stated in the first conclusion, and prevents the realization of the desideratum mentioned in the second, and from its very nature precludes the accomplishment of the second named desired result.

5. Suturing the fatty envelope recognizes the truth of the first conclusion, and fulfils the indications of the second and third conclusions, hence it is the method greatly to be preferred.

Frog's Skin Grafts.

According to M. PETERSON in the *Gaz. Hebdomadaire de Méd. et de Chir.*, of Nov. 13, 1885, grafts of frog's skin take with about the same certainty as that removed from the human body. [There is no reason to our mind why this should not be true of all integuments, and especially those from cold blooded animals, because of the longer viability of such grafts.]

A. H. P. L.

Blisters Better in Cold than in Warm Weather.

According to the *N. J. Medical Record*, blisters do not act as well in warm weather as in cold, because the perspiration largely prevents the action of the cantharides.

General Precautions in the Administration of Anæsthetics.

DR. GEORGE EASTES concludes his paper in the *British Medical Journal* as follows :

1. The patient should have no meal (except in cases of extreme feebleness)

for four hours beforehand, to avoid the tendency to vomiting. A little brandy or ammonia may be given with some water fifteen minutes before the operation if the patient be an adult and chloroform be selected.

2. The anæsthetist should endeavor to reassure the patient by a kind, gentle manner, which may calm an agitated heart, and induce easy respiration.

3. No tight fitting garment or band should be left around the chest or abdomen.

4. All artificial teeth must be removed from the mouth.

5. The anæsthetist should examine the heart sounds and pulse before the operation. This precaution may seem superfluous, in most instances, but in a few cases may put the administrator on extra guard.

6. The patient should be placed in the recumbent posture, with the head but slightly raised. This is particularly important when chloroform or any other cardiac depressor is used.

7. The anæsthetic should be applied in the manner most suitable to the vapor used, about which I have already sufficiently spoken under the heading of each drug that I have mentioned.

8. The surgeon should not commence his procedure before the patient is fully narcotized ; not alone in severe operations, for many simple procedures, such as the reduction of dislocated joints and strangulated hernia, and the diagnosing of tumors of the abdomen and pelvis, require complete muscular relaxation for their successful attainment.

9. It is a golden rule never to give more of the anæsthetic than is necessary for the production of sufficient anæsthesia for the operation that has to be performed. Since every extra degree in anæsthesia is an advance along that road whose extreme goal is death,

the patient should be taken no nearer the dreaded end than is quite requisite, as all the steps passed have to be retraced. Besides, as the gap separating the patient from death becomes lessened, it may easily arise that, in extreme narcosis, one extra and apparently trivial event, which in health would be quite inoperative to cause a fatal issue, may determine the patient's career.

10. Wherefore, lastly, as the work which the anæsthetist performs depends for its successful result on such a number of nicely balanced conditions, his whole attention, during the few minutes of his employment, should be concentrated upon the case. He must watch the respirations, the pulse, the countenance, and the general condition of the patient. He should not be observing attentively the steps of the surgeon's procedure, otherwise he may fail to notice the first sign of danger in the patient, and the life, for which he is chiefly responsible, may be jeopardized before it is recognized that it is in peril. Moreover, the anæsthetist may rely upon receiving more than full recompense for all his care in a decreased number of mischances and a welcome table of good results.—*Medical and Surgical Reporter*.

Anæsthesia by Mechanical Means.

Local anæsthesia might be attained mechanically by cutting off the afferent channels, from peripheral nerve endings to nerve centres, thus leaving these last unaffected. This was proposed long ago by Dr. Waller (of London), who suggested the compression of nerve-trunks, to obviate the pain experienced when the peripheral branches were divided. General anæsthesia would result if the sensory paths of the spinal cord,

or the perceptive centres of the brain be acted upon by some agent capable of annulling their functions.—*Medical World*.

[We would here call attention to Dr. Corning's paper on the production of spinal anæsthesia (*N. Y. Medical Journal*, Oct. 31st, 1885), in which he shows that deep injections of the hydrochlorate of cocaine between the dorsal spines produces a complete loss of sensation in both lower extremities (para anæsthesia) lasting for a sufficient time to permit the performance of most operations. The only possible objection we can see to this plan is that which belongs to all analgesics and anæsthetics, *i. e.*, paresis of the vaso-motor nerves, and consequently the greater liability to excessive hæmorrhage.]

A. H. P. L.

Treatment of Palmar Ganglion.

The Lancet lays down the following rules for the treatment of palmar ganglion, as in accord with the best and most recent views of surgical authorities on the subject. The first point of importance is to attempt the cure of the cases as early as possible. No good can come of delay which leads to greater distension of the cyst, and is especially to be deprecated as endangering the adjoining tendons, which become stretched, and even in some cases severed, by the pressure to which they are subjected. Second, the free evacuation of the cyst, and the removal of all the "melon-seed bodies" it contains, whether these be free in its interior or adherent to its walls. For this purpose an incision about an inch and a half long, not a puncture, should be made in the most prominent part of the swelling, above the annular ligament, avoiding, of course, the radial vessels and the tendons which can be felt through the skin. Pressure

should be made in the palm to force out the fluid and as many of the loose bodies as will thus escape. Then a sharp spoon should be introduced, and the whole cavity scraped, to detach any "bodies" which may be still fixed to the synovial membrane. The "spoon" is much the best means of doing this. Some have trusted to injecting a fresh stream of fluid into the cyst, but this will not remove "bodies" which are still firmly adherent to the cyst wall.

Volkman passes a large drainage tube through the cyst, and draws it sharply to and fro, and trusts to that to detach any adherent "bodies;" this is however, an uncertain method, and if the cyst be old and large, with pouches extending from the main cavity, they escape the friction of the tube altogether. Having thus carefully removed all the contents of the cyst, whether solid or fluid, a solution of chloride of zinc, gr. xl— \bar{z} i, should be applied to the whole interior of the sac, the purpose of this being so to modify the nutrition of its lining as to prevent any recurrence of the dropsy. A solution of iodine has been used for the same purpose, and some surgeons may be inclined to use iodoform instead. The most important steps in the treatment are those to be taken to secure healing of the wound without suppuration, at any rate without septic suppuration. As a preparatory step, the parts must be thoroughly cleansed before the incision is made, and the operation should be conducted under an antiseptic spray or irrigation, and some efficient antiseptic dressing should be applied. A drainage tube should be introduced into the wound and passed down beneath the anterior annular ligament, and only removed when the discharge through it is reduced to a minimum.

Dr. Weiss shows that if pressure be

carefully applied over the palmar part of the cyst, all retention of fluid can be carefully obviated. The hand should be kept fixed on some kind of splint applied to the extensor aspect, until the wound indicated is healed. As soon as that is accomplished, the fingers should be liberated and the patient encouraged to move them. The results of this treatment are entirely different from those formerly met with. When the antiseptic precautions are carefully carried out there is no danger whatever of blood poisoning or of profuse local suppuration, and the final result is the restoration of a thoroughly useful hand. The tendons are not bound down by cicatricial bands, and after a time it may be impossible to find any trace of the previous mischief beyond a linear scar in the forearm. Weiss considers that the process of cure of the synovial cyst is analagous to that obtained in a hydrocele by injection, or in dropsy of a joint treated by injection of iodine. At present no case of a recurrence of the ganglion after a septic incision and drainage has been reported.—*Journal American Medical Association.*

Therapeutical Hints.

DR. JOHN W. MARTIN says in the *Med. Press*, July 22, that the following is an excellent lotion for subduing inflammation, and reducing the œdema of inflamed parts: ℞. Tr. opii camph., \bar{z} ij.; tr. tolutani, \bar{z} ij.; liq. plumbi diacetat, \bar{z} iv.; glycerine, \bar{z} ij.; aquæ, ad., \bar{z} xx. M.

A piece of lint or old linen to be well wetted with the lotion, and to be applied to the inflamed part. The wetting to be repeated at frequent intervals.

Internally, it is useful to combine the following mixture with the use of the foregoing lotion: ℞. Potass bicarb., \bar{z} iss.; tr. nucis vom., \bar{m} xl.; ferri am.

cit., 3 iss.; sp. am. aromat., 3 iss.; aquæ ad., ʒ viij. M. ʒj. three or four times a day.

He has found this treatment especially useful in those cases in which intense inflammation in the arms follows re-vaccination.—*Medical and Surgical Reporter*.

Treatment of Carbuncle.

DR. J. V. SHOEMAKER, of Philadelphia, has used the following for external application: ℞. Naphthol, gr. x.; ext. of arnica, ʒ ss.; oleate of lead, ʒ ij. M.

This produces a very soothing effect. He has failed to obtain such good results with the alkaloid oleates as have been reported by other observers.

Dr. Savage, of Jacksonville, surrounds every carbuncle with a zone of cantharidal collodion from one-half to one inch in width; this draws a blister and relieves pain. He makes a small incision also, if pus has formed. In one case he applied a cantharidal plaster over the whole tumor and extending beyond, with excellent results. He gives calcium sulphide internally, a quarter of a grain, four times daily.—*Journal American Medical Association*.

The Treatment of Gall-Stone by the Elastic Bandage.

DR. QVISING states (*Tidskrift for Prakt. Medicin*.) that in seven cases of gall-stone (two men and five women) he has seen good results follow the use of Martin's elastic bandage. Its action depends on the immobilization of the abdominal organs, by which the calculus is prevented from irritating the mucous membrane, and from causing reflex contractions of the muscular coat of the gall-bladder. The bandage is applied rather firmly over the upper edge of the hepatic dullness, as far down as the crest of the ilium, a piece of

flannel being placed under it. It may be removed at night, if desired by the patient. Its use should be persisted in until the patient appears to be definitely cured.

Bone Grafting.

It may be of interest to our readers to know that it is possible to graft bone. Some time ago a German surgeon had occasion to simultaneously amputate one limb of a man and treat a compound comminuted fracture of another limb, with considerable loss of bone substance in the same patient. The gap caused by the loss of substance in the bone of the latter limb was remedied by cutting out a piece from the bone of the amputated member and fixing it in the vacant space. The result was highly satisfactory and complete union took place, there was said to have been no necrosis or caries, and the limb, within a reasonable time, was as firm as ever. We all have opportunities of testing this method as well as periosteal grafting and should not hesitate to give the most available method a trial at every opportunity.

Suet Bandages.

EDWIN BORCK, A. M., M. D. (*New England Medical Monthly*.):—

These are admirable for dressing. You can make them by melting mutton tallow over a slow fire. Have your bandages of close cloth ready cut the proper length and breadth, dip them into the suet; when saturated hold them so as to let them drip off, or the grease may be spread upon the cloth. Hang them over a line where they may be protected from dust, let them cool, fold them, put away for use. These bandages are especially adapted to dress old ulcers and wounds; they are smooth and adapt themselves perfectly to the

surface, are agreeable to the patient and can be medicated with any therapeutical agent you wish.

VENEREAL DISEASES.

On the Local Treatment of Syphilis.

The objects of local treatment are cleansing and disinfection of the affected area, reduction of inflammation, and cauterization.

Grünfeld holds that cases of a light nature and recent standing do not require any local attention. To this class belong syphilitic (mucous) patches, papules, and nodes.

In extensive tissue-destruction, with ulceration and scab-formation, such as in rupia and allied ulcerative processes, topical applications are indispensable. The scales are to be saturated with olive oil or carbolized oil (acid. carb., 1 to 10 olei oliv.) until they soften and fall off spontaneously. Lukewarm baths have the same effect. The remaining defects yield then readily to a combination of the mercurial and the soap plaster. As to the treatment of the so-called wet papules, Grünfeld advances the following indications :

1. Removal of the purulent secretion from the diseased surface, obtainable through baths of lukewarm water, or through disinfectants, such as carbolic acid or chloride of lime. After the bath a disinfectant wash is necessary, with solutions of carbolic or salicylic acid, thymol, chloride of lime (one to two per cent.), or sublimate (one to two per thousand).

2. Removal of inflammation from the affected skin areæ. The part is to be covered first with medicated gauze, and then with cold compresses. Solutions of sulphate of zinc (one-half to one per cent.) chloride of zinc, alum,

borax, acetate of lead, or even Goulard's extract, are eligible menstrua for the medication of the gauze.

3. To prevent the spreading of the affection. This can be effected by a thorough isolation of the affected skin area by dry cotton.

4. The formation of a new integument, which is facilitated by astringent coverings favoring the generation of a new epidermis. Solutions of calomel (two to three per cent.), chloride of zinc, chlorate of potassium, salicylic acid, and caustic potash, applied with a brush, will ordinarily achieve the desired effect.

5. Complete removal of isolated or confluent papules by an energetic caustic, such as the sublimate (1 to 20-25, concentrated acetic acid), applied carefully with the brush, after which the part is covered with dry cotton. Labarraque's method (solution of chloride of sodium and calomel) or Zeissl's fluid (calomel and liquid chlorine) are also serviceable. After this procedure, the application of astringent drugs hastens the healing process.

The scurf and scales usually appearing on the head are to be anointed with oil or vaseline every evening, so as to induce their falling off. In the case of pustules appearing on other portions of the body covered with hair, a more energetic procedure, such as the application of ointments of oxide of zinc, bismuth, white or yellow precipitate, is necessary.

Psoriasis palmaris and plantaris require special and careful attention. In light forms of this affection covering with mercurial plaster alone suffices. Before changing the plaster it is well to cleanse the part thoroughly with lukewarm soap water. In cases with thickened epidermis, which show little or no tendency to improvement, the sublimate

collodium (sublimate 1 grm., ol. ricini 2 grm., collodii pari 20 grm.) is to be painted on twice daily in two or three thin coats. In some cases ointment of white precipitate, oxide of zinc, or bismuth rubbed into the part daily act well. The mercurial plaster is, however, more powerful, and scarcely dispensable in the ulcerative form of psoriasis. Still, in spite of the most careful and specialized local treatment, the healing process is not infrequently so tardy as to require a constitutional treatment.

In syphilitic onychia, Grünfeld recommends the frequent cutting of the nails and the filing off of protruding parts of them. The mercurial plaster will soften the thickened margins and scaly masses.

Of higher importance, and requiring a more energetic therapeutic interference, are the gummata. In the nodes and ulcers of a syphilitic nature the first therapeutic requisite is the careful removal of the scabs by lukewarm baths or ointments.

Experience has invariably demonstrated the advantage of adding sublimate to the lukewarm baths taken in the cure of syphilitic skin-affections: 5 to 10 grammes are usually added to the quantity of water required for an ordinary bath-tub, while for local washes of the body 1 to 2 grammes suffice. Iodide of potassium, of course, can be similarly used. In fetid ulcers, Grünfeld suggests the addition of thymol or carbolic acid. In diphtheritic processes the strong caustic remedies are indicated, such as nitrate of silver (the solid stick, or in solution of 1 to 10), sulphate of copper in a concentrated watery solution (1 to 5-10), calomel in concentrated solution of acetic acid (1 to 10-15-20), or, finally, the hot iron. In ulcers of a phlegmonous tendency, covering with the tar and plaster of Paris powder, alongside of

proper antiphlogistic measures, are recommendable after antiseptic washes of chloride of lime (one to two per cent.), or carbolic acid (five per cent.).

After having converted the ulcer into a suppurating wound, iodoform and the mercurial plaster are our greatest standby. The latter enjoys so great a reputation in these affections that it is not infrequently employed as a diagnostic agent in doubtful cases.

Iodoform may be applied in powder form or by means of gauze. Its advantages are chiefly the rarely required change of the dressing and the quick resulting cicatrization.

In profusely granulating ulcers the sharp spoon with subsequent aseptic dressing cannot be dispensed with.

In the simple gummata of the skin, resorption through tincture of iodine or mercurial plaster may be tried.

In the progressed attenuation of the skin the yellow gummous contents of the gumma has to be emptied by puncture, whereupon a suitable dressing is to be applied.

Passing to the syphilitic affections of the mucous membranes, Grünfeld emphasizes the necessity of local medication, especially as compared with the syphilitic products of the skin, which in the majority of instances require no local treatment.

In the affections of the mucous membranes of the mouth, Grünfeld recognizes two requisites, viz., the general care and attention to the part and the direct treatment. The first indication is met by mouth washes composed of chloride of potassium, salicylic acid, permanganate of potassium (largely diluted), carbolic acid (one per cent.), chloride of sodium, borax, and alum. The cleansing, however, ought not to proceed in the usual manner, but by the irrigator. Attention to the teeth by

tooth-powders or suitable dental pastes is likewise a desirable object.

In the direct treatment of syphilitic mouth affections the solid stick of nitrate of silver plays a principal rôle. Equally valuable are solutions of sublimate of 1 to 20-50 in ether or acetic acid applied with the brush; in some cases the tincture of iodine is also serviceable.

In slight affections of the mucous membrane of the mouth the glycerite of tannic acid, sublimated in one, two, or three per cent. solution, salicylic acid, or chloride of zinc recommend themselves. If pain be present, cocaine, of course, suggests itself.

In affections of the genito-urinal tract the solid nitrate of silver is likewise a most efficient remedy; in the rectum the ointments of zinc, morphine, or belladonna, applied before and after defecation, will be found very grateful. The most scrupulous cleanliness is imperiously indicated, and to avoid friction a cotton tampon is, with advantage, inserted in the rectum.—*Ther. Gazette.*

DISEASES OF THE EYE AND EAR.

Skin Grafting—New Application.

H. F. HANSELL, M.D., says: In January, 1885, a young man in perfect health, asked my opinion as to the possibility of restoring an orbit from which the eye had been removed one year before, and making it capable of wearing an artificial eye. The eye had been destroyed by sulphuric acid, and very properly, enucleated. The lids, however, had been allowed to come into contact with each other, and in numerous places where the conjunctiva had been denuded of its epithelium, firm union, by means of cicatricial fibrous bands, had formed. Knowing the pa-

tient had sought other advice, and been discouraged, I was cautious, but felt justified in expressing the belief that, with patience, the desired result could be obtained. The bands of adhesion, and all places of union between the upper and lower lids were thoroughly divided, and the incisions carried moderately deep into the orbit, without, however, interfering with the nerve. After the hemorrhage had ceased, about twenty pieces of skin, three lines in diameter, were cut from the inner aspect of the arm, each piece subdivided into two or three more, and each subdivision inserted separately upon the cut mucous surfaces of the orbit. The surface was then covered with gold beaters' skin, which was retained in place against the mucous membrane and grafts by a pad of cotton. The lids were closed over the cotton and firmly bandaged. Some grafts became detached and lost, but many were retained, and losing their individual existence, were incorporated into the mucous membrane, and thus produced an extension of its surface. In the following three months the operation was repeated several times, the number of the grafts depending on the contraction that had ensued. In a few days after each operation, when the skin grafts had become firmly united, I allowed the patient to wear a leaden scale, modeled after an artificial eye, the size of the scale increasing as the orbit extended, until, in two months more, he was able to wear an artificial eye, which had been ground to fit his orbit.

The union between skin and conjunctiva became perfect, while the skin retained its own color. The edges or sutures were smooth, and the surface presented no marked irregularities. The discharge of mucus and tears, usual in an orbit deprived of the eye, was not

increased, nor at any time did the patient complain of pain. The result of this operation on this patient proves (1) that an unsightly deformity may be remedied, and (2) that skin, instead of mucous membrane, may be grafted into mucous membrane. For the cure of symblepharon (attachments of palpebral to ocular conjunctivæ) the conjunctiva of the rabbit has been frequently successfully transplanted. Where, however, the eyeball has been removed, this procedure involves unnecessary trouble and time.

The advantages in the transplanting of skin over grafts of mucous membrane may be thus summed up; 1st, skin is easily obtained; 2nd, it is readily manipulated; 3d, it forms a less vascular and equally strong floor, less liable to inflammation and mucous discharges.—*The Polyclinic—College and Clinical Record.*

[We would suggest that it would be better to employ almost any epithelial structure from some cold blooded animal for grafting purposes, instead of from the patient's own body, because as good as the latter, if not better, and would make these simple operations less objectionable, and consequently more feasible.]

A. P. H. L.

Chronic Otitis Media.

In a paper read before the American Otological Society (*Cincinnati Lancet and Clinic*), Dr. W. W. Seely gives the following conclusions as to treatment.

1. Only experience of sufficient length of time (often lasting over months) in each case can determine whether treatment shall be continuous (daily) or interrupted, that is, perhaps daily for a few weeks, followed by an interruption of some weeks or months.

2. Only experience in each case can

instruct entirely to the middle ear or entirely to the naso-pharynx, or combined against both.

3. Only experience in each case can inform us whether injections into the tympanic cavities are called for.

Under this head I would say that strict medication, either of the middle ear or naso-pharynx as routine treatment is unwise till simple inflation has failed.

4. Mechanical dilatation of the tubes is rarely necessary or advisable.

I would remark here that only in extremely dry states of the tube is dilatation followed by much success.

5. Hearing tests are not reliable, and hence patients with great deafness, great loss of bone conduction, etc., should not be sent away till the "test" by trial has been thoroughly gone through with.

6. Simple inflation failing, the greatest attention should be given to the naso-pharynx, even though it is in an apparently fair condition.

7. Syringing, douching, and swabbing the naso-pharynx should be abandoned.

DISEASES OF THE SKIN.

Skin Diseases.

ARTHUR VAN HARLINGIN, M. D., who is the author of some new ideas of treating skin diseases, gives the following among his specimen prescriptions: \mathcal{R} . Pulv. kaolin, \mathfrak{z} jss; ol. lini, \mathfrak{z} jss; pulv. zinci oxidî, \mathfrak{z} j; liq. plumbi subacetat, \mathfrak{z} j. M.

Sulphur Paste. \mathcal{R} . Sulphur precipitat, \mathfrak{z} ijss; pulv. colceii carbonat, \mathfrak{z} j; pulv. zinci oxidî, \mathfrak{z} j; pulv. amyli oxyzæ, \mathfrak{z} vss; glycerinæ, \mathfrak{z} j—ij; aquæ, \mathfrak{z} jx.

The quantity of glycerine is made to vary in consequence of the mixture's proclivity to harden too much, and may thus be kept to a suitable consistency.

THE

AMERICAN MEDICAL DIGEST.

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

DISEASES OF WOMEN.

A New Method of Treatment in Uterine Disease—The Dry Method.

Dr. ENGELMANN said that this was to be merely a preliminary paper, as he had not yet fully perfected this method of treatment and was not quite ready to place it in full before the profession, but as the same innovation was often in the minds of several, he wished to make the announcement before the society and claim this method which he had gradually evolved as his own. As a method, in its outlines, it was satisfactory and practically complete—yet he felt that he had not yet reached all he wished to attain until he had succeeded in devising a sensible method of applying impalpable powders to the uterine mucosa and evenly distributing them over the surface of the membrane. The dry treatment with powders and medicated cotton, acting upon the uterus, the body of the organ, and the surrounding tissues, was the leading feature of his method of treatment.

Dr. Engelmann reviewed the various methods of treatment customary in dif-

ferent countries, and characterized America as the land of nitrate of silver and iodine; the former, once most popular, now gradually yielding to the latter. He had long since given up as injurious, rather than useless, the use of strong intra-uterine applications, generally speaking of course, as in certain cases they were needful, and the only proper remedy; he severely criticised the very common custom of mopping the uterine cavity with strong solutions, especially the altogether too common and indiscriminate use of nitrate of silver and iodine, to which since the days of carbolic acid iodized phenol had been added—the three fluids, which, in this country generally make up the armamentarium in the treatment of uterine disease.

Dr. Engelmann had at first naturally followed the practice of those about him, but soon gave up the indiscriminate use of strong fluids, using weak solutions, or dilute fluids. Since 1873 he has endeavored to replace fluids, whenever possible, by powders, at first trying tannin, iron, nitrate of silver (in small proportions) in bacilli, but the

preparation was expensive and unsatisfactory; nor did Mitchell's gelatine pencils quite answer, but last spring Mr. Mitchell, of Philadelphia, prepared a very delicate gelatine pencil, which answers better than anything yet made for the purpose of intra-uterine treatment. So also the iodoform pencils of Parke, Davis & Co. are very serviceable.

These he uses in case he deems it necessary to treat the mucosa directly, in certain cases, however, resorting to fluids. In the majority of cases he relies on medication applied to the cervix by means of cotton and the powder blower. He deems it wrong to treat a diseased uterus through its smallest and most delicate part, the mucosa, but would rather rely on treating that sensitive membrane through the uterus, hence the use of powders and medicated cotton.

Dr. E. mainly uses iodoform, borax, bismuth, oxide of zinc, alum, tannin, calomel, and sulphate of zinc, which are dusted over the cervix and vaginal walls. Iodized, carbolized, borated, tannated, salicylated and iron cotton, and corrosive sublimate jute he considers the most delicate means of applying a remedy, as it is kept in contact with the parts, until gradually absorbed; the cotton, at the same time, must be judiciously placed, so as to rectify such malposition as almost always exists more or less in a diseased uterus.

This method is a most happy combination, as it combines the best and least irritating way of ameliorating displacement with a delicate and effective method of treating the co-existing pathological condition. Moreover, a support, such as is afforded by the properly placed cotton or jute tampon, is an aid to treatment and a relief to the patient, in morbid conditions not directly complicated with displacement; the sensi-

tive afflicted parts are supported; a strain is removed.

The glycerine tampon, once so popular, Dr. E. uses but little, but admits that under certain distinctly marked conditions, it renders admirable service; but even there it is not necessary, other means can be substituted, and he prefers them to this filthy remedy.

The dry method, the treatment of the uterine mucosa through the muscular and surrounding cellular tissue has beyond the advantage of greater certainty that of comfort and cleanliness; it is not painful, the patient does not suffer in the office, is not in agony during the treatment, nor does she go home to be reminded of her suffering by hours and hours of cramps and pain. She leaves the office comforted, feeling better.

Dr. E. does not cast aside intra-uterine applications, but claims that they should no longer be resorted to as a routine method of treatment, and when called for, should usually be of milder character than now commonly applied.

Many a victim to pessaries will be spared when the dry powder and cotton treatment is adopted, as the gradual replacing of the diseased organ is far better accomplished by medicated tampons, whilst the morbid condition is at the same time done away with, than by the irritating and dangerous pessary. Not that the doctor desires to interfere with the pessary in its proper place as a support to the movable and healthy, but displaced uterus.

The pessary, the intra-uterine application, the glycerine tampon, all find certain indications, but have done great harm by the indiscriminate abuse to which they have been put. More generally serviceable, more reliable as a method of treatment, and less dangerous is the dry method, the treatment of the entire organ, or the mucosa through

the corpus and cervix with powders and medicated cotton. Dr. E. soon hopes to devise a method of successfully distributing impalpable powders over the surface of the mucosa, and will then consider his method complete.

Such gentlemen as have witnessed Dr. E.'s treatment have never failed to appreciate its advantages, and the powder blower, which could not be obtained in the city previous to its use by Dr. E., is now to be had at most of the instrument makers.

Dr. E. has already demonstrated the advantages of this method in his department of the "Polyclinic" and cited a number of cases of disease of the mucosa with profuse discharge, previously treated by others by the intra-uterine method, which had been treated in the "Polyclinic" exclusively by the dry method, with the most rapid and surprising results, and promised soon to publish a number of case histories, carefully kept by the staff, which will demonstrate more clearly the method and its advantage.

Dr. E. closed his remarks with the wish that his colleagues would test the method which he had found so efficacious. The doctor was aware that dry cotton and powders had been used of old, but never in such combination and as the mainstay of the gynecologist, and no such method had ever been advocated or published; hence he lays claim to this method at the perfection of which he has so long labored, and claims it as his own.

[There is great good in this dry method of treating uterine diseases of the uterus. It is not altogether a new method. We have employed it years ago, and it is eight years ago since we saw Tarnier of Paris using it. One of the great advantages in the method in treating vaginitis at least is that it keeps

the inflamed surfaces apart. When an alterative effect is desired and agents like mercury or iodine are used, the dry method is best. When such agents as bismuth, zinc and the like are used, the frequent applications necessary to get the full benefit of the remedies is objectionable. The suggestions of Dr. Engelmann are good and worthy of every consideration.] A. J. C. S.

The Thermo-Cautery in the Treatment of Chronic Metritis.

DR. E. SCHWARZ, in a paper on the treatment of chronic metritis, advocates the use of the thermo-cautery, and reports most satisfactory results from its use in 30 cases so treated. Complete cures and permanent alleviation of the symptoms have not resulted in every case; but this, he says, is not remarkable when the pathological and anatomical foundation of the affection is taken into consideration. In about one-third of the cases in which the wedge-shaped excision, recommended by Schröder and Martin, was indicated, Dr. Schwarz, by means of the knife-shaped galvano-cautery, burned from each lip of the uterus a wedge-shaped portion of tissue about one inch in length, the same breadth, and from one-fifth to two-fifths of an inch thick at the base. Commonly, the same effects were obtained by the use of the cautery as with excision with the knife. In special cases the size of the portion removed was determined by the degree of hypertrophy existing. Ordinarily, without fear of persistence of the diseased condition, a portion of the diseased membrane from one-fifth to one-third of an inch broad can be allowed to remain. This, after the disappearance of the abnormal condition of nutrition, rapidly shrinks and returns to a normal condi-

tion, so that in from four to six weeks the parts are found fully covered with normal mucous membrane as far as to the os uteri.

The application of the cautery is made in a few minutes. No assistant is necessary. A glass speculum neither too long nor narrow is required, and in order to avoid making it too hot a short pause is made in the application of the cautery, during which irrigation is practised. Ordinarily, the pain experienced by the patient is not severe, and she fails to discover the occurrence of anything unusual unless previously advised of the operation intended. Moreover, patients who complain of severe pain from scarification of the parts experience no unpleasant sensation from the use of the cautery. After the operation the cauterized parts were dusted with iodoform and the vagina packed with antiseptic gauze. The patient usually kept her bed only two or three days.

Separation of the eschar usually occurred during the first eight days. Extensive suppuration as a result of the operation has not been noticed, but under the use of the iodoform tampon or sublimate gauze and irrigation, healing without extensive discharge has always quickly resulted.

In other cases in which such extensive hypertrophy did not exist, but in which it was necessary to reach the numerous dilated blood vessels, the wedge-shaped cauterization was not practiced. A pointed cautery was used by which was burned into each lip a number of holes from one-fifth to three-fifths of an inch deep, and about the diameter of a goose quill. Cicatrization under these circumstances occurred more rapidly than in the cases first noticed, and without notable suppuration.

Hemorrhage was observed neither during nor after the operation, nor as a

result of the separation of the eschar, and likewise but little inflammation or marked stenosis of the os uteri was noticed.

In every case there was marked and lasting improvement of the condition; in no case was the condition of the patient rendered worse. The results anatomically correspond to those obtained.

In all cases there was more or less considerable diminution of the uterus, and a decrease in its vascularity. In some cases, however, it was found necessary to repeat the operation, owing to insufficient cauterization at first.—*Centralbl. für Gynäkologie.—Medical Age.*

Infectious Peritonitis in Virgins.

The *Brit. Med. Jour.* tells us that Dr. Snyders has described two interesting cases, which seem to show that the virus of erysipelas can cause, in women who never had intercourse, an acute form of peritonitis, similar to that observed in puerperal cases. A young woman (a virgin), aged 18, was suddenly seized with symptoms of acute peritonitis five weeks after a servant in the house had been taken ill with erysipelas of the face; death ensued in thirty-six hours. Shortly afterwards, the brother of the young woman had an attack of erysipelas on the arm; this did not cause much anxiety at the time; but a fortnight later, the second sister, aged 20 (also a virgin), was seized with the same symptoms as the first, and died in less than two days. At the post-mortem examination, Dr. Firket failed to discover any local cause by which the origin of the inflammation might be explained. The spleen was much swollen, and the blood had the same appearance as in cases of infectious diseases.—*Medical and Surgical Reporter.*

A Case of Pyokolpos and Pyometra with Atresia Vaginæ Hymenalis.

RASNER saw in the clinic of Professor Manuowicz, in Krahan, a girl with the following history :

Patient was eighteen years old, and had never menstruated. For two years she had suffered from occasional pains in the abdomen, which usually lasted several days. There was also difficulty of urination and defecation. During the few days previous there had been chills and fever.

Examination showed the bladder to be distended with urine to the region of the umbilicus. Besides this there was a tumor reaching 3-4 fingers above the symphysis.

The external genitals and the perineum were bulging, and the labia majora were separated for a distance of several centimeters. The vaginal entrance was imperforate, the hymen bulging. A transverse incision was made through this, and over a litre of pure pus, tinged with blood, evacuated. After irrigating the parts with two per cent. carbolic lotion, examination showed the vagina to be smooth, distended and thickened.

The os uteri externum was the size of a half dollar, the edges forming a thickened prominence. The uterine mucosa was swollen, the cervical canal swollen above.

The flow of pus ceased after two days and the patient was dismissed.—*Weekly Medical Record.*

Hystero-Mania.

DR. BURDOCK, in a clinical lecture published in the *Western Medical Reporter*, says :

Our first patient this afternoon is thirty years old ; married ; has had one child, or rather a premature labor at almost the seventh month ; menstruated first at fourteen years, and was in

fair health, except that the menstrual flow was scanty and irregular. After marriage the nervous symptoms grew more and more aggravated at each epoch till pregnancy, after which her health became better and remained so until after the accident which resulted in the miscarriage. Succeeding her confinement, she got up, slowly, but seemingly felt quite well for a while, but at the return of menstruation the old symptoms returned, and have been growing more and more aggravated ever since. As the time approaches for the menstrual flow she becomes irritable, dazed and absent-minded, and at times, consciousness is entirely lost, and she is unable to give any account of herself—the severity of the symptoms being inversely in proportion to the amount of the flow.

Some of the class will remember a patient who was in the clinic last spring with a similar class of symptoms, save that she had never been pregnant. In that case the patient was picked up during one of her paroxysms and adjudged insane, and actually placed in the asylum, where the nature of the case was recognized, and she was immediately released and sent here. I found a uterus undeveloped, almost infantile, stenosis of the internal os, and general congestion of the pelvic tissues. The cervix was dilated with a tupelo tent, and the insanity disappeared as by magic. Now, that is just what we propose to do in this case. This patient, however, has been pregnant, still I find a severe stenosis, which unquestionably is cicatricial in its nature. In addition, I find an anteflexion due to incomplete involution after confinement. This partial subinvolution is due in this case to the injury to the cervix at the time of parturition, and the cicatricial stenosis is due to the same cause.

This woman has been living in wedlock eight years since the confinement referred to, and has been barren. Now, if we can stimulate a healthy action in these pelvic organs, relieve the stenosis by proper dilatation, we may increase the menstrual discharge, relieve her sterility, and cure her insanity.

She came into the hospital this morning, and I introduced a tent, after making an incision, to partially enlarge the canal of the cervix, and now I will remove that tent before the class; the patient will be kept in bed a few days, and we will report the progress of the case to you at some clinic in the near future.

Vaginal Drainage in the Treatment of Cancer of the Uterus, as a Means of Preventing Characteristic Odor.

PROF. HAL. C. WYMAN (*Medical Age*):

Cancer of the uterus often taxes to the utmost the patience and ingenuity of the surgeon, who at present limits his efforts in behalf of his patient to making her more comfortable, and at most, prolonging her life a few weeks. The odor, so foul and disagreeable, peculiar to uterine and vaginal cancer, comes in for a share of treatment. Various disinfectants are thrown into the vagina, in the form of injections, suppositories, and cotton tampons, with more or less success in controlling the odor. But, to be of any considerable benefit, they must be used often, *i. e.*, changed every few hours.

Not a few cases of uterine cancer have come under my care, and the plan that I have found best for keeping down the smell, is to maintain constant drainage of the vaginal fluid by means of variously shaped tubes, which keep the vaginal orifice open, and the fourchette low enough to permit all fluids to drain away. Oakum or absorbent cotton col-

lects the fluids after they escape. They are burned before they have time to undergo the distinctive putrefactive changes which result from the presence of the body temperature.

Any one who has studied a case of cancer of the uterus from its commencement as a simple proliferation of cervical epithelium, must have noticed how suddenly and rapidly the strength of his patient began to decline after that proliferation of tissue had begun to exfoliate and give out the remorseless and peculiar odor. Just what that odor is, I am not aware that any one has determined, but that it has the power to surely exhaust the vitality and strength of animals, no one can deny.

That it is the odor, *per se*, instead of a more tangible something that exhausts the patient, I do not claim; but that it is a something which is produced by changes taking place in the necrosed tissues, as the result of their remaining a number of hours in contact with the bodily warmth, my observations justify me in asserting. The investigations of modern chemists into the various alkaloid substances known as ptomaines, suggests a search of the cancer juices of distinctive smell, with a strong probability of discovering a clearer reason for their baneful properties.

When the vaginal orifice in my cases has been kept open so that fluids could constantly drain away, there has been coincident a marked improvement in the general health. There has been at once an abatement of the odor peculiar to cancer of the genital tract in women. I cannot but believe the odor bears a causative relation to the destructive character of the disease.

At first thought one would think the vagina sufficiently patulous to secure a thorough draining away of all fluids turned into it, but such is not the case

in many instances. I have known considerable quantities of fluid to escape from the vagina when making a digital exploration, which had been retained there, by the tonicity of the muscles at the vaginal orifice, and this notwithstanding the patient stood erect and had been walking about every day.

The Effect of Sea-Voyaging upon the Menstrual Function.

DR. IRWIN, in *Medical Record*:—

In order that the value of the figures regarding the menstrual function might not be overrated, the author said that 288 of the 451 observations were based upon the inquiries of the stewardess among the passengers under her charge. They were thought to be reasonably reliable. Of the 288 women included in her returns, all of whom were supposed to be non-pregnant and menstruated normally previous to the voyage, 21 passed the period while on board without menstruating; 43 menstruated before the period, and 224 menstruated at the proper period, while 23 complained of pain, and in a few instances of increased or diminished flow, while 201 noticed absolutely nothing unusual which could be attributed to the voyage.

Turning to his own 163 observations, 13 of the women passed the period on board without menstruating, of whom 11 experienced more or less molimen; 51 menstruated before the usual period, 99 at the proper period. Of these 47 complained of unusual discomfort, accompanied in 37 instances with increased and prolonged flow, and in two with diminished discharge. Of the 13 who passed the period, 3 were on board at the second period; in 1 of the 3 menstruation was almost normal; in the second the result not known, and in the third the process was increased and prolonged,

but at the two subsequent periods she had complete amenorrhœa. Thus, of the 163 cases observed by himself, only about thirty-one per cent. performed the function of menstruation as normally as on land. These women were usually of a more refined class than those observed by the stewardess.

In one of the cases the patient was a resident of New York, who had kept an accurate observation of her menstrual periods for fourteen years, during 12 of which she was a widow. With the exception of four periods, the only ones which occurred at sea, and another, which might otherwise be accounted for, she always menstruated with perfect regularity. Every flow which took place on shipboard departed from the normal standard.

It was a more difficult task to explain facts observed, and to deduce from them principles applicable to practice. This difficulty was increased by our ignorance and conflicting opinions regarding the real nature of menstruation. The special conditions of an ocean voyage which might be supposed to exercise an influence upon female habit might be classed under three heads: Physical, dependent upon the novelty of the situation and the apprehension of danger; ærial, dependent upon some special quality of the sea air; and, lastly, motional as a direct result of the movements of the vessel.

There could be no question as to the effect of strong mental impression upon menstruation. It was perfectly tenable to suppose that mental influence occasionally played some part in the disturbances under consideration, especially in those cases, by no means frequent, of the sudden arrest of the flow in women who had embarked while actually menstruating. It could not, however, be regarded as a principal cause, since

women who suffer much at this time often have not a particle of fear, and would thoroughly enjoy sea-life but for its unpleasant effect in this direction.

However acquired, sea air has some extraordinary hygienic potency, which has been recognized in every age of medicine. It held a distinguished rank among the remedies of antiquity.

It was also clear that the motion on board a ship disturbed in some way the established habits of the economy, and the author thought the credit of having demonstrated the true pathology of sea-sickness, or rather of motion sickness, had now been pretty generally conceded to him, his views having been published in 1881. The ordinary form of sea-sickness, or that form caused by the easy gyrations of a large ocean steamer, was essentially a disturbance of equilibration, the initial lesion being in the semicircular canal. This soon led to dizziness, followed by nausea and vomiting.

Some authors claimed that the motion of the ship exercised a peculiar influence upon the ganglionic system of nerves, and produced certain other effects, but by far the more striking of these effects was that which formed the subject of the essay. It was Dr. Irwin's conviction that menstrual disturbances on shipboard were almost entirely due to the motion of the vessel, and that the constant tendency of this motion was to increase the blood-supply to the pelvic organs. The result differed in degree from a slight and sometimes beneficial circulatory stimulus to a positive and dangerous engorgement, but under all circumstances the primary influence is unquestionably toward congestion.

It would be seen that a sea voyage might disturb the menstrual habit in almost every conceivable direction—in its periodicity, duration, amount of

excretion, and discomfort. The particular effect most constant in each case was determined by the constitutional habit of the individual, the relation of the last period to the date of embarkation, the length of the voyage, and fortuitous conditions.

Regarding periodicity, a premature return of the flow was far the most frequent effect. There may be a return of the sanguineous discharge at any time during the intra-menstrual epoch, but it is more liable to return if the voyage be undertaken during the first ten days following menstruation. On the other hand, complete and passive amenorrhœa for one or more periods after landing, is a frequent result of the Atlantic transit.

Of the various effects of sea motion upon menstruation it was unfortunate that none was more universal than an aggravation of whatever discomfort is ordinarily associated with this process. In some women painful menstruation is experienced for the first time at sea. In the author's opinion the statement may be accepted as universally true that in every type of dysmenorrhœa the discomfort experienced is increased, certainly at the first, and usually at subsequent menstruations during the voyage. If there were any exception to this rule it must be in certain neurotic states. Dr. Irwin offered some explanations for this phenomenon, based upon prevalent theoretic views concerning menstruation, ovulation, etc.

A sea voyage was likely to hasten puberty or the first menstrual flow. Some women who were undergoing the climacteric epoch also had a return of the flow during a sea-voyage.

The aphrodisiac influence of a sea-voyage was generally accepted, and it was easy to understand that an increased blood supply to the genito-uterine sys-

tem, should excite the sexual instinct. But there might be other conditions than the mere influence of the voyage at sea itself which would tend to produce this result.

An ocean voyage should be regarded as a potent emmenagogue, having, in addition to the special influence mentioned, a well-marked tonic, alterative, and sedative influence. With these characters it is entitled to head the list of therapeutic agents of similar effect, and should no longer be prescribed empirically, but with a definite object in view. There are many cases in which this local and perhaps constitutional influence was indicated.

In the conditions included under the term chloroanæmia with amenorrhœa and retarded sexual maturity, certain forms of leucorrhœa and uterine hysteria in undeveloped school girls, a typical case of which class had been described by Dr. Emmet, in this class of cases a sea voyage would be indicated.

Again there were many conditions of the genital organs, which, if not positively interdicting a sea voyage, demanded special prophylaxis and skilful attention while on board the vessel. Almost every form of uterine and ovarian disease became worse while at sea. Uterine displacements were unfavorably affected during the voyage.

The treatment of uterine troubles during ocean transit should be conducted upon general principles.

The influence of sea voyage upon utero-gestation was sometimes to produce abortion or early delivery. The vomiting attending sea-sickness was more violent than that of morning sickness, and was more likely to produce miscarriage. There was no uniformity of opinion upon this point, but it was the author's opinion that pregnancy, especially during the latter months, pre-

disposed to, and always aggravated, the most distressing features of sea-sickness.

Sea-sickness invariably suspends or perverts lactation.

The Influence of Diabetes Mellitus on the Female Sexual Organs.

The ordinary occurrence late in life of diabetes in women has prevented the confirmation of the occurrence in them of complications of the sexual apparatus analogous to those which so often occur in men.

A case recently reported by DR. HOFMEIER, however, shows that when the disease occurs in young women disturbances of the genital system are also apt to present themselves. The case was one of an unmarried woman, 20 years of age, who had menstruated regularly from her fourteenth year up to one year before the time of the report, when she attended the clinic of the Berlin Hospital for Women for relief from pruritus vulvæ. It was then found on examination that the urine contained large quantities of sugar, and that the uterus was greatly atrophied, being less than 5 c.m. in length. Examination under anæsthesia by PROF. SCHROEDER revealed that the ovaries were also greatly reduced in size. As all other diseases were excluded, it was concluded that the atrophy was the result of the diabetes.

An examination of the records of the hospital was then made for similar cases. It was there found that of over one thousand cases attending for pruritus vulvæ nearly all had passed the age when menstruation ceases spontaneously. In all of these the examination of the urine for sugar was only omitted in seventeen cases, and of these only three had not reached the usual age of the menopause, and in these latter diabetes

could be excluded by the other symptoms. There was only one case on record in which diabetes was present during the child-bearing age, and then, unfortunately, no record was made of the state of the menstrual function. These investigations point to the fact that in women diabetes ordinarily occurs late in life, and explain the apparent exemption of the sexual organs in diabetes in women.—*Berliner Klin. Wochenschr.*

Operative Treatment in Pruritus Vulvæ.

OTTO KUSTNER (*Centralbl. f. Gynak.*) gives four cases in which he has obtained a cure by excising the parts which are the seat of the pruritus. According to him, in the majority of the cases of pruritus, there is a primitive neurosis; but in many cases it consists of an abnormal irritation, which is secondarily exhibited by the abnormal irritability of the vulvar mucous membrane. The ordinary causes of this abnormal irritability are particularly, the products of the catarrhal secretions of the uterus and vagina, as this fluid, by constantly bathing the vulva, produces the first symptoms. If called early, the pruritus can be relieved by relieving the uterine or vaginal catarrh. But if the catarrh and its resulting pruritus have become inveterate, the pathological irritability of the vulva reaches a point which, even after the cure of the catarrh, through the physiological irritation, the rubbing of the parts against each other, suffice to keep up an insupportable itching. This natural irritability is increased secondarily by the modifications undergone by the vulvar mucous membrane, by the development of sudamina, of mucous sclerosis, excoriations, eczema, herpes, furuncles, etc. It is in these cases that the operation is indicated. It consists in excising the affected parts, and uniting the lips of

the wound by sutures.—*Journal American Medical Assn.*

DISEASES OF CHILDREN.

The Symptoms of Acute Nephritis in Children.

In an interesting article on this subject, in the *Archives of Pediatrics*, DR. W. H. PORTER says:

The symptoms depend largely upon the cause of the renal lesion, and naturally vary with them. When the patient is attacked with acute diffuse nephritis, and the cause is believed to be due to exposure to cold, or perhaps cannot be discovered, it will be found that the disease usually begins with a chill, followed by fever, pain in the back and region of the bladder, difficult and frequent micturition, and a very much diminished quantity of urine. Such cases may be divided into groups according to severity.

a. In very acute cases these symptoms are rapidly followed by signs of uremic poisoning, convulsions, coma, and death, which ensues in from twenty-four to thirty-six hours after the appearance of the disease.

b. In subacute cases edema of the inferior eyelids and feet appear in a day or two after the invasion, followed by general anasarca, while dropsy, abundant or otherwise, may make its appearance. The cephalic symptoms are those of the milder type of renal affections, consisting chiefly of pain in the head, drowsiness, and stupid feelings, but delirium rarely appears; after a few days or weeks the intensity of the symptoms abate, and the child is apparently cured, although some albumen and a few casts may persist, and be found in the urine for six months or a year afterward.

c. In still other cases of a milder

type edema and dropsy are the first symptoms that present themselves. There may be some nausea, slight pain in the back and in the region of the bladder, and dimness of the vision. These symptoms are followed after a short time by a waxy pallor and a very anemic condition, the nausea giving place to violent and often persistent vomiting. The child is much bloated from the increasing anasarca and dropsy, and may become "water-logged." Drowsiness and stupor are often quite marked. In these cases the sight may be impaired from a retinitis, or inflammation of the optic nerve. These symptoms, however, gradually disappear, although as in the former class, the albumen and casts persist in the urine for a considerable time.

4. When the acute diffuse nephritis appears as a sequela to scarlet fever, it usually develops on the fourteenth, the twentieth, the twenty-first, or the twenty-second day; that is, from the second or third week after the invasion of the scarlatina. This is the time when desquamation is most active, the skin very sensitive, and the patient restless from confinement. They slip from a warm to a cold room, or a window is left open, and the child is exposed to a sudden and cold current of air. In this way, almost unnoticed, the surface is unexpectedly chilled, the physiological processes at once interrupted, more work is precipitated upon the already weakened kidneys, and the nephritis set in motion; suddenly, apparently without cause, the increased temperature returns; headache, drowsiness, and stupor make their appearances, the skin becomes dusky, and the diagnostic waxy pallor of nephritic disease is developed. There is myalgia, edema of the face and extremities, followed shortly by general and extensive anasarca, abundant dropsy of the large

cavities and great dyspnea. In the worst cases the urine is suppressed, and convulsions, coma, and death rapidly ensue.

Acute Diffuse Nephritis in Children.

DR. PORTER concludes an article published in *Arch. of Pediatrics*, as follows:—

The *treatment* naturally falls into three headings, the preventive, the management of the acute invasion, and that of the more chronic stage. Under prevention, all that tends to ward off the development of an acute parenchymatous metamorphosis should be vigorously enforced. The skin and bowels should be kept acting freely, thus relieving the strain upon the kidneys. Cold applications to the skin should be avoided. Non-irritating diuretics should be freely administered, and the saline diuretics avoided.

During the invasion, when there is renal congestion and threatened suppression of urine, dry cups applied to the loins, and frequently repeated, will be found of service, or wet cups, not repeated, are often very efficacious. Or hydrargyri chloridi miti, gr. ij, with opium gr. 1-5, may be given every two hours, followed by castor oil. This plan of treatment is specially indicated when the bowels are constipated. Jalap and calomel, five to ten grains each, will be found of service. Elaterium, however, in small and repeated doses, has been found the most efficacious remedy in uremic conditions, as it appears to remove from the system the uremic poison more rapidly and effectually than any other eliminating agent. It produces very free and copious watery discharges, which greatly relieves the strain upon the kidneys, keeps down the edema, renders the child quite comfortable, and is a great aid in bringing about a cure.

Jaborandi, or its alkaloid pilocarpine, may be used; if the latter, it is best employed hypodermatically, but by some it is considered dangerous in this acute nephritis, on account of the shock which it is supposed to give to the system. From observing its action in large doses and in quite a large number of cases, only one deduction could be drawn, and that was, that it is not depressing to any noticeable degree, and is always followed by the most desirable results, both to the physician and to the patient. Recorded observations, however, are quite contradictory on this point, and this remedy should be carefully watched in its action. Spiritus etheris nitrosi, digitalis and its preparations may be used for their diuretic and diaphoretic properties; also large draughts of water, demulcent drinks and some of the mineral waters. Hot-air baths, at times, may be used, and are often serviceable.

Digitalis and its preparations are the only safe remedies during this acute stage. It is a non-irritating diuretic, and acts principally by contracting the arterioles, and possibly by stimulating the heart and increasing the general blood pressure; in this way we increase the pressure upon the glomeruli. It probably has less effect upon the renal arterioles than on the rest of the circulatory system, otherwise we should diminish instead of increase the flow of urine. Further investigation will probably show that it only acts when there is a venous congestion of the intertubular plexus of veins. Some have advanced the idea that this drug has a specific and unexplained action directly upon the kidney, especially upon the Malpighian tuft. This increased general blood pressure and the condition of this intertubular plexus appears to explain the so-called specific effect.

The potassium salts here, as in acute

parenchymatous metamorphosis of the kidney are contra-indicated, as they depress the heart's action and relax the arterioles. Their action as diuretics is ascribed to their power to increase oxidation and tissue metamorphosis, and in this way force more work upon the renal epithelial cells.

They are, therefore, injurious for three reasons: 1st, they weaken the heart; 2d, they relax the whole arterial system, and 3d, they increase the effete material to be thrown off by the epithelial protoplasm.

Opiates are decidedly contra-indicated in uremic attacks in children, even if they are admissible in adults.

After the acuteness of the attack has passed off, and it tends to assume the asthenic or chronic form, the tinctura ferri chloridi, in full doses, will be found a most reliable remedy, increasing as it does the oxygenating power of the blood, thus improving nutrition, and from its non-irritating diuretic properties hastens convalescence.

The food should be of the best, plain, easily digested, nutritious, non-irritating, and such as will yield the least amount of non-irritating effete material. A simple milk or skim-milk diet often proves most satisfactory.

During the convalescence great care should be exercised in keeping the bowels active. One free movement daily should be the rule. The skin also should be kept active by sponging and friction. All exposure to sudden changes in temperature and excesses in diet should be scrupulously avoided. By a strict observance of the above rules, the work to be performed by the kidney is reduced to the minimum, its nutrition increased to the maximum, and many cases caused to terminate in a complete recovery, which otherwise would run into a chronic form of renal disease,

and an untimely death, if they did not at once terminate in death.

Oil of Eucalyptus and Oil of Turpentine in Membranous Croup.

DR. F. A. JOHNSON, in a letter to the editor of the *Cal. Med. Journal*, narrates the following case :

Allow me to briefly report a severe case of membranous croup cured by me without tracheotomy. To perform this very hazardous operation would have been certain death to my little patient, on account of vascularity of the thyroid gland; I preferred to let the patient die a natural death. Feeling that all was not done that could be, and having but a few moments to work in, I took an atomizer, charged with oil eucalyptus and oil turpentine aa. q. s. and with the mouth well opened I sprayed the mouth and throat with this mixture every 15 minutes for at least two hours, and from the first the patient breathed easier. At the same time I gave my patient a mixture of brandy and carbonate of ammonia, one teaspoonful as often as every 15 minutes, alternating with the spray. At the end of two and one-half hours the little sufferer was running about the room. I had discovered, several weeks previous, that the two oils would dissolve India-rubber, and made a record of the fact that if I ever had a case of this terrific disease, or of diphtheria, I would give the two drugs a trial. I will here state that as powerful and volatile as the two drugs are, they have no bad effect upon the mucous membrane, but will dissolve the false membrane very rapidly. Try it, my brother physicians, and report your success in your respective medical journals.

I do believe, beyond a doubt, that by a judicious use of these two oils,

diphtheria and membranous croup can be cured without the use of the knife.—*Phys. and Surg. Investigator.*

Cocaine in Whooping-Cough.

DR. PRIOR, of Bonn, has treated several cases of whooping-cough with cocaine with good results. As is evident on *a priori* grounds, he does not consider the drug a specific, but simply a means of relieving and reducing the number of the paroxysms. He used fifteen and twenty-per-cent. solutions to paint the fauces, the inter-arytenoid fossa, and the vocal cords, with the result of prolonging the interval between the attacks, and lessening the severity of them. The treatment was resorted to twice daily, great stress being laid on the necessity of producing at the time complete anesthesia of the fauces and upper part of the larynx. Inhalation of a twenty-per-cent. solution four times a day was not so successful as painting.—*British Medical Journal.*

Diarrhœa and Dysentery in Children.

American Journal Obstetrics.

Diarrhœa in children is an increase in the frequency and amount of the alvine evacuations, with a thin or watery character, and admixture of fecal lumps, undigested food, and, perhaps, mucus. In children under one year the cause is often in the state of health or habits of the mother or nurse, from a faulty method of feeding, or resulting from cold or dampness. In children over one year the cause will be either dentition or errors of diet. Impure air or the direct effect of a high temperature in summer, may be considered as causative conditions. We may distinguish several varieties—Simple: where there is only a moderate increase in the frequency, amount and fluidity of the nor-

mal dejecta. Lienteric : the discharges similar to the preceding, but containing considerable portions of undigested food ; occurring mostly in children badly feed, and pointing to an imperfect digestion. Choleraic ; the passages very thin and squirted from the anus as if from a syringe ; these discharges do not have the normal acid odor, but are usually fetid, and have an alkaline reaction—the so-called cholera infantum. Mucous diarrhœa : the passages containing considerable mucus, sometimes streaks of blood, and attended with pain. These different varieties are more or less blended in most cases. Stools possessing a putrid odor indicate involvement of the mesenteric glands, and such cases usually terminate fatally. Bad methods of nursing or feeding are responsible, more than all other preventable causes combined, for the prevalence of summer diarrhœa. If a mother cannot suckle her infant, it is best to provide a wetnurse. When a wetnurse cannot be employed, milk is the only suitable food for young infants. It should be diluted with from one-half to one-fifth part of water, for infants under a year old, and add fifteen grains or half a teaspoonful of soda to each pint, which prevents the caseine from forming in such hard coagula and neutralizes any acidity which may have developed ; or a tablespoonful or two of lime water may be used instead. It is well to test the milk with litmus paper as a guide to the quantity of soda or lime water to be added. In the case of children with very weak digestion, from five to ten grains of pancreatin may be added, first dissolving it in a little water, and giving the milk blood-warm. If, notwithstanding this, curds are vomited, or three-quarters pass through, the milk may be digested half an hour with pepsin at a temperature of about 100°, then

strained through a fine sieve, and the whey given with or without a portion of the finely divided curd. It is best to sweeten the milk with sugar of milk. In some cases of diarrhœa attended with vomiting, the white of an egg, diffused in a pint of water, will be well retained and afford a grateful and nutritious drink. The doctor has no great confidence in infants' foods. If cow's milk will not agree, he tries condensed milk, and alternates it with some of the semi-farinaceous food in children three or four months old. Nestlé's milk food he has found as reliable as any of its class. In the simpler forms of diarrhœa, a few doses of gray powder will often be the only remedy required. Calomel in small and frequent doses will be useful in case the discharge is devoid of coloring matter (white or chylous diarrhea). No mercurial should be long continued. Lienteric diarrhea, pointing to disorder of the primary digestion, will be benefitted by nux vomica, drop-doses or less of the tincture. Green or mucous passages, with much griping, will find an appropriate remedy in ipecac in doses short of an emetic effect. Watery passages with pain and sleeplessness will be well met by a few efficient doses of Dover's powder combined with bismuth. Whisky should be given when there is prostration. The doctor likewise uses a trituration of liquor arsenicalis, 1-100 to 1-200 grain to the dose, in great loss of vital power. Where the nervous system is much disturbed, the doctor gives veratrum album, from one quarter to two drops every hour, with good results. Teaspoonful-doses of camphor water are good at the onset of a severe attack with liquid stools. Dysentery is more severe and dangerous than ordinary diarrhœa. It is often preceded for a day or two by malaise, fever, and dyspeptic trouble ; then the bowels act more

frequently and loosely than usual, and soon the passages become bloody and slimy. The classic treatment of opiates and laxatives will suffice for a cure in a majority of cases, but success will depend largely upon their judicious employment.

OBSTETRICS.

Habitual Abortion and Kidney Disease.

At the recent meeting of German scientists and medical men at Strasburg, Dr. FEHLING, of Stuttgart, read a memoir on habitual death of the embryo in kidney disease. In the first case under his observation, premature expulsion of a dead fœtus occurred six times, and there was no evidence of syphilis. At every pregnancy, anasarca, albuminuria, and death of the fœtus, with severe cramp of the abdominal muscles, occurred, between the fifth and sixth months; the dead fœtus was expelled from three to ten weeks later. In the second case, similar symptoms appeared in a young unipara; the fœtus died, and thereupon the albuminuria abated. In the third case, the patient had borne two healthy children. During her third pregnancy, albuminuria and characteristic changes, in the retina occurred; and, during the fourth, she was seized with hemiplegia; in both, a decomposed fœtus was expelled at the fifth month, with subsequent decrease of the albuminuria. In the fourth case, the patient, in her first pregnancy, aborted at the fifth month: then she gave birth at term to a recently dead child. In the third pregnancy, great œdema and albuminuria supervened, the child was stillborn, and the mother died of uræmia. Dr. Fehling believed that, in all these cases, kidney disease existed before pregnancy, which aggravated the renal symptoms. Winter had described

two cases of premature detachment of the placenta, normally situated, where albuminuria existed. Dr. Fehling found atrophy of the villi of the chorion, with wedge shaped or spherical infarcts in the placenta, in his cases, similar to renal infarcts. The infiltration of the chorionic villi and vessels of the umbilical cord with small cells, as seen in syphilis, was absent, nor did any of the embryo exhibit a trace of congenital syphilis.—*British Medical Journal*.

Anæmia in Twin Labor.

KOPPE mentions in the *Meditzinskoye Obozreniye* (Moscow), that a woman who had just had a severe twin labor, having presented signs of intense cerebral anæmia, was quickly brought round by pressure exerted on the abdominal veins by cushions and a tight bandage, the blood being thus forced upwards. The same gynecologist has diagnosed a vesical tumor in a woman, without causing the patient any pain, by making use of Simon's plan of employing cocaine as an anæsthetic while the urethra was being dilated. A 20 per cent. solution was used. The instrument was a Hegar's dilator with a Simon's handle.

A Monster.

We reprint the following from the *Atlanta Medical and Surgical Journal*.

In August, 1885, Mrs. C— gave birth to the monstrosity which is here represented.

The absence of neck and cranium gives it the peculiar appearance, which, seen with a back view, resembles a frog.

The trunk and extremities are normal. A space between the shoulders is rough and without a covering of skin. Fœtal movement felt during labor.

Remarks.—Mrs. C— firmly asserts

that she had not seen anything ugly or unusual, or in any way resembling the monstrosity to which she has given birth.

Almost every individual, including several physicians, to whom I have shown the monster, or photograph, have asked if the mother had seen anything during pregnancy which could have caused the deformity.

I wish to demur from this common practice of placing the blame of all our misfortunes and monstrosities upon the tender yet much slandered sex.

As we understand the teachings of anatomy and physiology, the foetus in utero has but a physical connection to the mother. The only contact, soon after pregnancy begins, is through the medium of the placenta, which is the organ through which oxygen and the elements of nutrition are conveyed to the foetus, as the stomach and lungs serve to nourish and oxygenize the blood and tissues of adults.

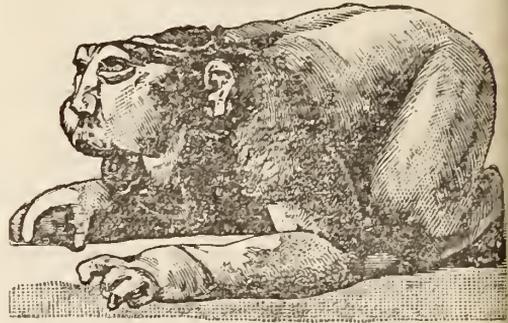
If this be true, how can mental impressions reach the foetus, except in a general and not in a special way?

The facts are also plainly established that the bones of the cranium and general outlines of the future child are marked out and begin their growth during the first weeks of pregnancy. The starch and oil in the grain of corn is the "stored up" food for nourishing the plant germ until it is rooted in the "mother earth," from which source it then gets its elements of growth. The soil having nothing whatever to do with the species, it furnishes only the warmth, moisture and elements of nutrition. The egg of the fowl is only the store of food for the germ which the male plants in the act of copulation, and without which germ the egg is only so much rich food for any animal that may feed upon it, be that animal a man,

or fox, or the spermatozoa of the male fowl. Soil and elements of nutrition have but little to do with the species of plant or animal, except so far as relates to color, size or vigor of the growing plant or animal.

Many faculties that resemble the mother are acquired after birth by constant association, training, and mental impressions through the medium of the brain and nervous system.

The spermatozoa, after working its



way into the uterus or fallopian tubes, meets the egg or ovum of the female, penetrates its outer covering, and immediately begins to absorb nutrition, and before it has exhausted this store of food it becomes attached to the mother through the medium of a rudimentary placenta.

This conclusion does not deny that the egg is especially prepared and adapted to the development and growth of the spermatozoic germ.

If the spermatozoa be perfect and the conditions for its nutrition be favorable, the child will be perfect. Otherwise, if the spermatozoa be imperfect, no matter what the favorable conditions of the ovum be, or how favorable the conditions for growth, the child will be imperfect.

The imperfect germ, like the blasted and dwarfed plant seed, will either perish in all of its parts and organs, or remain dwarfed or undeveloped.

CONSTITUTIONAL DISEASES.

The Treatment of Chronic Rheumatism.

DR. J. C. PETERS, in a paper read before the N. Y. Academy of Medicine, and published in *Medical Record*, said :

Almost all rheumatisms are connected with an excessively acid condition of many of the secretions and excretions, including the saliva, perspiration, and urine; even the chyme and blood are less alkaline than they should be. Next is the excessive preponderance of fibrin in the blood, and the great and early destruction of red blood-globules.

Alkalies form the natural basis of the treatment of almost all rheumatisms, and the first question which arises is whether the potash or soda salts shall be used, or both. As the phosphates and potash salts naturally predominate in the red corpuscles and in the formed tissues, while the chlorides and soda salts are most abundant in the serum and plasma, and in all the infiltrating fluids of all the organs of the body, both potash and soda may have to be used; and they will so aid and compensate each other that neither will have to be given in excess. In chronic rheumatisms Dr. Peters preferred the milder and more tonic soda and potash salts, such as the phosphate of soda, etc. This is a good and mild laxative when purgatives are required; it also lessens the acidity of the mouth, stomach and bowels, which is apt to be present, renders the contents of the thoracic duct and the blood more alkaline, and makes the urine and perspiration alkaline. It also lessens the quantity of fibrin in the blood. It is a cooling and slightly antipyretic remedy, and may be used in strong or saturated solution as a local application to chronically swollen joints, In chronic

arthritic rheumatism Charcot prefers the carbonate of soda, of which he gives from seven to ten drachms a day, even to old and feeble women, and says he has never seen anæmia or any dissolution of the blood caused by it; on the contrary, his patients even grew stouter and stronger, possibly from the better digestion of sugar, starch and fat which is caused by this and other alkalies. It also aids in the destruction of an excess of fibrin in the blood, and helps the liver in its great work of destroying fibrin.

Phosphate of soda is a gentle and pleasant remedy, which may be given in about the way that citrate of potash and Rochelle salts are usually given; the latter in half or one ounce doses when laxation is required, and either in one or two drachm doses when their alkaline effects are more desired. It neutralizes all acids, even that which is abnormally present low down in the large bowels, and moderates the excessive acidity of the normal acid phosphate of soda in the urine, and then helps to keep the uric acid and the other urates in solution.

But potash is the natural alkali of the red blood-globules, of the muscles, fibres, and all other formed and solid tissues; and citrate of potash, and even Rochelle salts, which is a tartrate of soda and potash, may reach not only the serum of the blood, but the blood-globules and the parenchymatous structures, when rheumatism is firmly lodged in the latter.

Benzoate of soda is another non-depressing soda salt, although it is somewhat antipyretic when given in large doses. It is a solvent of uric acid, increases the elimination of urates in rheumatic lithiasis, and seems not only to convert uric acid into hippuric, but also to liberate a portion of the products of disassimilation in the form of soluble

hippuric acid instead of insoluble uric. In delicate and sensitive patients benzoate of soda may be given with aromatic spirits of ammonia, thus: sodii benzoatis ʒ vj.; spts. ammon. aromat., ʒ vj.; spts. myristicæ, ʒ vj.; spts. chloroformi, ʒ ij.; spts. gaultheria, ad ʒ vj.—dose, ʒ j. to ʒ ij. in water.

The hippurate of soda has been suggested lately in doses of five to thirty grains. It tends to produce soluble urates. A favorite prescription with Granville is: sodii hippuratis, ʒ ij.; glycerini, ʒ vj.; aq. cinnamomi, ad ʒ vj.—dose, ʒ ij. to ʒ viij, three times a day.

The tauro-cholate of soda also holds uric acid in solution, and is said to render the stools characteristically rich in bile without causing purging. The usual dose is three to six grains, and it is said to be most useful in obese rheumatic patients, in whom the excess of fat slowly melts away. It is doubtful whether it is more useful than purified ox-gall.

The salicylate of soda is only useful in the acute aggravations of chronic rheumatism. It does not destroy the rheumatic element in the blood.

Valerianate of soda is declared by Granville to be very useful in weak and very sensitive patients. He even thinks its therapeutic value is decidedly greater than that of most of the other salts of soda. It relieves the nervous trouble and hyperæsthesia of rheumatism and gout quite effectively, and he cannot help thinking that it also promotes the activity of the absorbents, thus tending to remove congestion, exudation, and even thickening and hardening about rheumatic joints. Usual dose, one to five grains.

It may be assumed that all the good that can be got out of soda will be obtained by these preparations. Charcot

always gives quinine, also, when he uses soda or potash in large and long continued doses. Others prefer salicine as an anti-rheumatic tonic. Both prevent the excessive formation of uric acid. But the tartrate of potash and iron is the best tonic against the anæmia and debility of chronic rheumatism. It is pleasanter and better than the muriate tincture.

But, as before said, the soda salts only reach the liver and pancreas, the intestinal juices, the chyle and serum of the blood. They do not penetrate into the interior of the red blood-globules, nor into the parenchyma of the muscles and fibrous tissues, which the potash salts do. The acetate of potash, quickly supported by iron, is a most valuable remedy in subacute rheumatism, and especially in those forms which are liable to frequent acute exacerbations.

But citrate of potash is a much more pleasant and less depressing remedy in very chronic cases.

There are, pathologically, two great varieties of chronic rheumatic joint disease: 1, the fibrous: 2, the dendritic. In the fibrous form the tendency of all the exudations is fibrogenous. The inflammatory products or thickenings, instead of remaining in the soft and gelatinous stage of fungoid granulation, become firm and tough. The new cells are converted into fibres, and these harden and contract; even the inner surface of the synovial membrane is made hard. The normal dendritic growths of the villi are conspicuously absent, and in place of them are thick folds of fibrous tissue. The synovial membrane itself is infiltrated with fibrinous substance, composed entirely of fibre-cells, both fusiform and oval; only a few round cells are to be seen.

The favorite remedy for this state is the muriate of ammonia, administered

as freely as iodide of potash is often given. If fears are entertained that it will prove too debilitating, it may be aided by aromatic spirits of ammonia, or with quinine, or Huxam's tincture of bark; although Granville prefers the tincture of serpentaria, which he thinks has a specific effect. The muriate tincture of iron should not be forgotten.

Muriate of ammonia is a solvent and liquefacient remedy which tends to render all the secretions more abundant, while at the same time it reduces the plasticity of the blood and destroys fibrin.

It acts upon the kidneys, and if long continued will cause emaciation, commencing first with absorption of fats and then of soft fibrin. It is used both internally and locally against fibrous thickening of the ligaments and tendons about rheumatic joints. Some go so far as to think it almost specific against all cirrhotic affections of the connective tissues. In chronic rheumatic synovitis it is said to break down all the exudations into a thin mucoïd substance which is finally absorbed. It also has a powerful effect on the formation of urea: it is not only converted into urea; but helps to break down uric acid into urea, and aids in the excretion of both. It is also supposed to be really useful in so-called rheumatic neuralgias, when the fibrous sheaths of the nerves are involved. The dose is from five to fifteen grains up to one hundred and fifty grains a day.

Its great rival is corrosive sublimate, which may be given in doses of one-twenty-fourth to one-sixteenth or more of a grain, in Huxham's tincture of bark, or in the tincture of serpentaria.

The next great variety of chronic rheumatic arthritis, or synovitis, is the dendritic, in which the folds or fringes of the synovial membrane are greatly developed, so as to nearly resemble papillomata. For this sabina has been

suggested, especially when it occurs in females at the menopause, or where there is decided uterine derangement. Sabina once had a great repute, which was not undeserved, in chronic rheumatism and gout, for which it was employed both internally and locally to the affected joints.

Pulsatilla is a remedy which is supposed to act specifically upon almost all the mucous and synovial membranes, especially those of the small joints, and has a well-assured reputation in chronic rheumatism. It is most useful in sub-acute and chronic arthritic rheumatism when there is little or no fever; also in what is called rheumatic gout in females, with catarrhal and rheumatic disorders of menstruation.

But next to carbonate of soda, Charcot prefers iodine to the muriate of ammonia and sabina; not iodide of potash but tincture of iodine, in doses steadily increased from eight to ten drops in twenty-four hours up to thirty to sixty drops. He gives it during meals in water slightly sweetened, or in a glass of Spanish wine, which he says is better. He continues it for several weeks, or even months, and says it never gives rise to symptoms of iodine poisoning. Probably its effects are largely counteracted by the starch in the food. Granville also thinks iodine the most potent and suitable medicine to decompose urates in the blood, and says it relieves chronic rheumatic pains so promptly that he has rarely to use anodynes.

But he always gives it combined with muriate of ammonia and chlorate of potash, thus: ammonii chloridi, $\bar{\text{z}}$ ss.; potassæ chloratis, ʒ ij.; tinct. iodii, ʒ ij.; glycerini, $\bar{\text{z}}$ ss.; aq., ad $\bar{\text{z}}$ xij.—dose, from a tea to a tablespoonful two or three times a day. The taste of this mixture is more disagreeable than that of the tincture of iodine. One of the

best prescriptions is that of Dr. Buckler, viz : iod. potass., gr. ij ; iodid ferri, gr. j. ; iodine, gr. $\frac{1}{10}$; ext. conii mac., gr. j. —make one pill, to be taken three times a day. These pills are easily taken, and are said to be particularly efficacious in chronic articular rheumatism, even where there is an anæmic, scrofulous, or syphilitic taint. The so-called nodosity of the joints has been successfully treated with iodine.

Arsenic is the great rival of corrosive sublimate, iodine, and muriate of ammonia in chronic rheumatism of the larger joints. Occasionally it produces marked amelioration, but it often fails, and is said to be useless in the most inveterate cases. It generally aggravates at first.

Phosphorus is a more reliable remedy in arthritis deformans, and phosphate of ammonia forms more soluble salts with uric acid than any preparation of soda or lime. Uric acid and the urates disappear rapidly from the urine made after its use, and pains and swellings of the joints are relieved as rapidly as from any preparation of soda and potash. It is fully equal to the other alkalis, and preferable to most of them in delicate and feeble subjects. It maintains a highly alkaline condition of the blood, has a distinctly alkaline reaction itself, and renders the urine alkaline.

Gangrene and Arteritis in Typhoid Fever.

Typhoid fever is liable to many complications, the pathology of most of which is but ill understood. MR. BERNHEIM has observed in the course of one year four cases of gangrene. He believes that gangrene may occur in external and internal parts of the body. Noma and gangrene of the diaphragm are given as examples. In his experience noma has not been influenced by anti-

septic treatment. It is asserted that gangrene, presumably limited, of the viscera may occur without the production of recognizable symptoms—latent visceral gangrene. Such a proposition is by no means absurd. We have in medicine to do with a great many affections that are latent. There is another statement for which M. Bernheim is responsible: Arteritis, leading to painful gangrene, may exist without tenderness or obvious swelling of the affected vessel. He has apparently observed cases in which the middle coat of the artery has been remarkably vascular. The paper is full of interest, but the brevity of the report (*La France Médicale*), precludes further information.—*Med. and Surg. Reporter.*

Foot-pain in Typhoid Convalescence.

A physician writes to the *Med. Press* that he has a patient who is convalescent, but a most unusual and distressing complication has set in. He has suffered from a *most severe* and *constant* pain on the dorsal surface of both feet. The *slightest* touch cannot be borne. He has tried local applications of ext. belladonna and glycerine, liniment of aconite and belladonna, etc., etc., but these remedies afford no relief. There is no œdema, nor any alteration whatever in the appearance of feet. Opiates give relief at night. The patient had hitherto been a healthy country lad, and had never had any other illness.

The editor thus answers him:—Gently smear the following ointment: R. Extract. aconiti et glycerini, āā ʒj.; ung. hydrarg., ad., ʒj. Fiat unguentum. Having smeared this ointment thickly on, wrap the feet up in a large poultice of very hot bran. Preserve perfect rest in the horizontal posture. A few days of this treatment will

complete the cure. Should the pain in the meantime become intolerable, try hypodermic of morphia.—*Med. and Surg. Reporter.*

Nitro-Glycerin in the Cold Stage of Intermittent Fever.

DR. CHARLES WEIL.—Articles on the therapeutic uses of nitro-glycerin, or glonoinum, have been quite numerous since its revival and application in disease, angina pectoris in particular, in which affection it has been used with remarkable success since its first employment by that distinguished investigator, Dr. William Murrell, of London. But in no article has the writer seen it recommended as a prompt and efficient remedial agent in the cold stage of intermittent fever, which it cuts short at once, as does morphia, for instance, or chloroform. I have employed it for this purpose in four different cases so far, with the desired result in each one, and without any unpleasant effect, aside from a little ringing or buzzing in the ears, which, as we all know, is part of the physiological action of this agent. The last case in which I used it was that of Mrs. L.F.G., a stout, married lady, twenty-six years of age. Under the greater part of the house in which she resides there was a pool of water, prior to the sewerage which has since been laid in the street. I was hastily summoned at about 7.30 o'clock in the morning of November 30th last, and found her covered with blankets, and with chattering teeth, in the cold stage of an intermittent fever. I gave her a hypodermic injection of morphia which almost immediately cut the attack short. As she could not take quinine in any form, on account of an annoying eruption it would produce, I placed her on liquor potassii arsenitis, gtt. iv, *ter in die*. But this did not act

as quinine would doubtless have done, for between 3 and 4 o'clock on the following afternoon she had another attack, which was again relieved by the morphia. After that, she was free from all attacks until the 16th of last month, when I was again hastily summoned. I took with me my one per cent. solution of nitro-glycerin, and dissolving gtt. ii, in aquam xv, injected the whole into her arm. It acted as promptly and as efficiently as it did on the previous occasions, or as morphia did.

I would recommend, however, that only one drop be used, instead of two, unless the condition and nature of the patient would warrant more. I would also state that I greatly prefer the solution to the pills which some of the manufacturing chemists have placed on the market; the one per cent. solution in alcohol or ether being the most advisable.

My object in writing this brief article is to call attention to this additional property of glonoin, which the few cases mentioned justify me in claiming for it.—*Therapeutic Gazette.*

Paraldehyde.

DR. BARTHELOW (*Am. J. M. S.*), cites the observations of Mr. G. F. Hodgson, an English surgeon, in regard to paraldehyde. Mr. Hodgson regards it as the most appropriate hypnotic in the insomnia of gout, in mania, hypochondriasis, delirium tremens, migraine, and in the wakefulness of ordinary diseases. It produces natural sleep, promptly, and without any unpleasant after effects. His prescription is as follows: ℞. Paraldehyde, ʒi; spiriti chloroformi, ℥xv; pulv. tragacanth co., ʒi; syr. aurantii, ʒiv; aquam, ad ʒiij. M. This dose is sufficient in the milder cases, but must be repeated in the more severe.

Active Principles in Pharmacy.

DR. R. G. ECCLES, of Brooklyn, contributes to the *Pharmaceutical Record* an important article on "Infected Solutions," beginning with the following remarks (*New York Medical Journal*):

Aromatic waters, dilute solutions of phosphoric, citric, tartaric, oxalic, and other acids and their salts, as well as most alkaloidal solutions, encourage a growth of a variety of aquatic cryptogamous plants, whose polluting presence renders them unfit for use. They are unwelcome visitors everywhere, but in the last mentioned places they are a great commercial misfortune, so that their suppression is a subject of growing interest. That it will continue so to grow is apparent from the trend of medical science. Every advance made by therapeutics discredits the use of tinctures, infusions, decoctions, extracts, etc., as at present indiscriminately prescribed.

1. Because all medication is found to be an injury to the system, and on no account to be indulged in, except to suppress a greater evil.

2. Because these preparations almost invariably contain some drug not needed by the patient.

3. Because they often contain drugs positively contra-indicated by the disease, combined with such as are pressingly necessary for the same.

4. Because the strength of such preparations is never twice alike, and it is merely an accidental guess when the proper dose is given.

5. Because the physiological effects of many drugs are found to border upon the toxic. If too much is given, the patient is injured; if too little, he is insufficiently or not at all benefited.

This is why the alkaloids of cinchona have, to so great an extent, displaced the older forms of administration. This

is why those of belladonna, nux vomica and opium are pressing forward in the same direction. This is partially why cocaine has been found so useful at a time when coca was about to be thrown aside as of little value. The day of active principles in pharmacy is only beginning. Every year must add to their popularity, and discredit to a great extent all that now take their places. Definite solutions like Magendie's will ere long be in daily call, and these will represent all the virtues of the vegetable world. There will then be no stimulating with alcohol when a depressant is desirable, nor constipating with tannin when heart pressure only is needed. Hypodermic medication points the way we are bound to travel, and in this method of practice all the old drug preparations are worse than useless. All the changes here foreshadowed will not come in our day. Enough, however, will come to make the loss from infection become an item of financial importance. Cocaine at ten cents a grain and eserine at twenty-five are worth saving. If we could calculate the loss upon the former from this cause during the past year, it would no doubt amount to a snug sum.

**Relations of the Patella Reflex with
Diphtheria and its Consecutive
Lesions.**

The *Medical News* take the following from *La Medicina Contemporanea*:

BERNHARDT, in a critical research founded upon the literature of the subject and a series of twenty-one observations, makes the following statement of the relations existing between the patella reflex and diphtheria:

1. In a great number of patients who have experienced an attack of pharyngeal diphtheria, after some weeks the

patella reflex is found to have disappeared.

2. Although in these cases the diphtheritic attack was for the most part severe, and was, together with the ordinary paralytic phenomena of the palatine muscles and of the eyes, accompanied by other notable disturbance of the central nervous system (general paresis weakness and ataxia), such was not always the case, since even in patients in whom the course of the disease was benign, disappearance of the patella reflex was observed.

3. Although the phenomena observed by Westphal (absence of the patella reflex), as certain observations of the author demonstrate, may be manifested only six or eight weeks after the commencement of the disease, the presence of the patella reflex, from five to eight weeks after the recovery from the disease, as certainly happens, does not guarantee that the patella reflex will not disappear later, and that he who, up to this time, had remained free from serious disturbance of the central nervous system, will not ultimately suffer therefrom. On the other hand, the patella reflex may not be found a few weeks (three or four) from the commencement of the disease, while the patient, save the paralysis of the veil of the palate and slight disturbance in the function of the arches, feels perfectly well, and may remain permanently free from grave complications.

4. The disappearance of the patella reflex after diphtheria, appears frequently to occur only on one side ; likewise, in its restoration, it seems regained only on one side, or at least is plainly stronger on one side than on the other.

5. Disappearance of the patella reflex having once occurred, its absence may be remarkably persistent (five or six

months), even when the patient, having been cured, presents no other symptoms of having suffered from the disease, such as ataxia or paresis.

6. This fact appears to possess certain importance in those researches which tend to establish the presence or the absence of the patella reflex in persons restored to health, who, having suffered from an attack of diphtheria, cannot be enumerated among the cured until after five or six months.

7. Whether the patella reflex may not only be preserved during the first five or eight weeks after the disease, as certainly happens, but for months, or in a word is never lost, the author has not yet been able to establish with certainty.

8. The cutaneous reflexes and the tendon reflex are not affected to an equal degree ; the former are frequently found active, while the latter fail entirely, a fact which, observed even in tabetics, leads, according to the author, to the conclusion that the processes for the production of these so called tendinous reflexes are distinct and not yet as sufficiently investigated as those noted in the production of cutaneous reflexes.

9. The observations upon the disappearance or failure of the tendon reflex after diphtheria have special value when the functions of the quadriceps extensor femoris are intact, when atrophy does not exist, and when the electrical excitability of this muscular group has suffered no profound disturbance and the patients are able to extend the leg freely and vigorously.

As to the explanation of this condition, that it may develop from the effect of acute infectious diseases, the author agrees with those who believe that it probably depends upon a disturbance of the function and nutrition of certain portions of the central nervous system,

depending upon the emigration or development of germs.

The loss of the tendon reflex and ataxia are not in direct relation with each other. Both symptoms may be distinct and isolated. Tabes and diphtheria resemble each other in the fact that the loss of the tendon reflex precedes ataxia, and frequently is manifested only on one side; but in diphtheria ataxia either follows in a few weeks, or is entirely absent, while in tabes it frequently is not manifested until after the lapse of some years. A further distinction is, that the tendon reflex, when lost as a result of diphtheria, very generally is re-established—an occurrence extremely rare in tabes.—*Weekly Medical Review*.

Modification of Dover's Powder.

DR. B. W. RICHARDSON, in the *Asclepiad*, suggests some useful modifications in the preparation of Dover's powder, for use in certain diseases. He recommends the substitution of sodium salicylate for the potash salt, in rheumatic fever; soda bicarbonate, in gout; quinine and its salicylate in infantile remittents; and potass. chlorate in tonsillitis and febrile throat affections. True Dover's powder contains both nitrate and sulphate of potash.—*Medical World*.

Treatment of Acute Rheumatism.

DR. R. H. FOX reports a case (*Brit. Med. Jour.*) in which salicylate of soda, potash, quinine, colchicum, and liniments, all failed to relieve the fever and the pain. Almost in despair, he sponged the patient with cold water, quickly drying the skin afterwards. The relief was immediate, and the man was able to walk a short distance to his home in six days from that time. He has used

the same treatment in two other cases with success.—*Medical and Surgical Reporter*.

Diaphoretic Boluses.

A contributor to the *Union Médicale* gives the following formula:

Sublimed and washed sulphur, powdered bitartrate of potassium, each, 30 grains; powdered gum guaiacum, 15 grains; syrup q. s.

Divide into four boluses. All to be taken in the course of a day.

Ointment in Rheumatism.

In Bellevue Hospital the following ointment is extensively used for the pain of acute articular rheumatism. ℞. Chloral hydrate, ʒ j.; acid salicylic, ʒ jss.; ung. stramonium, ʒ j. M. Sig.—Apply to the afflicted joints.—*N. E. Medical Monthly*.

Salicylic Acid in Rheumatism.

DR. P. W. LATHAM, the Downing Professor of Medicine at Cambridge, in an article entitled "Why does Salicylic Acid Cure Rheumatism," lays down seven rules for its successful administration;

1. The true salicylic acid obtained from the vegetable kingdom must alone be employed. If you have to give large doses, avoid giving the artificial product obtained from carbolic acid, however much it may have been dialysed and purified. An impure acid will very quickly produce symptoms closely resembling delirium tremens.

2. Give the acid without any alkaline base. A very good form is to mix 100 grains with 15 of acacia powder and a little mucilage. Allow the mass to stand and harden, and then divide into 30 pills.

3. Place the patient fully under the influence of the drug—that is, let him

have sufficient to produce cerebral disturbance—*i. e.*, buzzing in the ears or headache, or slight deafness; with the development of these symptoms the temperature and the pain in the joints will begin to decline. To an adult he generally administers three doses of 20 grains (six pills), at intervals of an hour, and if the head remains unaffected, a fourth dose at the end of another hour; and then repeat the 20 grains every four hours until the physiological effect of the remedy shows itself. In the majority of cases, from 80 to 100 grains are enough. In severe cases 140 to 150 may be required. Afterwards about 80 grains a day are sufficient, and as the temperature declines, smaller quantities will develop their physiological effects, 60 or even 50 grains being then sufficient to produce cerebral disturbance. It would appear that as long as the rheumatic poison is circulating in the system, the physiological effect—that is, the effect it produces in the healthy organism—does not show itself; acting as an antidote, the greater the amount of poison, the larger must be the dose of the remedy; but as soon as the formation of the *materies morbi* is stopped, then the excess of the remedy acts as it would in the healthy organism, and its peculiar physiological effects are developed. It is a very striking illustration of the difference between the therapeutical effect of a remedy, and its physiological action.

4. Give the patient from 40 to 80 grains daily for ten days, after all pain and pyrexia have passed away.

5. Let the patient's diet consist entirely of milk and farinaceous food at least a week after the evening temperature has been normal. On the other hand, if the patient has meat and soup, you may look forward with fair probability to a relapse.

6. Take care to maintain a daily and complete action of the bowels. Calomel is the best purgative, from 2 to 5 grains at night, followed in the morning, if necessary, with a saline draught. This is the most important adjuvant to the action of salicylic acid.

7. Let the patient be enveloped in a light blanket, and with no more bed clothes than are sufficient to keep him from feeling cold. The object of the treatment now is to cool the patient, not, as in former times, to sweat the poison out of him, and the cooler he is kept the sooner will the temperature be lowered.

Dr. Latham has not yet concluded his observations, but so far he considers that though lactic acid has much to do with the symptoms, it is the excessive formation of glycocine and of uric acid in the tissues that develops the symptoms of rheumatic fever, and salicylic acid cures the disease by combining with the antecedents of these bodies, and prevents their formation. When salicylic acid is administered internally it passes off by the urine as salicyluric acid—that is, it has combined in its passage through the system either with glycocine or its antecedent, for on treating salicyluric acid with fuming hydrochloric acid, it is resolved into salicylic acid and glycocine. Consequently, in the system, by seizing either upon glycocine or its antecedent, salicylic acid takes away an essential constituent of uric acid, and so prevents the formation of this body.—*Lancet*.—*Peoria Medical Monthly*.

DISEASES OF THE NERVOUS SYSTEM.

Hypnone as a Hypnotic.

The fanciful name hypnone has been applied to methylphenylacetone. At the request of M. DUJARDIN-BEAUMETZ,

who insists that it should be used only in cases of sleeplessness from over-excitement of the brain, and not where there is pain, M. PIERRE VIGIER (*Gaz. hebdom. de Méd. et de Chir.*), has experimented with regard to its administration. The amount necessary to produce sleep varies from four to ten drops, which should be taken all at once, for divided doses do not succeed. The drug is scarcely soluble in water, and but slightly soluble in glycerine; but dissolves readily in alcohol. A syrup may be made in the following proportions: Hypnone, 1 drop; ninety per cent. alcohol, 15 grains; syrup of orange flowers, 75 grains; syrup of cherry laurel, 14 grains. Let the drop of hypnone fall into the alcohol, add the syrups, and keep in a tightly stopped bottle. In like manner an elixir may be made of the following ingredients: Hypnone, 1 drop; sixty per cent. alcohol, syrup of mint, each 45 grains.

The taste of these preparations is said to be very bearable. The drug itself has a very hot taste, and its odor reminds one of essence of bitter almonds, with a suggestion of wintergreen.—*New York Medical Journal.*

Pills for Neurasthenia.

MAXIMOVITCH (*Revue de Thérapeutique Médico-Chirurgicale; Union Médicale du Canada*), is credited with the following formula: Bromide of iron, hydrobromate of quinine, each 1 drachm; extract of rhubarb, a sufficient quantity. Divide into 120 pills, two of which are to be taken three times a day.—*Ibid.*

Cold Bandaging of the Leg in Insomnia.

DR. VON GELLHORN has found the following plan very useful in inducing sleep in persons who suffer from insomnia. A piece of calico, about eighteen

inches wide and two and three-quarters yards long, is rolled up like a bandage, and a third of it wrung out in cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of gutta-percha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by Winternitz that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage, the decrease amounting to 0.4° Cent., and the normal not being again reached for from one and a half to two hours afterwards. The author has employed this means of procuring sleep for a couple of years, and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to reapply the bandage every three or four hours, as it dried.—*Northwestern Lancet.*

Hypodermic Injections of Cold Water in Sciatica.

DR. D. H. LEWIS, of Long Pine, Pa., writes that he was consulted by a man sixty years of age, who was suffering greatly from sciatica. He had been treated for the past eight weeks by two physicians, and had run through the entire list of anti-neuralgic remedies. Being desirous of trying something which was at least new to the patient, Dr. Lewis determined to employ hypodermic medication, and, having no drug handy which he cared to use, he filled the syringe with cold water and injected the fluid deep down behind the trochanter. The following day the patient returned and said that he was feeling much better. The injections were accordingly repeated every third or fourth

day for a period of three weeks, by the end of which time a complete cure was obtained. The writer has since treated a number of cases of sciatica in the same way, with equally gratifying results. He thinks that possibly many of those cases which have been reported as cured by the injection of certain drugs, such as cocaine, might have terminated in an equally favorable manner had simply cold water been used.—*Medical Record.*

DISEASES OF CIRCULATORY ORGANS.

The Use of Carbonate of Ammonia in Cerebral Hemorrhage, Thrombosis and Embolism.

DR. R. C. VAN WYCK thus concludes an article in *Gaillard's Medical Journal*, for August :

The advantages I claim for the carbonates of ammonia in the treatment of cerebral hemorrhage, thrombosis and embolism, are as follows :

1. As a diffusible stimulant to the general circulation, relieving the anæmia which is present in the brain, increasing the cutaneous circulation, and inducing perspiration—relieving in this way intercranial pressure.

2. By its direct action in dissolving the clot. The only agents which possess this property are the alkalies, and the most effective of these is ammonia.

3. In œdema and congestion of the lungs, so often seen in apoplexy, the use of this salt will often relieve the existing condition, partly by its stimulating action on the terminal capillaries, and also by its expectorant action on the bronchomucous membrane.

4. By keeping up the alkalinity of the blood, and preventing further thrombosis.

I do not claim this drug as a specific, but only an auxiliary to other remedies.

In the treatment of a case of cerebral hemorrhage, the following would seem to me the order of treatment :

1. The prodromal symptoms which threaten an attack of apoplexy, by prompt venesection and catharsis.

2. To relieve the period of reaction after paralyzing has taken place, by arterial sedatives, preferably aconite.

3. To remove the exudation and all retrograde changes in the clot, anæmia, pulmonary congestion, and further thrombosis, by the free use of carbonate of ammonia.

4. To support the system by nourishing yet unstimulating diet, and by the use of medicines which nourish the brain tissue, such as syr. lacto-phosphate of lime, cod-liver oil, and the phosphide of zinc.

5. To increase the muscular development by massage-frictions, electricity, and strychnia.

The carbonate of ammonia should never be given in cerebral hemorrhage until the period of reaction has fully taken place, say from ten days to two weeks.

It should then be given continually for at least a month or more, or until the retrograde changes in the clot are accomplished.

In thrombosis and embolism, if the diagnosis can be clearly made, it should be given at once.

The dose used was 5 grs. three times daily in 3 ss. of the solution, liquor ammoniæ acetatis.

There is one class of cases in which the carbonate of ammonia has not acted well in my hands, viz.: cerebral hemorrhage associated with interstitial nephritis and hepatitis. In these cases I have had good results from the phosphate of sodium, 20 to 30 grs. three times daily, in the infusion of dandelion given after meals, and small doses of

corrosive sublimate, 1-24 gr. three times daily before each meal. I have sometimes combined it in a pill with digitalis and squill.

Dilatation and Hypertrophy of the Heart not Produced by Changes in the Valves.

DR. FRANCIS DELAFIELD (*American Journal of Medical Science*), classifies dilatation and hypertrophy, not due to valvular disease, as follows :

1. Due to excessive and prolonged muscular action.
2. Due to morbid changes in the lungs.
3. Associated with the infectious diseases, with anæmia, and with pregnancy.
4. Hypertrophy of the left ventricle, with lesions of the arteries.
5. Hypertrophy of the left ventricle, with cardiac neurosis.
6. Dilatation of the ventricles, with inflammation or degeneration of the walls of the heart.
7. Dilatation of the ventricles occurring without discernable cause.

Under the last head the writer includes some of those which are said to result from sudden emotions and to sudden exertions, and some of those said to be fatty, none of which causes he regards as satisfactory.

DISEASES OF RESPIRATORY ORGANS.

The Nature and Treatment of Pneumonia.

DR. STEWART LOCKIE (*Edin. Med. Jour.*, Oct. and Nov., 1885) thinks that the ordinary form of pneumonia is beyond doubt of infective nature, but he is not ready to deny that there may be other forms, as, for instance, gouty pneumonia. A disease may of course be infective without being contagious, of this intermittent fever is an example.

The writer is, however, inclined to admit the contagiousness of pneumonia, but it is probably very feeble. Of the infective diseases, erysipelas is the one to which pneumonia has the closest alliance. Both usually occur sporadically, but occasionally in an epidemic form, both have a somewhat similar more or less definite duration, both are apt to attack the same individual repeatedly, occasionally many times in succession, both are occasionally complicated with meningitis. Erysipelas is no doubt contagious, but probably very feebly so except in presence of a wound. Pneumonia, if contagious, is very feebly so under ordinary circumstances. Leyden and Koch assert that the micrococcus of pneumonia resembles that of erysipelas.

In the treatment of the disease, the writer is opposed to all lowering measures. It may be that cases occur in which excessive dyspnoea and engorgement of the right heart call for moderate blood letting, but he has never seen a case where he has been tempted to resort to it. The patient should be placed in a pure atmosphere with an equable temperature and supplied with moderate nourishment, not too much, lest we overtax the kidneys, which are probably the main agents in eliminating the poison. For the relief of pain, opium in the form of Dover's powder or by hypodermic injections of morphine, unless there is organic disease of the kidneys, when opiates had better be avoided if possible. The writer advocates the use of hot poultices, and his habit is to give carbonate of ammonia from the start, although he admits that in the early part of the disease its use is empirical, later it is useful in supporting a failing heart. Where the temperature exceeds 103° he gives quinine, in commencing doses of 10 grains at

night and 5 in the morning, increasing the doses if these do not control the temperature. If the stomach rebels, he gives it hypodermically or per rectum. The writer has seen such good results from quinine that he is inclined to agree with Dr. Burney Yeo in thinking that it is not given often enough, and is inclined in future cases to use it systematically from the first. With cold applications he has no experience. Failing circulation calls for alcohol and digitalis.

Nutrition and Growth in Connection with Pulmonary Phthisis.

DR. ALEXANDER JAMES (*Edin. Med. Jour.*, Oct., 1885) discusses this subject and arrives at the following conclusions :

1. That phthisis tends to occur when the assimilative power fails, as indicated by the occurrence of it, or tubercle in the lungs, intestines or brain, at different ages, and that the development of the reproductive function, the disappearance of enlarged cervical glands, and the growth of hair, indicate a lessened activity in the vital processes in adult life as compared with early years.

2. On the general principle of the connection between supply and demand, we may suppose that this assimilative power is, to a greater or less extent, dependent on functional activity of the part. This seems borne out by the fact, that in tall people, with large lungs, and with proportionately less demand for functional activity (*i. e.* less loss of heat) phthisis is common, and also by the fact that, as age advances, the natural tendency to emphysema, by increasing the functional activity of the lungs, seems to render them less liable to phthisis.

3. This assimilative power, though in part dependent on functional activity,

is *innate* as regards the individual. Of this we have evidence in the different sizes to which individuals grow, the functional activity being the same, and in the varying proneness to phthisis in individuals, the surroundings being the same.

Bronchial Asthma, and Hay Fever.

SIR ANDREW CLARK (*Am. Jour. Med. Sci.*, Jan.) considers the theory of bronchial asthma in the light of the pathology of hay fever, and arrives at the following propositions :

1. Asthma is a neuro-vascular trophic disease, and has its roots in a special vulnerability of the respiratory mucous membrane, of the respiratory nerve centres and of certain portions of the sympathetic.

2. The irritation exciting the nerve discharges which bring about the asthmatic paroxysms may arise in the blood, in any one of the mucous tracts, but more particularly the respiratory one, in certain cutaneous inflammations and in the central nervous system itself.

3. The paroxysm begins by a more or less diffused hyperæmic swelling of the bronchial mucous membrane, and is continued by the development of various parts thereon of circumscribed congestive swellings, which come and go with greater or less rapidity, and resemble in many particulars the swelling of the skin in nettle rash.

4. At their first appearance these swellings become coated with a viscid mucus, hinder the entrance and exit of air, and by their vibration produce for the most part the drier râles, characteristic of a certain state of the asthmatic paroxysm. Toward the close of an attack, the swellings after free secretion subside, the dyspnœa is relieved, and moist take the place of dry râles.

5. The secretion from the swellings

being sometimes acid, and even corrosive, may excite some contraction of the bronchial muscles; but such contraction cannot become, either by its nature or its amount, the chief factor in the evolution of the asthmatic paroxysm.

6. The hyperæmia and circumscribed swelling of the bronchial mucous membrane hindering the free entrance of air, and thereby the full aeration of the blood, both the periplural nerves and the respiratory centres are irritated, and exaggerated discharges of respiratory impulse are sent to the inspiratory muscles, which are thereby thrown into violent and sometimes even tetanic contractions.

7. These violent inspiratory efforts, increasing the Hallerian extension force of the thoracic walls, straighten the bronchial tubes, and, notwithstanding the tendency of inspiratory forces to increase the size of the swellings, make the entrance of air into the lungs far easier than its exit.

8. When the inspiratory efforts cease, and the expiratory recoil begins, and is continued by the muscles of forced expiration, the smaller bronchi, especially those containing mucous wheals, are compressed, and all the passages are relaxed and lose their straight direction. Thus the egress of air is greatly hindered, and the act of expiration so prolonged that it is sometimes suddenly interrupted and prematurely closed by the violent inspiratory efforts originated in the respiratory nerve centres, through the circulation of imperfectly oxidated and decarbonized blood. In this way inspiration gains upon expiration; the alveoli are distended with air; the diaphragm is depressed; the chest, in all its dimensions, is dilated; the breathing becomes more and more difficult: death seems imminent, and the paroxysm is at its height.

9. After a time, varying greatly in duration, the attack begins to subside, and, partly by secretion from the bronchial mucosa, partly from the exhaustion of the excitability of the respiratory and vaso-motor centres, respiration becomes easy, lividity and swelling of the face disappear, restless anxiety is displaced by growing calm, and the attack is brought to an end.

Production of so called "Rose Cold," by means of an Artificial Rose.

DR. JOHN N. MACKENSIE, of Baltimore, in the *Am. Journal of the Med. Sci.*, for Jan., reports a case wherein a patient subject to attacks of "rose cold," the most intense coryza was induced by bringing into her presence a carefully made artificial rose. On the following day, after the deception had been explained to her, she was able to bury her nose in a specimen of the genuine article without unpleasant effect.

Treatment of Catarrhal Phthisis, of Hæmoptysis, and of Chronic Bronchitis by Terpene.

PROFESSOR GERMAIN SÉE gives the following *résumé* of his paper on this subject:

1. It diminishes and quickly arrests purulent expectoration in catarrhal forms of phthisis. Whether the muco-purulent secretions proceed from the bronchi, irritated by tubercles, or from the walls of pulmonary cavities; whether the malady is at an early stage, or at a phase of purulent breaking down, or even of cavities already formed; terpene should be used whenever the formation of pus is sufficiently abundant to tire the patient, to exhaust the strength, or to cause him to waste away.

2. It should be used with success in the hæmoptysis of the early stages of

tuberculosis ; that is to say, when the disease has not yet developed large cavities, with aneurisms of the pulmonary arteries.

3. In the treatment of pulmonary catarrhs ; of chronic bronchitis not dependent on asthma, and only producing dyspnœa by choking the bronchi, terpe-
ne constitutes the best method of lessening bronchial hypersecretion.

4. The action is quick, sure, and free from physiological inconveniences, rendering it preferable to preparations of syrups of turpentine or tar, or of shoots of pine, which contain so little of it ; and to essence of turpentine, which is not tolerated. It even offers advantages over creosote, on account of its perfect innocuity and easy digestion.

5. The best way of administering this medicine is either in the form of pills or tincture, and the best dose is one gramme.

6. In catarrhal, or emphysematous, or nervous asthma, which is to be distinguished from primary catarrh, iodine and pyridine have an incontestable superiority.—*Bulletin de l'Académie de Médecine.*—*Journal American Medical Association.*

DIGESTIVE TRACT.

Intestinal Giddiness.

The existence of this variety of giddiness has long been known to us from the occurrence of that form of it associated with, or caused by, the presence of worms in the intestinal tract. LEUBE has, however, for many years back noticed another form of it, dependent on flatulent distention and relieved by passage of flatus, and several cases which he has recently observed tend to throw some light on the subject. (*Deutsches Archiv. für klin. Medicin.*) In these, three in number, the giddiness was as-

sociated with chronic constipation and relieved by free motion of the bowels or passage of flatus, which the sitting posture aggravated by the act of defecation and relieved by standing or walking, and lastly with intestinal catarrh and flatulence ; and in all of them he found on examination *per rectum* that the feelings of giddiness were greatly intensified either by the introduction of the finger into, or its withdrawal from, the rectum. He concludes, therefore, that giddiness in patients suffering from intestinal affections has its source in a diseased condition of the intestinal walls, the sensation being due to pressure on the hemorrhoidal plexus of the sympathetic nerve, but in what way brought about remains yet to be seen.—

Medical Record.

Treatment of Intestinal Obstruction by the Force Pump.

DR. H. ILLOWAY (*Am. J. Med. Sci.*) advocates the treatment of intestinal obstruction by injections, given by means of the force pump. He claims that this is the only method by which enemata can be carried past the ileo-cæcal valve, or given sufficient force to produce peristaltic action. He reports three cases where it was successfully used. In cases where it fails, operation is indicated as a last resort.

Sugar in Phthisis and Dysentery.

DR. VILDOSOLA, in a Habana Medical paper, states that cane sugar is valuable as a diet in consumption and chronic bronchitis ; also in dysentery, and even in dyspepsia. He says that dysentery, which cannot be controlled by ipecacuanha and other remedies, is frequently found to yield to sugar-cane in a state of fermentation when chewed. *London Lancet.*

DISEASES OF THE URINARY ORGANS.

Diabetes Mellitus Successfully Treated with Boracic Acid.

F. A. MONCKTON reports, in the *Australian Medical Gazette*, a case of diabetes mellitus cured by the use of this drug. He says, while pointing out that the value of boracic acid as a diabetic remedy has only been proved in this one case, let me earnestly beg that those who have an opportunity of watching its effect will try it. When placed on the boracic acid the patient's urine had a specific gravity of 1.025. Seven grains of the acid were given three times a day, and at the end of ten weeks the specific gravity was 1.016; no sugar. He continues the drug, however, as it produces no unpleasant effects. No stringent dietary regulations were observed in this case.—*Medical World*.

Vesical Irritability.

DR. E. ERICH, of the Maryland Woman's Hospital, tells us (*Med. Times*) that many of the patients applying for relief at the out-door department of the hospital complain of vesical irritability, frequency of micturition, with burning pain at the meatus and much straining. In a large proportion of these cases the urine is alkaline and frequently cloudy. These symptoms are usually quickly relieved by the following combination. R. Acidi benzoici, ʒj.; sodii biboratis, ʒ iss.; aquæ, f ʒ vj. M. S.—Tablespoonful every three to four hours.

If the trouble does not yield to this medicine, Dover's powder in three grain doses every two to three hours is frequently found effective.

As a tonic in the anæmic condition so often attendant upon the pelvic troubles

of women, the following pill is given: R. Quinæ sulphat., gr. xlviii.; ferri sulphat. exsic., gr. xxiv.; strychniæ sulphat., gr. i.; M. Ft. pil. xxiv. S.—One after each meal.

An Injection for Paralysis of the Bladder.

The *Union Médicale* credits the following formula to Dumreicher:

Extract of nux vomica, 3 to 6 grains; distilled water 6 ounces.

One-sixth of the whole is to be injected into the bladder every day, and retained for an hour. At the same time, electricity may be used with advantage, and micturition is to be regulated, as much as possible being passed every four hours.—*N. Y. Medical Journal*.

Lagophthalmos in Diabetes.

Facial paralysis has not had much attention drawn to it in diabetics. DR. FIEUZAL, in the *Bulletin de la Clinique National Ophthalmologique de l'Hospice des Quinze-Vingts*, of September, 1885, relates three cases of the facial paralysis under the title of "paralytic lagophthalmos in diabetes." The first case was that of a man in whom the right side of the face became paralyzed suddenly; corneal ulcers developed; the duration of the paralysis was three months, and ended in complete recovery. A year later the left side of the face was paralyzed for four months. There was no history or evidence of syphilis, and none of rheumatism, but the urine was loaded with sugar. The treatment was simply that used for diabetes, together with some galvanic stimulation of the muscles. The history of the other two cases was practically of the same kind as the one we have briefly sketched.—*Medical and Surgical Reporter*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Simplicity and Adaptability in the Treatment of Fractures.

DR. GEO. N. MONETTE, *Journal American Medical Association*. In compound comminuted fractures the utmost care in the application of dressings must be exercised; and as to routine bandaging, the same must be rigidly dispensed with. I have treated such cases without a bandage, and have also departed from the prescribed course for such cases. Each case develops features of its own, which necessitates a certain method of utilizing appliances, and the identical repetition as to seat of fracture in another case would reveal diverse phenomena.

As regards fracture of the femur in children, suppose we have a case in an infant six or eighteen months old. What can be more cruel than a straight splint? My plan for treating these cases is to put them in a flexed position, similar to the sitting posture, and with extension of the anterior and posterior splints about the waist, and held by a band, and the lower extremities of the splints carried to or beyond the toes. By this method there is the most rigid immobility of the limb, and with comfort to all parts enveloped by the bandages. My first application of this form of splint was in the spring of 1868, and whenever a suitable case presents I utilize the identical form of splints, anterior and posterior, in conformity to a sitting posture.

Fractures of the clavicle offer some discouraging results, as the movements of the thorax (as in lying down) are prone to militate against permanent adjustment of any sort of dressing. It seems to me that a little more simplicity is requisite; for instance, simply bind-

ing the arm to the thorax by a bandage. In fractures of the clavicle in infants and very young children, the former particularly, I have pinned the sleeve of the arm of the fractured side to the dress anteriorly, or about the median line, across the chest. Such treatment has resulted successfully, and with no more prominence of a callus than from the routine Fox apparatus, or that of any other specialist in surgical appliances. This confinement is readily tolerated by children, and a little pain causes them to bear it patiently. The nature of the fracture in children tends to confirm my method. With diminished ossific development, the fracture is not distinct; hence the reapposition of the splintered fragments is readily accomplished; solidification takes place promptly, and immobility is attained sooner than in similar fractures in adults.

Periosteal Grafts for the Formation of New Bone.

A newly established fact well worth bearing in mind is that bone can be grown at pleasure and to any required extent, by the grafting of periosteum upon a granulating surface. Some time ago an American surgeon had a comminuted compound fracture of the clavicle, with loss of fully 3 cent. of the bone at about its middle. The patient recovered, but with diminished usefulness of the arm on the affected side, because the clavicle was composed of two parts, with an intervening scar of soft tissue, fully 2.5 cent. long. The scar was partly excised, the ends of the bone scraped, and after three days, when granulations were forming, small pieces of periosteum were laid upon the healing surface and retained. A large number of them took, and the grafting was repeated with the ultimate result of a firm and efficient bridge of bone between

the two broken extremities. The clavicle, after this, was as serviceable as ever. The periosteal grafts should have their outer side in contact with the grafting surface, so that the bone-forming aspect of the graft is directed inwards toward the space to be filled by bone. The location and proximity of the grafts determine the future shape of the bone.

Fracture of the Clavicle.

DR. LANGENBUCH reports in the *Deutsch. Medizinische Wochenschrift* a case of fracture of the clavicle, in which he used, with success, the silver wire suture.

The case was a boy, 10 years of age, with a fresh fracture of the clavicle between the middle and outer third. The sternal extremity was dislocated backward and outward, and appeared remarkably moveable. Langenbuch cut down on the place of fracture, laid the same free and made a total transverse fracture. Both fragments were bored through, and then drawn together with a silver suture. The wound was sewed up without drainage with cat-gut. Antiseptic gauze bandage was used. The arm was fixed after the manner of Desault. Recovery followed promptly. Langenbuch hopes that his bloody method will gradually free us from the useless methods of bandaging these fractures.—*St. Louis Cour. of Med.*

Fracture of the Patella.

A seance of the Société de Chirurgie, of Paris, was taken up recently, with a discussion on the rôle of the triceps muscle after transverse fracture of the patellæ. It was the sense of the debators that this muscle, on account of its want of use atrophied, and that it was possible to make it useful again by means of faradization. As opposed to this, L. Gosselin

addressed an open letter to M. Berger, which was published in the *Archives Gênérales*. Gosselin held that the atrophy of the muscles was not real, and declared that the stiffness and unwieldiness of the leg was due only to the condition of the bone and joint. As proof, he presented the following:

The patella fractures heal with or without distance between both fragments. In the latter case, the unwieldiness on locomotion remains only so long as the consequences of the fracture in the joint continues. If these are past, then these patients stand and walk quite well, in spite of atrophy of the triceps, which may have been present for a long time. The muscle contracts itself remarkably well in spite of its atrophy. Its physiological loss stands in no connection to its anatomical loss.

In repair with the fragments separated the muscle acts little in the first months. Later, it contracts itself quite well, as one can tell by laying the hand upon it. The movement is, however, only carried to the upper fragment of the patella, while the lower remains unmoved. On this account the lower leg cannot be extended. The atrophy of the muscle is not at fault as hindering the movement, but only the condition of the under joint of attachment, in this case the patella. Gosselin also found that the movement of the legs from year to year improved, even if the muscle retained its atrophic condition.

In a therapeutic view, he very much prefers a bony union, and seeks, by all means, to obtain this. He discards, however, on the ground of most French statistics, the suture, on account of its danger. He also cites the fact that almost always the locomotion of the patients improves as the years pass by.

The question of suture in transverse fracture was decided contrary to a dis-

cussion in the Société de Chirurgie of Paris, on the November 7, 1883. M. M. Verneuil, Richelot, Le Fort, Gillette, Despies, Labbe, Trelat, and Furget were in the negative, and only Lucas-Championniere, Pozzi, and Channel in the affirmative. The last named gentleman formulated the indications for the operation, as follows (*Gazette Hebdomadaire*, 2 s, xx. 49. 1883) :

1. In old transverse fractures of the patella with extensive callosities and disturbance of function of the extremity, when it is known that this is not, to some extent, dependent upon muscle atrophy and some abnormal addition to the bone, it will furnish only imperfect relief, yet the suture is to be recommended to the patient.

2. In fresh fractures of the patella, the suture is not to be recommended as a general method of treatment. In these cases it is only applicable where it is impossible to obtain coaptation of the fragments, either from the special kind of fracture or on account of the interposition of a foreign body—as blood-clots, connective tissue, capsules, etc.

In the operation the strongest antiseptic cautions must be used. This operation is quite favorably reported upon by Wahl, Lister, Macewen, and others. But of forty cases collected by Turner (*Lancet*, December, 1883), only two died. In thirteen, suppuration occurred, and resulted in ankylosis. In the other cases there was bony union with moveable joint. He recommended only the silver wire for the suture.—*St. Louis Cour. of Med.*

A Successful Case of Total Extirpation of the Larynx.

DR. ROSWELL PARK, on June 25th, 1885, performed complete extirpation of the larynx (thyrotomy) on a physician,

65 years of age, for laryngeal epithelioma. A preliminary tracheotomy had been performed some weeks earlier to prevent death from suffocation. The incision extended from the hyoid to one inch below the upper end of the sternum. The soft tissues were dissected from the side of the larynx and the œsophagus separated from it with the fingers. The trachea was then severed immediately below the cricoid and the larynx raised. It was next separated from the hyoid and constrictor muscles. As many as twenty-five hæmostatic forceps were in use at one time. Chloroform, with amyl nitrite was the anæsthetic. The uvula contained a small nodule, and it (the uvula) was excised. The time of operation was about one hour. A vertical incision in the upper end of the trachea admitted its being stitched to the cervical integument for the purpose of keeping it well forwards. A specially prepared single aluminum tube was inserted and held in place by tapes passing around the neck. Its upper surface was overlapped by the anterior cut margin of the œsophagus. The wound was packed with iodoform gauze, after its surfaces had been sparsely sprinkled with iodoform. Feeding was accomplished through an œsophageal tube every four to six hours. The food consisted mainly of beef peptonoids and egg-nog. Tonics and sedatives were also administered. There was some traumatic fever, which subsided in two days, and after this time the temperature was about 99° F., and often fell to normal. On the sixth day, while perfectly quiet, he suddenly sprang up from bed and attempted to jump from the window. A trained nurse prevented this until help arrived. "Three weeks after the operation he rode a mile to his brother's house." In eight weeks he was able to speak quite as

loud as any one with his artificial larynx.
—*The Medical Press.*

[This is the third or fourth operation of the kind in this country. It exemplifies what may be accomplished by timely judicious surgical interference. Too many lives are lost because general practitioners very often look upon this procedure as too formidable to be seriously contemplated in cases under their own personal charge. How many lives are there now in the care of our readers that might be indefinitely prolonged by the timely performance of this operation?

Interesting to note is the fact that this patient had what is called traumatic mania. Dr. Park is careful to state that nothing employed as a wound dressing or as medicine could have produced the effect, because all quantities were minimum.]

A. H. P. L.

A Mode of Treating Acute Inflammation of the Knee-Joint.

MR. RICHARD BARWELL (*Lancet*) advocates the treatment of acute inflammation of the knee joint by aspirating the joint in the following way: The knee is firmly enveloped, by preference, with a sufficiently broad band of elastic webbing; or an ordinary calico bandage will answer the purpose, care being taken to leave between two of the turns a little interval on the inner side on a level with the upper margin of the patella. At this joint a tubular needle is passed into the joint. The fluid runs away, as a rule, quite easily, and often better without the aspirator vacuum. While it flows the hand should exercise a little pressure on the patella, effectually preventing the entrance of air, and when, the flow having ceased, the needle is withdrawn, the puncture is to be covered with sticking-plaster. Pressure

by means of adhesive-plaster must then be applied, and the limb placed at rest for a few days upon a splint. In traumatic cases the fluid is deeply stained with blood; in non-traumatic cases, if the evacuation is effected early, the liquid is quite clear. By this procedure the pain is immediately relieved, the temperature, if it has been high, subsides, and the patient is well in from ten days to a fortnight.—*New York Medical Journal.*

[We would suggest the use of Martin's pure rubber bandage in preference to those made of calico, and also recommend that Abernethy's valve opening be made in puncturing. This consists in drawing the skin from some other part of the knee over the place to be punctured, and after puncture it is permitted to slip back to its former site and the orifice closed. In this way all direct connection between the air and joint is at once cut off.]

A. H. P. L.

Stephen Smith's Amputation at the Knee-Joint.

At a recent meeting of the Royal Medical and Chirurgical Society, London, Mr. Thomas Bryant read a paper on amputation at the knee-joint, and reported thirty cases. The author strongly advocated disarticulation by the method of Dr. Stephen Smith. He exhibited illustrations of the operation, and indorsed completely the remarks of the American surgeon upon the value of his method of procedure, and strongly urged its application to cases of amputation in the leg also. The muscle substance was generally included in the flap in thin subjects, but not in others. The resultant stumps in the leg thereby obtained were excellent. As compared with other methods mentioned, Mr. Bryant stated that the method of Dr.

Stephen Smith was to be preferred, as it gave a better covering to the condyles of the femur, and the flaps were less prone to slough; it also placed the cicatrix entirely behind the condyles, out of the way of injury, permitting no bagging of fluids, the stump being in the best position for drainage.—*Lancet*, Dec. 12, 1885.—*Medical Record*.

[This operation is preferable, because of the chance for perfect drainage, diminished tension (hence less probability of sloughing), and the advantage of having the cicatrix well up behind the stump, and not subject to pressure during the wearing of an artificial limb. Mr. Bryant summarized as follows in favor of Smith's method: 1. Lessened shock; 2. Lessened tissue section, and the non-opening of muscular interspaces of the thigh; 3. No necessity for running the additional risk of sawing off the condyles; 4. Leaving intact the attachments of the thigh muscles and thus increasing the mobility of the stump; 5. The greater usefulness of the stump.]

A. H. P. L.

A New Dressing for Wounds.

The Paris correspondent of the *British Medical Journal*, says that a new article for dressing wounds, called Berthault's taffetas, has just been brought out, which is considered to be superior to the adhesive plasters hitherto used. It is as transparent as glass, and as thin as the skin of an onion; the condition of the surface covered by it is as easily seen as though it were uncovered. This plaster is as elastic as India-rubber; it cannot be traversed by fluids, and is unaffected by change of temperature. Chemically it is inert; neither changed by acids, alkalies, nor the secretions of the human organism.—*Medical and Surgical Reporter*.

[If all that is claimed for these taffetas be true, the sooner they are introduced the better. Their non-irritant quality and transparency would make them invaluable. With it a wound could be watched, and a failure to unite observed at the very beginning.]

A. H. P. L.

The Treatment of Cases of Imperfect and Painful Swallowing.

It has been frequently recommended that we resort to a tube passed through the nose, but we venture to say that comparatively few resort to this procedure, especially in children's practice, because it seems like a very unpleasant method. However, we note that Dr. J. F. BULLAR (*Practitioner*), states that this is an erroneous impression. As a matter of fact, there was commonly little, if any, struggling or apparent discomfort; the children often hardly woke while the tube was passed, and fell asleep immediately after it was withdrawn; and in cases in which the children resisted the passage of the tube it was invariably found that they had more rest, and were less exhausted than when constantly troubled with a spoon.—*Ibid*.

[Feeding by the nose through a small enough catheter, or tube, properly introduced, even in children, is a simple, easy and not painful procedure. Care should be taken to keep the tube close to the floor of the nose.]

A. H. P. L.

The Disinfection of the Hands.

The *Medical News* tells us that Forster, of Amsterdam has made an experimental investigation of the comparative values of different methods of rendering sterile the bacterial dust which is always present on the hands. All the known disinfectants were used, and the

so purified finger was dipped in sterilized neutral beef juice peptone solution.

With one exception, the development in the culture media of fungi, in from twenty-four to sixty hours, was not prevented by the treatment of the finger. Even washing with two and a half per cent. carbolic acid solution was inefficacious. Corrosive sublimate solutions alone, of a strength of from half to one part in one thousand, were found to be of use; and the finger thus treated, when dipped in the most sensitive culture media, induced therein no fungous growth.

[We have found that pure water is more efficient in removing the bad odor from the hands after a post mortem examination than soap and water combined. This is supposed to be due to the adherence of the odor being caused by the retention of grease from the cadaver, and which the water floats off. Simple mustard paste is also very efficient. Corrosive sublimate, or a strong solution of chlorinated soda are the best disinfectants for this purpose in our experience.]

A. H. P. L.

Successful Abdominal Section in Perityphlitic Suppuration.

The Medical Times and Gazette, Dec. 19, 1885, publishes a paper by DR. THOS. BARLOW and MR. R. J. GODLEE, in which is detailed a case of perityphlitic suppuration was treated at first by an exploratory abdominal incision, because of uncertainty of diagnosis, and later by a second incision in the right iliac region. The first wound was sutured and a small drainage tube inserted. A large tube was passed to the bottom of the suppurating cavity through the other opening. The abdomen was washed out with a 1-500 bichloride of mercury solution. With the exception of a transient albuminuria and a parotid

bubo, he recovered perfectly without untoward symptoms, in fact, the pules remained at about 90 and the temperature was normal all the time.

Varicose Veins.

Varicose veins are frequently exceedingly troublesome and sometimes dangerous and we therefore draw the attention of our readers to an article which appeared in the *British Medical Journal*, by DR. J. F. FRY, strongly advocating the removal of a considerable length of the varicose veins, as first proposed by Dr. Steele, of Bristol, and Mr. Marshall, of London, in the *Lancet*. Perhaps the method of operation can be most readily understood by reading a description of its performance as detailed by Dr. Fry:

An ink-mark about an inch long was made over each of the two varices (one near the ulcer, the other above the knee), and, the patient being under the influence of an anæsthetic, a Martin's rubber bandage was firmly applied from the toes to the middle of the thigh, and removed after a Foulis's tourniquet had been placed round the thigh at the upper margin of the bandage. The limb was now bloodless. Under carbolic spray (one in forty), a longitudinal incision was made through the lower ink mark, but only skin-deep, and extending into the ulcer. The tortuous varix next was dissected out and ligatured above and below, and thus a piece of vein six inches long was removed through an incision one inch in length. The edges of the skin were brought together with silver-wire suture, and antiseptic dressing applied. The second varix having been treated in the same way, the limb was firmly bandaged and (after the tourniquet had been removed) swung in a Salter's cradle. During the first three

days the temperature ranged between 99° Fahr. and 100° Fahr., and then fell to normal. The wound was dressed antiseptically on the third, fifth, and eighth days, and on the last date the sutures were removed.

The conclusions reached by Dr. Fry are as follows :

If palliative measures afford sufficient relief, it is unwise to operate ; but of the various operations the excision of the vein is the safest, and for its successful performance the following details must be strictly carried out :

1. Excise through several small incisions (not more than inch in length) in preference to removing one large piece, as by so doing the vein is occluded at several points.

2. Mark the site of the proposed incisions before applying the bandage, as the position of the varices becomes indefinite when the limb is rendered bloodless.

3. Apply the Esmarch bandage carefully, so as thoroughly to empty the blood-vessels ; or, the wound becoming full of blood, there will be considerable difficulty in dissecting out the vein, and very troublesome hemorrhage may occur.

4. Ligature the vein at its upper end, and dissect it out from above downwards.

5. Remove as little as possible of the tissues surrounding the vein ; but if this be unavoidable, take away also the deep fascia (which is but feebly supplied with blood, and will not favor union), and allow the skin to adhere to the vascular muscle.

6. Apply the dressings and bandage the limb before removing the tourniquet. By this means hemorrhage is avoided and primary union encouraged.

7. Above all, the careful employment of antiseptic measures is neces-

sary, both during the operation and in the subsequent dressings.—*Therapeutic Gazette.*

The Difference in the Symptoms of Strangulated and Oblique Inguinal Hernia.

At a meeting of the New York Medical Society, held November 18, Dr. Frederick Hyde read a paper with the above title, in which the following were the principal points developed :

1. In proportion to the length of time an inguinal hernia existed would the symptoms and signs of strangulation be mild and chronic.

2. In a case of long standing inguinal hernia in which signs of stricture of the bowel are obscure, there not being evidence of total obstruction of the canal, often it is not safe to wait for fæcal regurgitation before deciding that strangulation exists.

3. When strangulation occurs at the first protrusion, the symptoms of strangulation will be found to be more marked.

4. If hiccough and fæcal vomiting existed from nearly the beginning of the symptoms, no time is to be lost, herniotomy should be performed at once.

5. If a swelling exists with symptoms of obstruction of the bowel, the patient complaining of severe pain in the abdomen, but of none in the tumor, and had hiccough, although there is absence of marked general disturbance, a fair trial of taxis should be made, and that failing to reduce the tumor, herniotomy should not be delayed. This remark was based on an interesting case, the history of which Dr. Hyde gave in detail. No fæcal vomiting occurred, no pain in the tumor even after taxis, but there was some pain in the abdomen and hiccough. Because of the mildness of the symptoms the consulting physi-

cians delayed the operation more than twelve days, and when it was finally performed, the strangulation was found to have existed within the abdomen. The patient died.

6. If no strangulated portion be found within the external sac, the finger should be passed internally, and adhesions sought for in the neighborhood of the opening.

7. Too long a trial of taxis before dividing a stricture should be guarded against, as it prepares the way for the death of the patient after herniotomy.

8. After stercoraceous vomiting has set in taxis should not be applied, but herniotomy should be performed at once, although the prognosis is unfavorable.

9. If after opening the sac the omentum is found smooth, and no intestine can be detected, the omentum should be opened to learn whether it may not contain a strangulated portion of intestine. It is unfair to speak of herniotomy as a dangerous surgical operation *per se*. The danger attending the operation is due to the condition of the sac and its contents, and to taxis and delay in operating.

Dr. J. W. S. GOULEY read some notes on the same subject, in which he reached the following conclusions :

1. When doubt arises in the mind of the surgeon respecting the existence of strangulation of the intestine or omentum in case of incarcerated hernia, it is his duty to give the patient the benefit of the doubt by at once resorting to the operation of herniotomy.

2. Delay in relieving the strangulation is often fatal, while herniotomy in a case in which no strangulation exists is not usually harmful.

3. Medicinal treatment is often delusive, and local applications, such as opium, tobacco poultices, ice, etc., are in most cases worse than useless.

4. Persistent taxis is infinitely more dangerous than herniotomy, and such taxis, even when it is followed by reduction of the hernial protrusion, is often the cause of fatal peritonitis.

5. Another, though rare, effect of violent taxis is the reduction *en masse* of the hernia in its state of strangulation, and its result is known.

6. As a general rule, two minutes of gentle taxis, the patient being in a hot bath, will settle the question as to the possibility of safely reducing the hernia.

7. Therefore it may be said with propriety that the less taxis, the less ice, the less other topical applications, the less opium, the less general or special meddlesome interference which often do serious injury to the intestine, the better the chances of recovery in the event of herniotomy. This is particularly the case in femoral hernia.

He said he had abstained from incising the neck of the sac in femoral hernia, but had made divulsion by simply insinuating the index finger through the free opening made in the sac until it entered the abdominal cavity, and had had no trouble in effecting reduction of the intestine, the object of the procedure being to avoid division of the obturator artery, should it be abnormally situated. He coincided with Dr. Hyde that hernia is not *per se* a dangerous operation. Dr. Gouley said further that if it seemed necessary in a case of inguinal hernia, after herniotomy, he would open the abdominal cavity in order to relieve the strangulated intestine.

[Too much stress cannot be laid upon the necessity of promptness in relieving cases of hernia, and the danger of doing irreparable mischief by great efforts at taxis, and by the customary topical applications. When moderate and properly performed taxis fails, herniotomy

should promptly follow. Dr. Gouley's preference for dilatation of the neck in place of section is just.] A. H. P. L.

Transplantation of Tendons.

According to the painstaking experiments of M. M. FARGIN and ASSAKI, it is possible to successfully transplant pieces of tendons from an animal of one species between the cut ends of a tendon of some animal of an entirely different order. It can, of course, also be done when the animals are all of the same family. These facts should stimulate a trial by those who have the opportunity among human beings of transplanting tendons from animal to man.

The Aesthetic Surgeon.

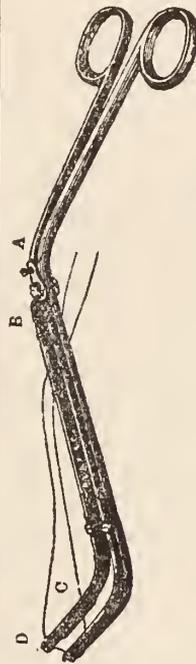
In an editorial of the *Maryland Med. Journal*, of Aug. 29, 1885, attention is called to the too frequent occurrence of ugly defacing cicatrices, whose existence is a reflection upon the skill or conscientiousness of the surgeons having had them in charge, while the healing process was going on. That this is true no one will deny, yet the day seems far off, if ever it will come, when there will be special surgeons whose work it will be to straighten crooked noses and attend to a like class of work, as our contemporary is inclined to believe. A man who cannot heal a single wound without disfigurement should leave it to those who can.

A Post-Nasal Snare Applicator.

DR. E. FLETCHER INGALS (*Jour. Amer. Med. Asso'n*):

The post-nasal snare applicator was designed to facilitate the application of a wire loop over tumors in the post-nasal space, and to retain the wire in position until it could be tightened. In using it a catheter is passed through the

nose, the end being drawn out through the mouth. Through this are passed both ends of a wire about three feet long, which are brought out at the nostril. The applicator is then attached to the loop, and the catheter and wires are drawn through the nose, the wire loop being drawn back into the mouth. As the loop passes under the edge of the soft palate the blades of the applicator are opened, thus spreading out the loop over the tumor. The wire loop is then carried by the applicator directly to the base of the growth in the vault of the pharynx, where it is held while an assistant passes the ends of the wire projecting from the nose, through the tube of a



snare, which glides along the wires to the back part of the nares. The wires are then fixed to the snare, and by it the loop is drawn tight about the tumor. The sliding blades of the applicator are then loosened and the instrument disengaged by a slight movement. In the cut, B and D show the sliding blades which retain the wire C in the notches at D. A, is a cam, which tightens the sliding blades over the notch at D, and which, when turned sideways, allows the blades to be drawn back by the thumb pieces at B, thus releasing the wire at the notches D.

The instrument works perfectly, and fully accomplishes the object for which it was designed. It is especially useful when the tumor is large; a condition which sometimes makes it extremely difficult to apply the wire loop.

For small tumors it is not so essential, but it will be found greatly to facilitate the operation, and to relieve the patient of most of the discomfort incident to the introduction of the fingers behind the palate.

Ligations of the Arteries of the Palm of the Hand and Sole of the Foot.

ED. DELORME has recently published a very valuable memoir on this subject, illustrated by a large number of plates, and supplemented by a number of dried preparations, among them over two hundred hands, which are deposited in the museum at Val-de-Grace. His methods are as follows :

1. *Ligature of the Radio-palmar.*—Make an incision slightly convex from the scaphoid tubercle a little outwards, 0 m, 05 centimetres in length to the second interdigital space.

2. *Ligature of the Direct Cubital (superficial arch).*—Trace the line of Boeckel and incise externally to the pisiform bone, following a line to the third interdigital space and line of Boeckel.

3. *Ligature of the Transverse Portion.*—Extend the incision of Boeckel 5 to 8 millimetres.

4. *Ligature of the Trunk of the Collaterals of the Thumb.*—Follow on the back of the hand the internal border of the first metacarpal. The artery is between the first dorsal interosseous and the adductor pollicis.

5. *Ligature of the Trunk of the Index Collateral.*—Incise the length of the internal border of the second metacarpal, remove the first dorsal interosseous; the artery is under its aponeurosis.

6. *Ligature of the Radial Origin of the Deep Arch.*—Same incision; pass to the tubercle of the second metacarpal and then inwards to the anterior surface

of the bone, where will be found the origin of the deep arch.

7. *External Palmar Incision.*—Incise on a line passing from the interval of the eminences and to the external border of the index. Cut deeply to the external border of the first of the lumbricales; the artery will be found in the insertions of the adductor pollicis.

8. *Median Palmar Incision.*—Incise on a line which prolongs the axis of the index to the middle of the hand; there find the external border of the lumbrical of the medius; flex the hand and the artery will be found at the superior portion near the base of the third metacarpal, crossed by the ulnar nerve.

9. *Internal Palmar Incision.*—Passing between the hypothenar eminence and the flexors, let the incision follow a line from the interval of the eminence near to the fold of the little finger. Seek the interval between the flexor minimi digiti and the mass of the hypothenar muscles; flex the fingers, and the artery is under the aponeurosis; it crosses the tendon.

In his study of the foot Delorme has deposited in the museum more than fifty injected feet to prove his dissections. He considers.

1. *Internal Plantar (at its origin).* The incision passes from the scaphoid tubercle to the tubercle of the small apophysis of the calcaneum. Cut through the skin and aponeurosis and draw aside the fibres of the adductor pollicis.

2. *External Plantar.*—Same incision, the probe following the direction of the artery which may pass for 7 centimetres from its origin.

3. *External Plantar (calcanean portion).* Trace across the heel a line prolonged in the direction of the internal malleolus. A little below it, some 8 centimetres, incise a line which shall

pass from a quarter of the internal heel to the first interdigital space. Under the aponeurosis, disengage the internal border of the short flexor; on the plantar surface of the accessory appears the nerve, and the artery is external to it.

4. *External Plantar* (calcaneo-cuboid portion). Incise below the transverse line of the heel, following a line passing from the middle of the heel to the space which separates the third and fourth metatarsals. Beneath the aponeurosis, disengage the external border of the short flexor; the artery is applied to the superficial surface of the accessory with the nerve and veins.

5. *Ligature of the Arch*.—Antero-external plantar incision.—Incision of 8 centimetres at the crossing of the lines going from the tubercle of the fifth metatarsal to the internal sesamoid bone of the first, and from the crease of the fourth with the fifth in the middle of the heel. Pass a little within this last line and parallel to it. Seek the external border of the adductor obliquus; the artery is at its superior insertion, covered by the interosseous aponeurosis. The nerve conceals the vessel on the third metatarsal.

6. *Ligature of the External Plantar at its Termination*.—Antero-internal incision. Trace a line perpendicular to the axis of the foot, one centimetre in front of the internal tubercle of the first metatarsal, a second line directed from the first interdigital space to the internal quarter of the heel; at the junction of these two lines, a little externally on the second, and for about 8 centimetres, make the incision; the short flexor and the internal plantar nerve will be recognized. Penetrate between the short flexor and the oblique adductor, feel the tubercle of insertion of the long lateral peroneal. The artery will be found some millimetres below and a centi-

metre in depth on the second metatarsal.—*Archives Méd. Belg.*—*Journal American Medical Association.*

Treatment of Indolent Ulcers.

From a statement in the *Chemical Gazette*, it appears that if indolent ulcers are washed with five per cent. solution of carbolic acid, then cauterized with nitrate of silver, and next sprinkled with iodoform, the last mentioned application liquifies, and puffs up with gas but the combination is successful where all other remedies fail. Try it, and report results.

VENEREAL DISEASES.

Concentric Enlargement of the Wrist in Hereditary Syphilis.

DR. R. O. INGRAM, says in the *Atlanta Medical Journal*:

I have not had my attention drawn a sufficient length of time to this symptom of hereditary syphilis to determine whether it is in a greater or less degree constant, or even if it is as equally so as the Hutchinson tooth found in hereditary syphilis. I believe, however, if we would examine closely, we will find it manifested quite frequently.

My cases have occurred in children ranging from one month up to one year and six months of age. Dr. Vinson's case occurred in a child about twelve months old.

The concentric enlargement has more the appearance as if two fine silk ligatures had been tied around the wrist immediately above the joint, the strands being placed about half an inch apart and tied tight enough to hide themselves in the flesh. To the touch they have all the dense hard feeling that callous does when thrown about a fracture.

I have attempted to depict somewhat

the appearance of this condition by a rough sketch that is seen in figure 1 of

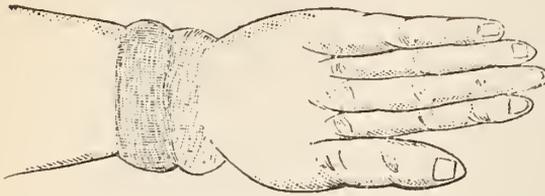


FIG. 1.—Concentric enlargement of wrist in hereditary syphilis.

annexed cut. This was sketched off-hand from a case that fell under my care in November, 1884. The mother of this



FIG. 2.—Lateral extension produced by concentric hypertrophy of radius and ulna in hereditary syphilis.

child I treated for syphilis three years previous to its birth, or rather I prescribed for a couple of Hunterian

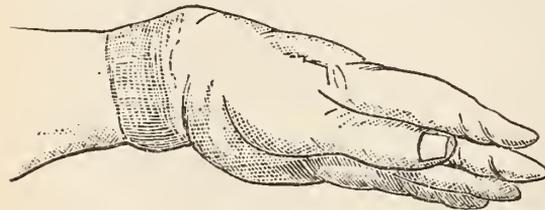


FIG. 3.—Fracture of the lower extremity of the radius (gross).

chancres. I think she received no systematic treatment looking to systemic eradication. The child, when I first

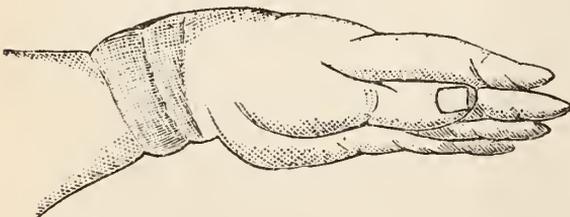


FIG. 4.—Concentric band of wrist from hereditary syphilis simulating fracture of lower extremity of radius.

saw it, was covered with eruptions peculiar to this disease.

This condition often produces distortion accompanied with symptoms which are calculated to mystify the medical attendant. To illustrate, I have attempted to show in figure 2 a lateral extension of the hand of a child eight months

old I now have under treatment. With the pain and swelling it might very well be mistaken for articular rheumatism. This peculiar drawn condition

was due, no doubt, to excessive hypertrophy of the bone under the extensor muscles, drawing them taut.

A case fell under my care in the early part of 1884, which very much simulated fracture of the lower extremity of the radius.

This I have attempted to depict in figure 4. The similarity can be seen by examining figure 3, which represents a fracture of the lower extremity of the radius (after gross). This case was very interesting, as crepitation

could be distinctly detected on motion of the hand at the wrist-joint. This perhaps was produced from deposit or other abnormal condition of the wrist-joint. Dr. Vinson's case was similar to this, except there was no crepitation.

The doctor's case might have well misled, as the child had a fall a day or so previous to falling in his charge. The Doctor was undecided as to a fracture, but with his thorough knowledge of such fractures, he was inclined to a contrary opinion.

These three cases are the only ones that I have seen that could have been mistaken for other troubles.

TREATMENT.—These cases have all been treated satisfactorily with mercury.

I have used in all but three of my cases the protoiodide, in the others the bichloride, with tonics (Huxham's tincture of bark).

One case, owing to necrosis of the ulna, necessitating operative interference, allowed me the opportunity of observing the condition of the bone, which showed great thickening of the periosteum, with muscular hypertrophy of the lower extremity of the two bones of the forearm.

Dr. Vinson treated his case with inunctions of mercurial ointment rubbed in the groins and arm-pits. He informs me that it has been relieved from the trouble.

Diagnosis and Treatment of Syphilis.

DR. J. A. WESSINGER (*Medical Age*.)—

The Arabian method of treatment, to which I will allude briefly, consists in the patient abstaining from his usual articles of food; he lives on biscuit, dried almonds, figs, and raisins, and drinks a glass or two of a decoction of sarsaparilla during the twenty-four hours, together with a mercurial pill night and morning. I have had no experience with this method of treatment, and am unable, at present, to state how extensively it is used; suffice it to say, however, that a laboring man could not pursue this line of treatment. It must be limited to those who lead an inactive life. The hygienic method of treatment consists in the practice of absolute cleanliness of the patient, abstinence from the use of stimulants and tobacco, attention to the secretions of the skin and bowels, and the cultivation of a cheerful disposition. The diet should be plain but nutritious. In case a patient has been long addicted to artificial stimulus, it may not be proper to prohibit its use entirely, yet in every case it should be given under the strict supervision of the

physician. Attention to the hygiene and surroundings should be part of the treatment of every case of syphilis. The mercurial method of treatment was first employed about the year 1500, and consists in the internal administration of the various salts of mercury, together with their introduction into the system by inunction, fumigation, in suppository, and hypodermically. Internally, the bichloride and diiodide are the salts of mercury most frequently resorted to, and may be given in pill form, in powder, or in solution. While mercury causes the secondary lesions to disappear, and the iodides the tertiary lesions yet since the secondary and tertiary lesions of syphilis often border closely on each other, it is necessary in treatment to combine mercury with the iodides, as this is not only the best method of curing the disease, but also the surest guarantee against a relapse. This method of combining mercury with the iodides is pursued by some of the most eminent syphilographers of the present time.

By inunction, we of course understand that mercury is administered through the skin by the use of friction. The preparation probably best adapted for this method is the oleate combined with simple cerate. The inunction should occasionally be followed with a bath of hot water and soap. This method of treatment is quite extensively employed, and usually attended with very satisfactory results. Mercurial fumigation was employed at a very early date in the treatment of syphilis, but fell into complete disuse until revived by English physicians. By this method mercury is introduced into the system by means of fumes generated by volatilizing calomel or black oxide of mercury, and in connecting the steam from boiling water. The patient, stripped of his clothing,

is placed over the generating apparatus, usually upon a cane bottomed chair, and encircled with a blanket drawn tightly around the neck. This process may be continued from three to twenty minutes, and repeated from two to four times a week, according to the general condition of the patient. This method is quite popular with some physicians, and is more cleanly but less convenient than inunction.

Suppositories containing from $\frac{1}{2}$ to 1 drachm of mercurial ointment, with a sufficient quantity of cocoa butter, one of which is introduced into the rectum every night, has been tried in the treatment of the disease in question, but with very unsatisfactory results. They soon occasion tenesmus, colic, catarrh, and a frequent desire to go to stool, while the syphilitic lesions are benefited very little, and a tendency to salivation is manifested early with this method of treatment.

The use of mercury by the hypodermic method has of late years attracted considerable attention among physicians, and deserves to be regarded as a valuable addition to our methods of treatment in certain cases. I have had no experience with this mode of treatment, yet I think very favorably of it. Calomel and corrosive sublimate are the compounds of mercury usually employed in this method.

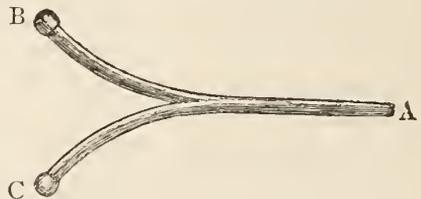
Iodine and its Compounds.—In the treatment of syphilis, the therapeutic effects of the iodides is in direct ratio to the duration of the disease. In other words, in secondary syphilis give mercury, and in tertiary syphilis give the iodides. This plan is the one usually adopted in the treatment of syphilis. However, there are physicians who successfully practice what may be called the mixed treatment, which consists in a combination of the iodide with mer-

cury. I have tried this method of treatment and am able to speak very favorably of it. It has been my experience, and also the experience of other practitioners, that in treating syphilis with the iodides alone, a tendency to relapse is quite frequently manifested, but combination with mercury prevents any such tendency. I desire again to refer to the fact that combination of the iodide with bromide of potassium, prevents any tendency to iodism. This action of potassium bromide, I think, was first mentioned by Dr. Henry Selden Norris, in the *Medical News*. This discovery, if substantiated by further observation, is certainly invaluable.

A New Catheter Attachment.—Cystic Therapeutics.

PROF. A. F. PATTEE, M.D.

This simple contrivance I have used in my practice for a number of years, attached to a catheter in washing out the bladder and other cavities. The



attachment is shaped as the above cut represents. A is to be connected to a soft rubber catheter, or any other kind, when required; B to the syringe by a short piece of rubber tube; and to C a rubber tube from one to three feet in length, as may be required; this is the efferent, or waste tube to draw off the injection. The tube can be compressed by a clamp, wire spring, or which is far better, the thumb and finger, while the injection is running into the bladder or other cavity. A fountain syringe or graduated bottle is best to use, as the quantity of injection can be carefully regulated and pressure controlled.

The following formulæ I have found very efficacious: *For Acute Inflammation and Gonorrhœa of the Bladder*: ℞. Resorcin, ʒ ij. ; acid. boracici, ʒ iss. ; zinci sulph., grs. iv. ; aquæ, ʒ viij. M. (The water should be boiled, and soft water used.) Inject two ounces at first, let it remain two minutes, draw off ; then inject three ounces, let it remain three minutes, draw off ; then inject four ounces, and continue until the injection returns clear.

For Pain in the Bladder: After washing out the bladder with a solution of ten grains of borate of soda and five grains of boracic acid to the ounce of boiled water, use the following: ℞. Cocaine hydrochlor, grs. iv. ; acid. boracici, grs. xv. ; aquæ, ʒ iv. M. Inject two ounces and let it remain. *For Chronic Cystitis*: ℞. Aquæ eucalypti, ʒ viij. ; resorcin, ʒ ij. ; potassii chlorat. ʒ i. ; acid. salicylici, grs. viij. ; acid. boracici, ʒ i. M. Wash out the bladder with the borax solution, then inject four ounces of this and let it remain from five to ten minutes.—*Medical World*.

DISEASES OF THE SKIN.

Hyperidrosis.

Hyperidrosis or excessive sweating is a functional disease of the sweat glands which manifests itself either in a general or a localized form.

The parts which are most liable to be attacked are such as are kept warm and more or less confined. In parts which are subjected to heat it generally happens that in addition to an excessive secretion of sweat, there is also the presence of a disagreeable odor. This is caused by the decomposition of the sebum or fat and more or less putrefaction of the macerated epithelial scales which are separated from the epidermis

by the action of the increased amount of sweat.

Upon examining a part subject to this disease we find that the skin has a soggy appearance, that the horny layer of the epidermis (scarf-skin) is easily rubbed off, and that beneath a pinkish or whitish appearance is presented. The patient will complain that the skin is more or less tender to pressure and very painful to friction.

The causes are numerous and are such as will tend to inhibit the action of the vasomotor and trophic nerves of the skin.

The general treatment which is employed should be directed to the general condition of the patient and have in view the placing of the whole system in as good a condition as possible. Tonics of various kinds, if indicated ; nervines, etc., are to be administered upon general principles.

In mild cases where the sweat is not poured out in excessively large quantities, and where the decomposition does not set in very rapidly, frequent washing followed by the application of astringent lotions is sufficient. The process will very often be hastened by occasionally painting the surface with tincture of belladonna. As astringents, may be used, catechu, tannin, alum, etc. Chloral hydrate in solution is a very good application, but should not be used too strong. After applying the lotion a dusting powder should always be used.

The form of hyperidrosis for which relief is most often sought and which is most difficult to relieve, is that affecting the feet. If any of the means indicated above fail there are a number of others, one of which may succeed. A good one is that lately adopted in the German army. It consists of two parts of salicylic acid mixed with one hundred parts of best mutton

suet, and applied to the parts daily, care being taken not to wash the affected locality, but wiping it dry and seeing to it that opposing surfaces do not come into contact. Another method introduced by a French army surgeon consists in washing the feet well, applying powdered subnitrate of bismuth and renewing often without further washing. By dusting the feet liberally every day with this preparation, a cure will often be accomplished in a fortnight.

I have found that in excessive sweating of the soles of the feet, especially the application of ordinary adhesive plaster, renewed every other day, will give good results in ten or twelve days. In place of this a belladonna plaster may be used, but will not be as satisfactory to the patient.

Hebra's method is perhaps the best for obstinate cases, and if one course of this treatment does not suffice, another one ought to be undertaken, as improvement, if not cure, will follow each attempt. The method, in brief, is as follows: The feet are well washed and dried with a cloth and dusting powder. Then the soles and toes are covered snugly with pieces of cloth upon which has been spread, to the thickness of an ordinary knife-blade, the unguentum diachyli. This ointment is made by adding one part of litharge to four of olive oil and gradually adding water enough to make a stiff ointment. The process is repeated in twenty-four hours, the feet, however, being merely wiped dry with a cloth and dusting powder. After repeating the application for ten to twenty days, dusting powders alone are used, for a time, until there is an assurance of a cure.

The prognosis of the disease is fair, but should be guarded and based upon each individual disease. In hyperidrosis

dependent upon neuralgia or similar condition, it is good; whilst, in the majority of cases, where the cause is obscure, it is not so favorable, and in old standing cases of local hyperidrosis especially of the feet, it is very often bad and requires a great deal of patience and a determination to carry out details on the part of the patient to bring the case to a successful termination.—*St. Louis Medical and Surgical Journal.*

Application to Allay Itching of the Mucous Membrane.

M. BAZIN (quoted in *Union Médicale*) remarks that the same applications will not answer for all the mucous membranes indiscriminately. For the ocular conjunctiva he advises a collyrium of 1 or 2 parts of copper sulphate to 5,000 of distilled water. For tingling of the tongue he recommends a gargle of from 10 to 30 parts of Lebeuf's "coal-tar saponin" (a preparation of coal-tar and quillaya) to 300 of water. For itching within the nostrils, injections of a 1-to-1,000 solution of carbolic acid, with or without the addition of glycerin, are advised. For the mucous membrane of the vulva solutions of corrosive sublimate and of mercury nitrate are particularly efficacious. Glycerole of tar may also be used, or, better still, glycerole of tannin or of starch.—*New York Medical Journal.*

Chapped Hands.

DR. SWIFT furnishes the following formula to the *New Eng. Med. Monthly*:
 ℞. Zinci oxide, gr. xx; acid tannic; gum camphoræ pulv. aa, gr. xv; glycerine, ℥ iv; tr. benzoin, ʒ ss; M. apply locally.

Warts.

Castor oil applied daily for two or three weeks is said to be a sure cure of warts.—*Ind. Medical Journal.*

DISEASES OF WOMEN.

The Treatment of Patients after Operation for the Restoration of the Cervix Uteri and Perineum.

When we first began to practice gynecology the treatment of patients after these plastic operations was exceeding simple. The patient was kept in bed, and received such food as she could take, usually in small quantity. The catheter was used, and if there was pain or great restlessness, opium was given, and if the operation was upon the cervix the hot water douche was used. This was about all, and the patient had a miserable, lonely time of it, and as a rule lost strength and health by the confinement.

When the silver wire was used, as it was then and is now by some operators, the patient was tormented with the sutures when she moved, so that she had to lie upon her back all the time. In case of the perinæum, if she tried to move, the sutures would pull and prick the parts and cause much pain. Much of all this is changed for the better.

By using silk sutures there is no pain or irritation after the first few hours, and the patient can move, or be moved in bed with ease and comfort, the perinæum can be covered with a dressing which will keep it clean and comfortable, and the patient can turn upon her face to urinate, and save the torments of the catheter.

Massage is used to keep the general nutrition in good condition, and also relieve her from the weariness of being alone and quiet. Massage also creates a need for more food, so that the patient cared for in this way will gain flesh and strength, getting out of bed stronger than when she gave up to be operated upon.

In fact the "rest cure" can be prac-

ticed during the after treatment of these operations, with all the advantages thereof. In the old way patients were put to bed strong and got up weak; now we can put them to bed weak and make them stronger for the rest and treatment.

A. J. C. S.

The Overgrowth of Surgery in Gynecology.

Judging from the current literature of the day one gets the impression that the whole art of gynecology is reduced to abdominal surgery, with an occasional plastic operation about the cervix uteri and perinæum. The published transactions of the obstetrical and gynecological societies of the larger cities of this country are made up of great operations.

The removal of ovaries, tubes, uterus, and all forms of tumors connected with these organs, appears to be the whole occupation of those who practice gynecology. If these specialists and their assistants condescend to treat the diseases of women which do not require heroic surgical treatment, they evidently do not consider such practice worth mentioning. There is certainly great surgical activity in this department. So much so that we are led to hope that a reaction may soon come; a change which will bring up the medical side of the subject. It is time that the knowledge, judgment and skill of the physician should receive as much attention and consideration as the daring operations of the surgeon.

In the crop of gynecologists coming up at this time, we find nearly all of them thirsting for big operations like hysterectomy and ovariectomy. It would be well if there were more who could be called physicians.

A. J. C. S.

When Should Menstruation Cease.

DR. HUGHES in the *Medical Age*, calculates the time when the menopause is due, in the following manner :

Commencing with the propositions : First, that the allowance of years to mankind is "three score and ten." Second, that a woman is capable of child-bearing for half her life after she arrives at puberty. Now find out at what age menstruation began in any particular case, subtract this from seventy and divide by two, the result is the number of child-bearing years : add this to the age at which menstruation began and it will give the age at which it should cease. For instance :

Years of life.....	70
Menstruation began at.....	16
	—
	54
	—
Half of which is.....	27
(The child-bearing period.)	
Add the commencing age.....	16
	—
Giving age at which it ceases.....	43

Bearing in mind the facts that those who begin early, cease early, and those who begin late, cease late, we should have the following table :

Beginning at	12	ceases at	41
"	" 14	"	" 42
"	" 16	"	" 43
"	" 18	"	" 44
"	" 20	"	" 45

Although this table has been found correct, allowance must be made for causes producing variations ; it is not sent forth as infallible, but it will be found to "hit" nine times out of ten. It is doubtful if any trace of the idea will be found in works bearing on the subject, and it is believed to be original with the writer.—*Western Lancet*.

[That there is some relationship between the beginning and the ending of

this function is possibly true. Those who begin early cease early as a rule, and yet there are a great many exceptions to this. But it is perfectly evident that there is no rule which is followed generally, upon which a table like the above can be constructed with any accuracy. The fallacy of this table can be perhaps best observed by one single statement, namely, those who begin at twenty end at forty-five according to the table. But the fact is that for every one who begins so late as twenty, there are tens of thousands who end this function at fifty-five. The table, then we must say, appears to be of very little value as a guide to the laws which govern these functions.

A. J. C. S.

Santonin as an Emmenagogue

DR. AMAND ROUTH (*Lancet*), reports that he has used santonin in twenty cases of amenorrhœa, according to the suggestion made by Mr. Walter Whitehead in the same journal, giving ten grains on two consecutive nights, and not using a purgative. In seventeen of the cases the drug failed completely, but in the three others it produced a flow. The author concludes that, as a direct emmenagogue, santonin is useless in cases associated with chlorosis, in which he has often found permanganate of potassium useful ; but that, in healthy or full-blooded women, it seems to have some power to start a uterine flow, and apparently without causing much pain. He remarks that its mode of action is quite unknown, and that therefore it does not seem likely to be much employed in gynæcological therapeutics.—*New York Medical Journal*.

[There are things that quite surprise us in the above note by Dr. Routh, in the *Lancet*. In the first place, less than ten grains of santonin produces disa-

greeable toxic effects, even when combined with a purgative. When given alone, it must be exceedingly disagreeable medicine in its effects, to say the least. In the next place, it appears to be entirely useless. According to the author's statement, it failed in seventeen cases, and only appeared to have the desired effect in three. It is more than possible that like results would have followed the use of almost any remedy, or without the use of any medicine. The only deduction that we can draw from all this is, that *santonin* should not be used as an *emmenagogue*.]

A. J. C. S.

The Medical Treatment of Uterine Hemorrhage.

DR. M. A. MENDES DE LEON, Privat-docent at the University of Amsterdam, has contributed an interesting and suggestive paper on the employment of *hydrastis canadensis* in uterine hemorrhage. The inquiry was suggested by the remarks of Schatz, of Rostock, on golden seal in metrorrhagia and menorrhagia, at Freiburg, 1883.

Hydrastis Canadensis, L.—*Warneria Canadensis* (Milleri): Canadisches Waserkraut, gelbes Blutkraut (German); yellow Puccoon, Golden Seal (American)—is a plant growing abundantly in the United States from the Canadian border to the Carolinas and Tennessee. It belongs to the family of the *Ranunculaceæ*, and the group of the *Anemones*. The rhizome, green and dried, is employed in medicine. The green rhizome, familiarly known as yellow root, is of a yellow color, very succulent and lactescent on fracture. According to the researches of Lerchen, it contains albumen, sugar, extractives, and an acid which forms with ferric chloride a green precipitate, but is not tannic acid. The rhizome also contains resin and ethereal

oils. According to Hale's investigations (1873), the principal alkaloids are berberine and hydrastine.

Hager assigns the drug a place in the German Pharmacopœia as a tonic antiperiodic, and antiphlogistic (*Handbuch der pharmaceutischen Praxis*).

Mendes de Leon exhibited the drug in forty cases with favorable results. The cases may be arranged under five categories:

1. *Menorrhagia*.—In those cases in which the usual pains accompanying menstruation are increased in consequence of the genital congestion, to an intolerable colic. In mechanical dysmenorrhœa and in spasmodic obstructive dysmenorrhœa (Matthews, Duncan) *hydrastis* is of little value.

2. *Catarrhal inflammations of the mucous membrane of the body of the uterus and cervix*.—In this class of cases the practical value of the drug is great.

3. *Chronic inflammations of the pelvic connective tissue*.—*Hydrastis* lessens the congestion about the genitals during menstruation, and alleviates the abdominal pains usually experienced under such conditions.

4. *Dislocations of the uterus, especially in retroflexio and versio*.—It goes without saying that the drug is of value only in those cases in which, on account of adhesions, reposition of the organ is impossible.

5. *Climacteric hemorrhages*.—What the effect of the drug would be in cases of bleeding myomata Mendes de Leon is unable to say. Negative results were obtained in two cases.

The preparation exhibited was a strong tincture. Fifteen to twenty drops were given from four to five times daily, commencing fourteen days before menstruation. In certain cases the drug was exhibited during the intramenstrual period.

Mendes de Leon thinks, with Schatz, that hydrastis affects directly the uterine muscle and blood-vessels, producing contractions, and thus diminishing genital hypermia.

Unpleasant consequences from the exhibition of the drug are seldom observed. Digestive disturbances and obscure nervous symptoms were infrequently observed.

Mendes de Leon recommends the drug in cases of metrorrhagia conditioned upon a diseased state of the uterine mucous membrane, when the curette cannot be conveniently employed, or in conjunction with that instrument. In menorrhagia from the virginal uterus, the drug is indicated for obvious reasons.—*Ther. Gaz.*

Cocaine in Dilatation of the Female Urethra after Simon's Method.

DR. KOPPE, of Moscow, describes the case of an anæmic, extremely nervous, and sensitive lady, aged 40, who presented symptoms of an obscure vesical tumor, and in whom, for the diagnostic purposes, he resolved upon dilatation of the urethra. Chloroform being contra-indicated, the author resorted to cocainisation of twenty minutes' duration, by means of introducing into the urethra a Playfair's sound with hygroscopic cotton-wool soaked in a 20 per cent. solution of hydrochlorate of cocaine. At the same time, the solution was applied, also to the lower part of the anterior vaginal wall and to the urethral orifice. The application was renewed every five minutes. The diagnostic operation consisted in making three incisions (with scissors), from $\frac{1}{4}$ to $\frac{1}{2}$ centimetre in length, into the edge of the urethral orifice, and in dilating the urethra by means of Hegar's uterine dilatator (Nos. 10 to 18). Not the slightest pain or any other sensation was felt

by the hyperæsthetic patient during the whole procedure. Thus cocainisations proved here a brilliant substitute for chloroform narcotisation. As to the vesical tumor, it turned out to be "adenoid."—*Obstetric Gazette.*

Case of Diabetes Mellitus Cured by Removal of the Uterine Appendages.

In the *British Medical Journal*, Dr. Imlach records a most interesting case of a widow, aged 31, who suffered from pyosalpinx. An operation was suggested, but it was discovered that the patient was suffering from diabetes mellitus, passing over 2,000 grains of sugar during the twenty-four hours. After three months' treatment under anti-diabetic diet, the patient became so weak that an operation was decided upon.

Drainage by Koeberle's Method after Abdominal Sections.

DR. R. STANSBERRY SUTTON, in an article published in the *Obstetric Gazette*, says, in conclusion :

Drainage is used in this country to a considerable extent, but only a few operators know more than enough about it than is necessary to make their attempts dangerous to their patients. In my last thirty-nine abdominal sections, I have been compelled to drain more than one-third of the cases. This has been due to the fact that the cases were of a very severe character.

By drainage, after Koeberle's and Keith's method, I have saved a large number of women, after supra-vaginal hysterotomy, who would have died without drainage. In some cases I have thus removed thirty and forty ounces of bloody serum inside of forty-eight hours after operation. To properly drain cases, the following apparatus is required :

1. An assortment of glass tubes varying in length from 3 to 9 inches, and in caliber from the size of a goose-quill to the spout of a teapot. They should be perforated with holes in the last inch, and the top should be encircled with a flange.

2. A good 4.02 glass piston syringe, four inches of soft rubber tubing to unite the syringe to a celluloid catheter with the bend cut off.

3. Rubber sheets 18 x 18 inches, perforated in the centre with a very small hole.

4. Sponge to place over the end of the tube, to be surrounded in the rubber sheet.

Every possible antiseptic care is required to prevent Peasley's fear, viz.: septicæmia.

How shall we proceed?

My method, deducted from observations made a few years ago at the operations of Koeberle and Keith, is as follows:

On the table, at every operation within the cavity of the abdomen, the entire drain apparatus is in readiness. It is all submerged in an antiseptic fluid. A tube is placed in the lower angle of the wound reaching the bottom of the pelvis. It is secured by a suture above it. After the wound is all closed the rubber sheet is adjusted over the tube, the sponge is placed upon the mouth of the tube, and the rubber sheet is folded about it. All is secured with the binder.

At intervals of three or four hours during the first day, and six hours in the second day, the tube is emptied by suction with syringe and catheter. As soon as the serum loses its red color the tube is removed.

The longest time I have had a tube in was 56 hours; it was in the case of a lady who recovered after I did double ovariectomy for cystic ovaries and supra-

vaginal amputation of the uterus at the same time. She was brought here by Dr. McClure, of Suterville, Westmoreland County. She was operated on, March 28, 1884, in my private hospital; she is still living in good health, or was very recently, when I saw one of her neighbors, who knew her and spoke of her to me.

The cysts were developed under the broad ligaments, the latter roofing them, and the uterus was so involved that everything had to be renewed. In another case of the same character, done successfully and drained, I was able to leave the uterus. In one of the cysts there was a hole, and the cavity of the abdomen contained over sixty pounds of fluid secreted by the leading cyst. In a case sent me by Dr. Findley, of Altoona, in which I removed, by supra-vaginal amputation, the uterus, with large fibroids, this method of drainage not only saved the case, but made it easy.

But it was not my object to give or multiply cases; we have used drainage in a great many, some of whom recovered entirely by reason of it. Used properly, safely, viz.: with great cleanliness, it is a great method of safety, but it will admit of no carelessness or dirty measures in dealing with it. Following Keith's method in operating, viz.: the cautery clamp for the pedicle, and drainage, I have had patients recover who would have undoubtedly died by any ordinary methods of operating on them.

With drainage, Baker Brown's treatment of the pedicle, and my precautions in regard to sepsis, high temperatures are rarely seen, and for more than two and a half years I have not seen a drop of pus in a wound which I have made in the abdominal walls.

Dermoid Cysts of both Ovaries. A Diverticulum from the one on the left side Included within the Rectum. Ovariectomy. Recovery.

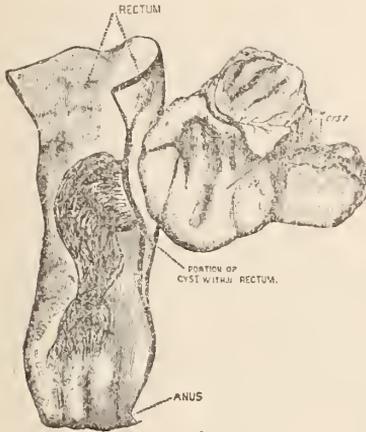
A German lady, age 48, married, and now living with her second husband. Menstruation began at ten years of age, and was always regular until two years ago; since then the intervals have varied between two weeks and four months, the quantity usually being normal. For many years she has suffered from frequent and severe headaches which would begin as soon as she awoke in the morning and continue until sundown. During the past two years they have been especially severe. She has had one child and two miscarriages. The child was born twenty-five years ago, after a tedious labor, which was accompanied by laceration of the cervix and perineum. Ever since that time she has had more or less pain in the right iliac region. The last miscarriage occurred ten years ago, previous to any trouble in the bowel or evidence of tumor. Six years ago, she observed one day, while at stool, that a bundle of hairs protruded from the anus. She tried to pull it away, but was unable, and stopped pulling only when compelled to do so by the severe pain which the effort caused. She refused to permit a doctor to examine her, and one day succeeded in pulling it all out, about three years after it was first observed. Since then she was not aware that it had grown again. About the same time she began to be troubled with very obstinate constipation which continued two years. Two years ago, she first began to notice that her abdomen was growing larger.

On May 28th (1885), I operated upon the patient. A short incision in the median line exposed the cyst, which was free from adhesions, with the exception of one, of moderate firmness, over the

fundus of the bladder. Nothing unusual occurred in the removal of this tumor, which had developed from the right ovary, contained several quarts of bland fluid, and was also the seat of three dermoid cysts which contained an abundance of sebaceous matter and hair. Upon the left side of the pelvis a tumor still remained, of the size of a very large orange, and firmly imbedded in the pelvic tissue. Some force was required to remove it from its bed, and this operation was followed by free oozing of blood, which was checked with some difficulty. The pelvic peritoneum was, of necessity, torn in the enucleation of the tumor, from which a fibrous prolongation projected in the direction of the rectum. Drawing upon this prolongation with sufficient force, the rectum was opened, a rent one and a half inches in length being made, and through this opening a small diverticulum, attached to the tumor by the fibrous prolongation, was drawn, which had growing upon it a long lock of black hair smeared with unmistakable fecal matter. The position of the wound in the rectum, at the bottom of a deep and dark cavity, made its closure a matter of the greatest difficulty. The cavity was illuminated, however, by a large mirror held at a sufficient height above the patient's body, and a continuous silk suture was at length applied. The abdominal cavity having been thoroughly cleansed, parietal peritoneum was closed with a continuous catgut suture, excepting at the lower angle, which was left open for the passage of a glass drainage tube, the latter being carried to the bottom of Douglas' cul-de-sac. Finally the abdominal wound was closed with silver sutures deeply passed, dusted with iodoform, and antiseptic dressings adjusted. The carbolic acid spray was used in the operating room for four hours previous

to the operation, which was performed with antiseptic precautions. Though very much prostrated by the operation, the patient began to rally within five hours, the temperature at that time being 101° F. per vaginam, and the pulse 102 per minute. The next day the temperature reached 103° F. at 10.30 P. M., which was the highest point reached at any time.

A very offensive bloody discharge was passed *per vaginam* on the fourth day, which became less in quantity and less offensive on the following day. The drainage tube was removed on the sixth day. The quantity of bloody serum in



the abdominal cavity, which was found at the different examinations, was quite insignificant. The sutures were all removed from the abdominal wound on the seventh day, and good union was secured excepting at the site of the drainage tube. On the morning of the eighth day, a dose of castor oil was given by the mouth, and this was followed two hours later by an enema of sweet oil. A large fecal movement resulted an hour later, and three hours and a half subsequently there was another, with a third, a fourth, and a fifth at short intervals. No bad results of any character followed this thorough

evacuation of the intestines. Complications from this period existed in the form of a very painful irritation of the bladder, which yielded after a time to suitable internal medication and irrigation; in the formation of an extensive mural abscess at the site of the drainage tube which burrowed into the left iliac fossa, but finally healed entirely, and in the formation of three fistulous tracks within the abdominal wound, external to the peritoneum. These latter were attended with great pain and the development of a profusion of fungoid granulations which were very suggestive of malignant disease, but which finally yielded to persistent treatment with solid nitrate of silver. It may be proper to add that the pain produced by the caustic was greatly relieved by applications of a four-per-cent. solution of cocaine made directly to the wound. The patient has not been seen professionally since the 1st of August, but at that time she seemed to have recovered entirely from her operation, and any consequences which may have followed from it.

A few words may be added in regard to the unique specimen which developed from the left ovary, a drawing of which accompanies this article. The body of the tumor presents nothing especially peculiar, but from its lower border springs the diverticulum, which resembles a pigeon's egg in shape, size and color. From or near the lower extremity of the diverticulum projects, as may be plainly seen, a tuft of hair three inches long. The fecal matter which covered this when it was removed from the abdominal cavity gave rise to the unpleasant suggestion that the lumen of the intestine had been invaded. This, however, did not prove to be so serious an accident as was feared. Several interesting questions arise in connection

with this peculiar specimen pertaining to the field of the embryologist and pathologist rather than to that of the surgeon. My own idea is this, that the diverticulum was pushed through the anterior wall of the rectum by a process of ulceration, and absorption of that wall during the growth of the tumor, the diverticulum evidently being a portion of the dermoid tumor of the left ovary.

DISEASES OF CHILDREN.

A Case of Unusual Malposition of the Viscera in a New-Born Child.

DR. JOHN PHILLIPS (*Archives of Pediatrics*). On the 29th of last May I was requested to perform a post-mortem examination on a child which had died twenty minutes after birth, without apparent cause.

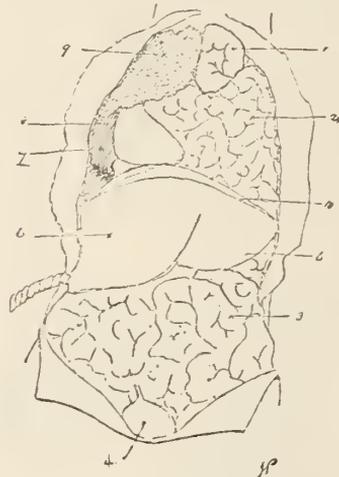
The child in question was the third. None of the others had any malformation and were quite healthy; neither was there any family history of deformity on either side discoverable.

The mother experienced a fright two days before the labor commenced, but it was normal in every way, and the child was born at full time. After delivery it gave a few feeble cries, and by dint of artificial respiration was kept in a semi-moribund condition for twenty minutes.

Post-mortem Examination.—The body was that of a full-timed, well-formed female child, weighing seven pounds. The abdomen was very flattened, but no malformation could be discovered externally. On removing the chest-wall and opening up the abdominal cavity, the appearance roughly sketched in the figure presented itself; the whole of the space usually occupied by the left lung, the heart, and large vessels were filled with intestines; the upper third con-

sisting of large bowel, stained of a greenish brown hue, the lower two-thirds being made up superficially of coils of small intestines of a pinkish white color.

The right side contained at the apex, the thymus gland; below that the heart and large vessels covered by the pericardium. To the right of these latter



Superficial View of Viscera on Opening the Thorax and Abdomen.

1. Large intestine. 2 and 3. Small intestine. 4. Bladder. 5. Umbilical cord. 6. Liver. 7. Right lung. 8. Heart and vessels in the pericardial sac. 9. Thymus gland. 10. Section of diaphragm.

and slightly below was the right lung, trilobed, but in a condition of almost complete atelectasis.

On raising the intestines on the left side, the stomach came into view, resting on the convex surface of the diaphragm, with one or two coils of large intestine of olive-green color covering its pyloric end. At its cardiac end was the spleen, and behind and below, the left lobe of the liver could be seen passing through a large congenital deficiency in the posterior part of the left side of the diaphragm. The opening was oval, being three and one-half inches in breadth and an inch in its antero-posterior diameter. The edge was quite smooth, the serous surfaces being continuous.

Towards the median line of the

thorax, and attached by some fibrous tissue to the vertebral column on the left side, was a small bilobed brownish yellow mass, which proved on examination to be undistended left lung. On removing the pericardium, the ductus arteriosus was found patent, the right pulmonary artery could be traced into the right lung, but a fibrous band represented that going to the left lung.

The brain was normal. The abdominal cavity was occupied by the liver, the remainder of the large and small intestines, and the bladder.

Cases of *transposition* of viscera are rare; but I have been unable to find a case on record of malposition similar to the one described above. The question as to the possibility of the child being born alive with such a condition existing is manifestly an interesting medico-legal problem.

Therapeutics of High Temperature.

DR. WATSON, in a clinical lecture published in the *Arch. Pediatrics*, says, substantially:

While I do not intend to speak of the causes of high temperature to-day (as we daily go over that ground with each case appearing before us), yet you must remember that in some cases your treatment must be directed toward the removal of any existing exciting cause. Thus, you may have a high fever from an acute attack of indigestion, and obviously you should relieve that. This, then, leads me to say that it is good practice in nearly all your cases with high fever to precede your regular febrile treatment by cleaning out the gastro-intestinal canal. You can do this with castor oil, rhubarb, frequently combined with soda, or with calomel and soda, as in this prescription. \mathcal{R} .—Hydrarg. chl. mitis, gr. i. to iiij; sodii bicarbonatis, gr. ij to xv, followed by a seidlitz powder

in milk, in three or four hours. The most available, and, at the same time, valuable internal remedies are aconite, quinine, and antipyrine.

1. *Aconite*. The best preparation of this drug to use is the tincture of the root, and is given in plain water, or it may be combined with other febrifuges. On account of its comparative tastelessness, it is readily taken by young children, and as I have told you about all tasteless and non-irritant medicines, it is best to give it in small and frequently repeated doses.

On account of its frequent prostrating effects, you should see the child taking it every two or three hours. When this is impossible, I have found the following plan to answer very well, viz., for a child under two years of age, I prescribe one-twelfth of a drop every fifteen minutes for the first hour, and then every half-hour for two hours, and subsequently every hour, until my next visit. You will, however, get better results from it if you give it every ten or fifteen minutes, and see the child at least every second hour. A precaution that I always give the mother is to stop giving it when the child begins to perspire. This is usually, though not always, a reliable guide.

The indications for its use are a hot, dry skin, full and frequent pulse, and a temperature over 102° F. Hence, its value is most marked in the pneumonias, in the eruptive and desquamative stages of the exanthemata, and in the acute inflammations of the serous membranes.

While you will find this drug one of the most valuable anti-febrifuges, yet it will fail in some cases, and if you have produced a marked effect on the quality and frequency of the pulse, without any fall in the temperature, then you must abandon its use for another remedy which I will shortly tell you about.

In some cases you will get excellent results with the following combination, viz.:
 ℞—Tr. aconiti rad. gtt. ij; sp. æth. nitrosi, ℥ ij; glycerinæ, ℥ ij; liq. ammon. acet. q. s. ad. ℥ ij. M. S. ℥ ss, q. h.

If the child has more or less delirium, it will be well to add five or ten drops of paregoric to each dose as given. As I have frequently told you, it is always better to prescribe your preparation of opium separately, so that you can increase or diminish its quantity as desired.

2. *Quinine*.—For those of you who live in districts where malaria is either the primary or a complicating factor in nearly all diseases, quinine will be your sheet-anchor. You can use it in any of the following ways, viz:—

Quinine.	{	Per Orem {	Powder. {	Milk, Coffee, Cocoa, Liquorice.
			Liquid. {	Liquorice.
	Per Rectum {	Suppository. Enema.		

(Hypodermically, or by Inunction.)

In nearly all cases it will be advisable to precede the use of quinine by the mouth by a cathartic. One of the best ways to give quinine by the mouth to young children is in the form of a powder in one of the menstrua just mentioned. When given this way have the quinine dispensed in one-grain powders, and add one or more, as desired, to a teaspoonful of the milk, coffee, chocolate or liquorice, at the time of its administration.

Sometimes I add ten or fifteen drops of the fluid extract of liquorice-root to the teaspoonful of milk, in which the bitter taste of the quinine is very well disguised. Again, you will find cases which will take the quinine in powder alone.

The Elix. Taraxaci Comp. is also a very good vehicle for the administration of quinine, and there are also several other compounds upon the market

for a similar object, but I don't think you will require them, especially with children. As with adults, so with children, the most reliable effects will be obtained from the use of an acid solution of the quinine, but its very bitter taste would be objectionable in most cases.

I have frequently used quinine in suppositories with very satisfactory results. I think it well, without some marked indication to the contrary, to combine with it a minute dose of opium, to allay in some degree the local tenesmus of the gut. When used in this way, I prescribe double the quantity that I would by the mouth. The best menstruum is cocoa butter, and after the introduction of the suppository within the sphincter, the buttocks should be pressed firmly together for several minutes. It will be well for you to remember that these suppositories may so irritate the lower bowels as to simulate dysentery.

You will frequently have occasion to use quinine hypodermically, and usually with good results. The best location for the injection is the buttocks. The dose should be from a half to two-thirds of that for the stomach. I have always used the bisulphate, which, with the addition of a little heat, is soluble in eight parts of water.

Quinine has also been used by inunction, with some oleate as a menstruum, but rather in chronic than acute cases.

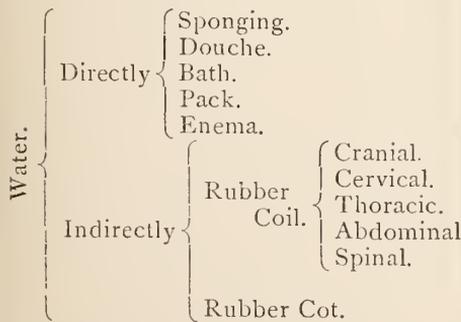
When you have a temperature of 106° F. of undoubted malarial origin, and there are no immediate complications apparent, use quinine hypodermically, and repeat it in an hour if required.

3. *Antipyrine*.—The last of the internal remedies I shall call your attention to is antipyrine. During the past year or two it has been used quite extensively in this country, and for some time previously in Germany. There

seems to be no special indications for its use, excepting a high temperature regardless of its cause. It may be given by the stomach, by the rectum, or hypodermically. The best way to give it is in three successive doses at hourly intervals, which can be repeated in six hours if necessary, and for a child under seven years of age the dose, to begin with, is one grain for every one and a half years of the child's age. This dose should be doubled in the second series of these doses. Usually, however, the temperature remains down several degrees for about eighteen hours after the first series of these doses, and then does not reach its previous height. If given in an enema, double the quantity should be administered at the same intervals. If given hypodermically, half the quantity dissolved in warm water can be used.

You can reduce any temperature, and that, too, with a remedy which you will always have at hand wherever you may practise medicine—*i. e., water*. Furthermore you can reduce the temperature safely and prolong, if not save, the life of the little patient; at least you will not have done your duty until you have made every effort to reduce the high temperature which is killing the child.

You can use the water in any one of the following ways, viz.:



Sponging—This is the easiest and frequently a very efficacious way of

using the water. If you have a temperature of 105° F., with no serious complication impending, you can have the child's clothes removed, and place it on the smooth surface previously mentioned (with a rubber sheet beneath the cotton sheet), and with water at 90°, commence to sponge the thorax and abdomen, and at the same time, have the water gradually cooled down to 70°, turning the child first on one side and then on the other, so that the back can be frequently sponged. Do this for thirty minutes, and you will probably find the rectal temperature down to 102° or 101°; if so, I usually wring out a piece of muslin, long enough to reach from the shoulders to the hips, in equal parts of whiskey and water, to which a little ground mustard has been added, and wrap this around the child's body; then covering the child with an ordinary sheet, allow it to remain in this way for one or two hours. If, at this time, the temperature remains down, the child can be removed to a dry surface, but not dressed for at least three hours more, when, if the temperature still remains down, it can be lightly dressed. During all this time, cloths dipped in iced water should be repeatedly applied to the head, and, if the child is comatose, a hot flaxseed poultice sprinkled with mustard, is kept applied to the nape of the neck. If the heart's action is feeble or irregular, I usually take a small sponge moistened in hot whiskey and water, sprinkled with mustard, and apply it over the pericardium for ten or fifteen minutes. During all this time the extremities have been kept warm, as previously described. In the meantime, the child has taken whatever nourishment it desired. Now, if malaria was the cause of the high temperature, primarily, you should administer quinine in some one of the ways I have

already described ; or you can keep the child in this way—*i. e.*, undressed, and when the temperature goes above 103° , either sponge it again or apply the whiskey-water sheet. However, if the temperature repeatedly goes up, after being thus reduced, it will be better to put the child either on a rubber coil or a rubber cot, which I will soon describe to you. I think this one of the most practical and feasible ways of reducing a high temperature in ordinary practice; the parents and friends, however skeptical cannot object to it, for they see you commence with warm water, which you have gradually cooled, under the pretence that “the body is so hot that you must add ice to keep the water the same as when you commenced.”

Douche.—When you have a temperature of 106° or 107° , with the child either in convulsions or profoundly comatose, more rapid work than the preceding must be done. In three cases of this kind, I have improvised a Kibbe cot, with two chairs, a blanket, and a sheet. The chairs, with square-top backs, are placed back to back, about thirty inches apart, and over the tops the blanket is tightly stretched, and fastened with large safety pins to the centre cross-piece, in the back of each chair, respectively; then on this blanket the sheet is placed, and the undressed child on the sheet; beneath the blanket, and between the chairs, there is a small bath tub. It is well to place a thin sheet over the thorax and abdomen of the child, so that the shock will not be so great. When everything is in readiness, and you can do it all in the time I have been describing it to you, take water at a temperature of 90° , and pour it over the thorax and abdomen for three or four minutes, gradually having the water cooled down to 75° in the meantime, and there will be signs of returning consciousness

within a few minutes. Within five minutes, the thermometer in the rectum will show a fall of four or five degrees in the body temperature ; and here again keep the extremities warm. You can protect the legs from the water by a sheet tightly rolled up and placed under the thighs. If you put your hand underneath the blanket, over the middle of the back, you will be surprised to find the amount of heat there. Leave the child on this cot for several hours. Perhaps, after several hours, the temperature will go up again; if so, then again apply the douche, but only for two or three minutes. One advantage in using the water in this way, is that you have it under your complete control, so that if there are any appearances of shock, you can apply warm or hot water instantly, and that too, without moving the child. Of course you are to use this method only in desperate cases, and in families of intelligence, and with their full consent, after you have explained to them the gravity of the case.

Enema.—In cases where you must reduce the temperature very rapidly, enemata of cold water, a gill at a time, repeated every ten minutes, will do well in some cases. I have used it in one case with a temperature of 107° , caused by malaria. The infant was in convulsions when I was called in, and a syringe being at hand, I immediately gave it an enema of cold water, and repeated it in five minutes, after which the convulsion ceased; the enemata were repeated every ten or fifteen minutes for an hour, at which time I had obtained a solution of the bi-sulphate of quinine, which I gave hypodermically, and the high temperature or convulsions have not since re-occurred. I should advise you to use it only in similar desperate cases.

INDIRECT APPLICATION.—This method of using water in reducing high

temperatures in young children consists in the use of tubing of rubber (lead or copper might be used) through which water is passed either from the hydrant or a syphon. The most convenient way of using it is to attach one end of the tube—*i.e.*, the receiving tube—to the water faucet of the hydrant, while the other end, or the discharging tube, is placed in the basin of the hydrant. The temperature, or degrees of cold, applied to the skin of the patient can be regulated in four ways, *viz.*: 1. By the temperature of the water used; 2. By the force applied to the stream in passing through the tube; 3. By the thickness of, and covering over (as sheet or blanket) the tube; and 4. By the amount of clothing on the patient.

Causes of Death in New-Born Children.

DR. NOBILING, of Munich, whose labors in forensic medical research have earned him the reputation of a high authority in Bavaria, has recently published in the *Ärztliches Intelligenzblatt* a series of contributions on the pathological appearances observed in the bodies of children that have died from asphyxia shortly after birth. He has examined a large series of bodies, and has arrived at the conclusion that the asphyxia often attributed to overlying, and even to obscure pulmonary disease, is too often due to foul play. He is particularly suspicious of extravasations of blood, and sums up his conclusions on that subject. Extensive subcutaneous extravasations could always be traced by Dr. Nobiling to external violence, including such as might be received in protracted and instrumental labor, and attempt to restore animation. Effusions of blood in the muscles of the neck and along the course of the great vessels are always caused by forcible strangulation. Hemorrhages under the

capsule of the liver or in its substance are invariably the result of external pressure, and so are lacerations of the peritoneum, liver, spleen, and kidneys. These injuries are by no means rare results of violent attempts to promote respiration, and Dr. Nobiling has traced them also to rough and clumsy handling of a new-born infant by male relatives or incompetent nurses. Hemorrhages in the tissues of the umbilical cord are very rarely caused by the mechanical forces of labor, or even by artificial replacement of the prolapsed cord; they generally result from firm manual pressure on the cord, or from intentional laceration. Circumscribed collections of blood under the scalp or integuments may be either due to mechanical labor, or to many other kinds of external violence; the same applies to hemorrhages in the substance of the lips, tongue, palate, and pharynx, which are always traumatic. Bleeding from the external auditory meatus and extravasations behind the ear are also the results of violence, not disease. Dr. Nobiling has often found a portion of the fluid or solid material which caused the infant's death in the nasal fossæ, mouth, larynx, trachea, bronchi, pulmonary vesicles, œsophagus, stomach, tympanum, or Eustachian tube, sometimes in only one of these anatomical structures and regions. When blood is found lying free in the same parts, it may have proceeded from the infant's nose, or have entered its mouth during parturition, being of maternal origin. The principal lesson to be learnt from the researches of Dr. Nobiling is that all internal and intestinal extravasations of blood in the body of an infant are to be regarded with suspicion, and to be considered as traumatic, being due to violence causing visceral injury, or complete and sudden asphyxia.—*Medical and Surg. Rep.*

Recent Methods of Treatment of the Asphyxia of New-Born Children.

Although we have published Schultze's method of resuscitating the new-born before, we herewith present a resumé of an article by DR. WM. L. REID, published in *Medical Abstract*, illustrating the method in question, believing a bet-

bones. (Fig. 1.) Without delay in this position, the child is swung sharply upwards, until the operator's arms are extended horizontally, then the upward movement is continued more gently so as to bring the legs slowly past the perpendicular and allow them to sink quietly against the front of the child's



Fig. 1.

ter idea of this procedure can be obtained thereby.

Schultze's method: The child is to be suspended a few inches from the floor, by the two index fingers placed in the axillæ from behind, the thumbs lying loosely over the front of the thorax, and the other fingers spread also loosely over the thorax behind, the head being supported against the edges of the ulnar



Fig. 2.

body. (Fig. 2.) The weight of the latter is now supported by the thumbs in front of the thorax, and the chest pressed on all round by the fingers, and its arms laid against its sides. This compression through the diaphragm below, and the fingers all round, causes aspirated fluids to flow freely from the mouth and nose. After being retained in this position a few seconds, the body is swung smartly down again into its former position, taking care that now there is no compression of the chest, either before or behind, but simply a suspension of the child on the index fingers. (Fig. 1.) During this movement the contents of the abdomen, partly

by gravity, and partly by centrifugal force, fly away from the diaphragm, and dragging it down, enlarge the chest from below. At the same time the arms are separated from the sides, and by their muscular attachments drag the ribs upwards, and in this way air is sharply drawn into the lungs. These movements are continued every four or five seconds, unless when a considerable quantity of

fluid continues to come from the mouth and nose, when the movement of expiration is on that account prolonged.

OBSTETRICS.

Method of Inducing Labor.

Prof. TIBONE, in an article in the *Revista Clinica e Terapeutica*, suggests a modification of the method of Krause which is, as is known, the introduction of an ordinary sound into the uterus, leaving it there until labor is established. Tibone's method is as follows: After taking all antiseptic precautions the cervix is brought into view by means of a speculum and then a special kind of sound is introduced. The author prefers the plain English bougie, No. 10 or 12. The bougie is held a moment in a warm mercurial solution and is gradually softened; it is then introduced into the cervix and slowly and gradually pushed up until it has entirely disappeared inside the womb. There is then placed upon the mouth of the womb a large tampon of cotton soaked in an antiseptic solution; the patient may then get up and keep about until the appearance of labor. This method is perhaps a trifle slow but it is sure, and on account of the softness of the instrument used there is no exposure to violent rupture of the membranes or to serious injury to the placenta. The author has used this method repeatedly and always with satisfaction.—*L'Union Médicale*.—*Western Medical Review*.

Mistletoe as a Parturifacient.

Dr. G. V. HALE, in a recent number of the *Texas Courier Record*, calls attention to the use of the fluid extract of mistletoe (*Phoradendron flavescens*) in cases where a uterine stimulant is required. He says but little mention is made of this useful agent. In doses of

twenty to forty minims, repeated at intervals, he has had the most happy results. In a recent case, occurring in a patient aged thirty-seven years—fifth confinement—in which hard pains simulating those of labor had existed at long intervals for some two days, followed by a sudden gush of liquor amnii and then a complete cessation of any pains for two hours, an exhibition of this preparation in the manner indicated above was followed in less than an hour by effective contractions and the birth of a nine-pound male child in less than two hours thereafter, the shortest labor ever experienced by the grateful patient.

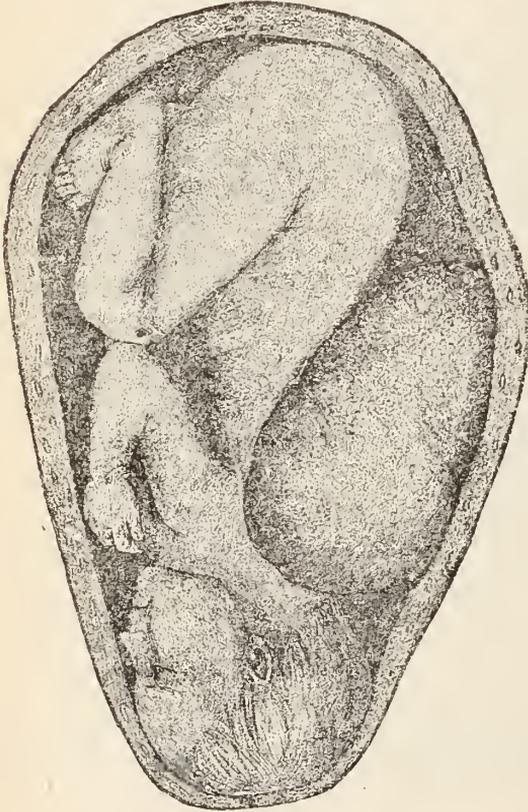
There seems to be no contra-indication to its use at any stage of labor—other things being equal, of course—and it seems probable that we have in mistletoe a parturifacient not excelled, if equalled, by ergot or gossypium.—*Louisville Medical News*.

A New Test for Human Milk.

DR. HÉLOT (*Lyon Medical*), has discovered a method at once simple and practical to test the quality of woman's milk. It consists of a comparison by means of a dropper of the number of drops in a volume of distilled water at 15°, with that in an equal volume of the milk. Good milk, that which will cause a gain of 25gm. per day in the weight of the child, gives a proportion of 35 drops to 30 of distilled water. The number of drops may vary, increasing to 36, 37 or 38. The milk is then of superior quality. If, on the contrary, one gets only 33 drops, or less, he should mistrust the milk. The Pravaz' syringe allows of the accurate accomplishment of this examination; it only being necessary to remember the ratio of 5 to 6 between water and good milk. The test should be applied to each breast in the middle of the nursing.—*Medical & Surg. Reporter*.

A Case of Uterine Fibroid Complicating Labor.

DR. C. A. KIRKLY recently reported an interesting case to the *American Journal of Obstetrics*—an illustration of which we copy—in which a primipara, 35 years of age, was delivered after four days by craniotomy, having resisted all the ordinary measures. The true cause of



dystocia was only ascertained after the delivery of the child, as is explained by the accompanying remarks of the doctor, which we reproduce :

“ Had the presence of the fibroid in this case been known, the result might have been different. It was not even suspected until after delivery of the body. In its general character it so much resembled a child’s head, that the only impression that prevailed was, that we were dealing with a monstrosity of

some kind, or a twin birth. Had the condition been known, the Cæsarean section would have afforded the patient a better chance of recovery had she been allowed to go to full term. I had no knowledge whatever of the patient until engaged to attend her in her labor. The tumor, attached as it was to the side of the uterus, would have offered no impediment to the Cæsarean section. The object sought by craniotomy was, that force might be more directly applied to the child’s body. The usual indications for performing that almost always unjustifiable operation did not exist, that is, the pelvis was normal, and the child’s head was not too large ; but owing to the condition of the patient when it was decided upon, and the natural obstruction from resistance of the soft parts, it was concluded the best thing to do. It is singular that the natural function of the uterus could be performed under such unfavorable circumstances.

The neck of the child was pressed much nearer the uterine wall on the right side than is shown in the cut, thus making the space for the escape of the body very narrow. When traction was made, the position of the tumor would so change as to completely wedge the body of the child within the cavity of the uterus.”

Dextro-Quinine in Puerperal Fever.

We have found five grain doses of dextro-quinine to act with marked efficiency in the pyrexia of puerperal fever ; especially is this preparation of advantage where the sulphate produces marked cerebral symptoms.

PUBLISHERS' DEPARTMENT.

WOOD'S HANDBOOK OF THE MEDICAL SCIENCES. [*Second Notice.*]

The articles upon the Circulation of the Blood, by Dr. William Gilman Thompson, while making but little claim to originality, is an able resumé of the subject, plentifully interspersed with the names of authorities in parentheses. For a work of reference like the present, this seems to be the most valuable form of paper; giving us as it does the present status of the subject from all sides, with a copious bibliography for the benefit of those who wish to push their investigations further rather than confining its scope to the views of the author. In fact, throughout the volume the bibliography is made a cardinal feature, thus adding greatly to its usefulness to those who seek in its pages an index resumé of medical literature.

The principal agent in propelling the blood being the contraction of the heart, the accessory agents are stated to be, "1, the contraction of the arteries, and of 2, the muscles among which the veins lie; 3, aspiration of the chest; 4, capillary attraction; 5, osmosis caused by chemical tissue-change." In regard to the action of the heart it is only necessary to note that the author adopts the view that during the systole "the long diameter is shortened very slightly by the ventricular contraction and by the descent of the base of the heart," in accordance with the majority of observers and opposed to Dalton. The nerve supply of the heart is briefly but clearly outlined, and a short synopsis given of the experiments of Schelling, Landors, Sée, Martin, Czenmak, Breedom-Sanderson, and others, with local and uterine cardiac stimuli. The ultimate cause of the heart beats is admitted to be entirely unknown.

Under the section head of action of auricles and ventricles, the remarkable statement is made upon the authority of Kirke that "the ventricular contraction occupies four-tenths of a second, no matter what the rate of the heart beats may be." Further on we are told that with very rapid pulsations the ventricular systole occupies only 0.199 second. No explanation is given of the contradiction. The absurdity of the former proposition is made manifest by the simple calculation

which shows that with a pulse of 150 to the minute, the entire time of a pulsation, including the diastole is but four-tenths of a second. The fact of course is that while the length of the systole may vary, it is much more constant than that of the diastole. The description of the valves of the heart, and of their action is admirable, and it is illustrated with cuts, which, if not very beautiful from an artistic standpoint, are, with one exception, well designed to elucidate the text.

The work of the heart is estimated at 124 foot tons in 24 hours. The work of the left ventricle is about three times as great as that of the right. A summary of the recent observations upon the work of the heart, made by W. H. Howell and F. Donaldson is given, by which it appears that diminution of pulse rate causes an increase in the quantity of blood thrown out from the ventricle at each systole and consequently an increase of the work done at each systole and vice versa. The number of systoles required for all the blood in a dog's body to pass through the left ventricle is estimated at fifty-four variations of arterial pressure from 58 m.m. to 147 m.m. of the mercury column, have practically no effect on the quantity of blood sent out from the ventricle at each systole, but the work done by the left ventricle varies directly as the arterial pressure against which it works within these limits; above this limit the work done continues to increase, but not in proportion to the pressure. There was found to be no constant relationship between the weight of the heart and its work. The mean ratio of the maximum weight of blood thrown out from the left ventricle at a single systole to the whole body weight is .00117 or $\frac{1}{855}$ for a mean pulsation of 180 per minute.

We wish the influence of respiration upon the circulation had been made a little clearer. "The heart and large vessels are exposed to an atmospheric pressure which is minus the elastic traction of the chest," the meaning of this is not very obvious. In the absence of any respiratory effort the heart and large vessels are exposed to exactly the same atmospheric pressure as the rest of the body. When an inspiratory effort is made, the volume of the thorax is increased. By an elementary law of physics, all fluids communi-

cating with it tend to flow in to fill the increased space, the two most important fluids which do so communicate are air and blood; hence blood, as well as air, tends to flow in; when an effort to expire is made the volume of the thorax is diminished, and blood as well as air is crowded out, as the mechanism of the vascular apparatus allows the blood to move but in one direction, the tendency of respiration is to accelerate its flow. This seems to be the very simple explanation of the so-called aspiration of the chest as an element of the circulation.

Capillary attraction is stated to be a factor in aiding the blood flow, though it is admitted that little importance is attached to it by most physiologists at the present day. It would seem that such attraction as the capillary vessels exercised toward the blood would be expended in retaining it in contact with themselves, not in forcing it beyond them. Capillary attraction will draw fluid into a tube, but never force it through one; if it would the problem of perpetual motion would be solved.

As a concise statement of the present knowledge of the physiology of the blood, it would be hard to imagine anything more satisfactory than has been given us by Dr. Frederick P. Henry. It occupies sixteen of the large pages of the Handbook. As a method of estimating the number of blood corpuscles, the writer gives preference to a combination of Gowers' graduated pipettes, with Hayem and Nacet's cell and eye piece, which seems to be the simplest and most satisfactory process yet suggested. In regard to blood formation, the writer presents impartially the views of Norris, Hayem and others, without committing himself to any one. "Although," he says, "the subject of blood formation is yet in embryo, its development within the last few years has been remarkable, and there is every

reason to hope that ere long it will be as thoroughly understood as any other function in the animal economy.

Subjects connected with embryology have been assigned to Dr. Charles Sedgwick Minot. Those appearing in the present volume treat of the allantors, the arunion, the area embryonalis-pellucida-vasculosa and the blastoderm. The several subjects are considered with great clearness, and are admirably illustrated. "The blastoderm of (probably all) vertebrates," the author states, "passes through two stages. The *primary blastoderm* consists of ectoderm only, which is separated except at its edges, from the yolk by the segmentation cavity; the *secondary blastoderm* is constituted by portions of the three primary germ layers, which overlie a second cavity belonging to the entoderm, and lying behind and separated from the segmentation cavity; the secondary blastoderm is the commencement of the embryo."

The "Development of the Brain" is considered by Prof. Henry F. Osborn, and the subject of the Anatomy of the Brain, which is to be from the pen of Dr. Burt G. Wilder, will appear in the appendix, where the Doctor promises a large number of original figures from new dissections, and a sample of his simplified nomenclature.

Among the more important of the remaining articles upon anatomical and physiological subjects may be mentioned: Accommodation and Refraction, by Dr. H. Gradle; Aliment, by Dr. R. H. Chittenden; Applied Anatomy of the Arm, by Dr. M. H. Richardson; Arthrology, by Dr. Frank Baker; Bladder of the Male, by Dr. Arthur T. Cabot; Bladder and Urethra of the Female, by Dr. Wm. Gardner; Blood-Vessels, by Dr. Wm. L. Wardwell; Histology of Bone, by T. Mitchell Prudden; the Bronchi, by Dr. Lewis L. McArthur, and Bursæ, by Dr. Frank Baker.

CONSTITUTIONAL DISEASES.

Baths in the Treatment of Cerebral Rheumatism.

The following are the conclusions formulated by Dr. H. DUPRÉ in a recent thesis on this subject (*Revue Médicale*):

1. Hydrotherapy ought to be employed in cases of cerebral rheumatism with hyperpyrexia and delirium, whether the articular symptoms be present or not.
2. The condition of the pulse and temperature, and the nervous symptoms, are the indications to be followed in deciding upon this plan of treatment.
3. In presence of such great danger any temporizing method is inadmissible.
4. Baths are to be preferred to any other plan of treatment.
5. In sub-acute cerebral rheumatism baths of a temperature of 63° to 75° F. should be used.
6. In the acute form a temperature of 85° to 90° F. is preferable, and this may afterwards be reduced, if deemed desirable, by adding cold water.
7. This method is often successful, but it should not be considered as certain, for there are cases in which it occasionally fails.
8. There are no absolute contra-indications to the use of baths, though, of course, the method is not without its dangers; it may give rise to congestions of various kinds, syncope, pleurisy, and the like.—*Medical Record.*

Splenic Anæmia.

The affection known as Hodgkin's disease is often confounded with splenic leucocythæmia, as there is in both an exaggerated development of the lymphatic ganglionic system, but in the former the characteristic alteration in the blood is wanting. Dr. Banti has described another form of anæmia in which the ganglionic system is unaffected, but in which there is a very noticeable hypertrophy of the spleen. There is no apparent cause for the impoverishment of

the blood, as it seems not to be due to either scrofula, rachitis, syphilis, or alcoholism. Climate, sex, and age appear to exercise no causative influence upon the disease. At the autopsy the liver is found to be somewhat enlarged, and of a yellow or brownish red color. It appears under the microscope to be the seat of a circumlobular interstitial hepatitis, arising from around the branches of the portal vein. The hepatic cells are normal, or are atrophied and the seat of fatty degeneration. The spleen sometimes fills a large part of the abdominal cavity, and may weigh as much as five or six pounds or more. Its color is brownish-red. The capsule seems to be thickened and opaque in certain places. The microscope shows the lesions to consist of an atrophy and sclerosis of the Malpighian corpuscles and of a general sclerotic degeneration of all the network of the organ. The disease begins insidiously and presents, ordinarily, three stages in its evolution. In the first there is hypertrophy of the spleen, which ordinarily passes unperceived; in the second stage the symptoms of anæmia appear; and in the third the cachexia supervenes and leads rather rapidly to a fatal issue. The patient is easily fatigued, his breath is short, and the pulse is forcible and rapid. The skin and external mucous surfaces are pale, and there is often œdema of the lower extremities. Then the symptoms become gradually worse. The skin assumes a dirty-white appearance, the adipose tissue disappears, and the œdema becomes generalized. Finally, come hemorrhages and fever. As secondary symptoms may be noted, hypertrophy of the liver, dyspnœa, dyspepsia, diarrhœa, weakening of the mental faculties, etc. The only treatment advised by Dr. Banti is extirpation of the spleen.—*Ibid.*

The Latest Antipyretic.

PROF. STRAUP, in Vienna, while investigating the action of various salts of the Peruvian bark, discovered a short time since a new alkaloid, a base containing oxygen, and derived from para-oxychinolin. Iron chlorid, and other oxidizers, produce a green discoloration of the solution of the salts of the new alkaloid, and the latter, of which the sulphate and the tartrate now are in commerce, received in consequence of this reaction the name of thallin. The sulphate as well as the tartrate were at once employed for clinical experiments, and their actions investigated. Dr. v. Jacksoh (*Vienna Med. Weekly Paper*, 8, 1885), and Dr. C. Alexander (*Allgem. Med. Centr. Zeit.*, February 11, 1885) have since reported that the new alkaloid is one of the most powerful antipyretics known, very prompt in its action, and effectual in comparatively small doses. A dose of from four to five grains is sufficient to reduce the temperature by several degrees for three or four hours. According to the height of the fever, the number of degrees it is intended to reduce the temperature, and the time during which this action is desired to be maintained, the dose mentioned is administered every hour, two, three, or four times in succession.

Children and delicate persons take the remedy best in syrup. pruni. Virgin. It is well to mention that the urine of patients under the effect of the drug, assumes a greenish color in small quantities, and in larger a brownish-yellowish hue; therefore the effect is similar to that of carbolic acid.—*Medical and Surgical Reporter.*

The Administration of Antipyrin.

After a number of trials, M. Dumouillard (*Lyon Méd.*) gives the preference

to the following formula: Antipyrin, 20 parts; Jamaica rum, 30 parts; syrup and water, each 150 parts. In typhoid fever, he gives a teaspoonful three times a day.

Antipyrin as a Sedative.

DR. A. WALKER, *British Medical Journal*.—I have found antipyrin useful to produce sleep in two cases of typhoid fever, and in several cases of pyrexia in young children.

In the two cases of typhoid fever, 15 grains were given at 9 P. M., $7\frac{1}{2}$ grains at 10 P. M., and $7\frac{1}{2}$ grains at 11.50 P. M. The result was reduction of temperature from 104° F. to 105° F. to about normal, and good refreshing sleep for five or six hours.—*Medical World.*

A New Method of Treating Diphtheria.

DR. R. J. NUNN says in *Atlanta Medical and Surgical Journal*: In the study of a successful mode of treating diphtheria, two aims must be kept constantly before the mind: 1. To neutralize the constitutional taint: 2. To remove, and arrest the formation of local deposits.

Assuming that the cause of diphtheria is a microbe, the destruction of the germ may be accomplished in two ways:

1. By chemical re-agents, known as antiseptics, etc.

2. By the discovery of some other micro-organism which will eat up or destroy the microbe of diphtheria.

Neglecting the second method, the writer endeavors to show that we are in possession of germicides which can be introduced into the blood in sufficient quantities to destroy the microbes without affecting the vitality of the patient. These antiseptics are the biniodide of mercury and the iodide of potassium. According to the experiments of Dr.

Miguel, one part of biniodide of mercury will render 40,000 parts of beef tea antiseptic. Hence, one grain of the biniodide will render the body of a child weighing fifty pounds antiseptic. But it is manifestly impossible to give this drug in such quantities. Dr. Miguel found that the proportion of iodide of potassium required to sterilize beef tea was one-seventh, but one-ninth or even less of this quantity will render urine antiseptic. Dr. Nunn accordingly concludes that one-eighteenth of a grain of the biniodide of mercury will prevent the development of bacteria in a child weighing fifty pounds, and this minute proportion may be still further reduced by giving iodide of potassium with it. One of the first indications to be fulfilled is to keep the system saturated with the antiseptic, and as these drugs are rapidly eliminated from the system, they must be given at short intervals. One grain of the biniodide is dissolved in from four to eight ounces of water, and iodide of potassium added according to the age and condition of the patient.

For combating local symptoms, the peroxide of hydrogen is preferred as a solvent of the membranes. This drug, while acting as a powerful solvent of the membrane, has no effect upon the healthy tissue; besides, this remedy cannot be classified with the poisons. The only drawback to the employment of this agent is, that, although it rapidly dissolves and washes away recent deposits, it is almost powerless against thickened and hardened masses; hence arises the necessity for a digestive agent. For this purpose, pepsin, pancreatin, trypsin and papayotin have been used. The latter is to be preferred, because it acts equally well in alkaline or acid solutions. Agavin is also suggested.

The papayotin is applied to the membrane by means of a powder blower, of

it may be used in solution. The parts should first be cleaned with peroxide of hydrogen, and nothing should be given for half an hour afterward, the object being to avoid washing off the papayotin before it has time to act. This agent is to be applied two or three times daily, the ethereal solution of iodoform being employed also.

Dr. Nunn gives a resumé of his treatment as follows:

1. Give five or six drops of the constitutional antiseptic (solution of biniodide of mercury with iodide of potassium) every ten minutes. If the patient is asleep, the medicine may be dropped into the mouth with a French pipette or a camel's hair brush, without waking the child.
2. Twice, or oftener, daily, wash off all membrane in throat, nasal passages etc., with a solution of peroxide of hydrogen or other suitable solvent.
3. Apply to the membrane papayotin or some agent possessing similar properties.
4. Let the patient alone for a half hour.
5. Resume internal medicine.
6. In the interval, use ethereal solution of iodoform locally.
7. Stimulants and nutriments are to be pushed as the basis of all treatments.
8. As the case recovers gradually, the local applications are to be discontinued.
9. In like manner, the frequency of the doses of the constitutional antiseptic is to be lessened, but—
10. It should not be wholly discontinued until all danger of sequels is past.

Dr. Otto Ringk's Theory and Treatment of Diphtheria.

The following is the conclusion of a translated article published in *Daniel's Texas Medical Journal*.

His treatment of diphtheria is not quite as simple as his theory is novel.

He uses antiseptics in the form of turpentine and mur. tr. of iron. He says :

With no remedy have I been so successful in combating the initiatory diphtheritic fever, caused by the entrance of "monades" into the circulation—as I have been with the oil of turpentine.

After having diagnosed a case as diphtheria, I administer *immediately* a dose of ol. terebinth, one tablespoonful to an adult ; children in proportion. If, after the administration of this dose, the fever does not subside, or the forming of diphtheritic membrane continue, I repeat the dose every three to six hours until the desired end is accomplished, or an effect is produced on the kidneys. The prevailing idea of the evil effects of this drug on the kidneys, he says, has been greatly over estimated; my experience being, that children especially will bear this remedy well, and better than adults; it being but necessary to closely watch its efforts as stated, and no fear or apprehension in this respect need be entertained. Besides the turpentine (he continued) I am in the habit of prescribing the following mixture: \mathcal{R} . Liq. ferr. sesqui chlo. 3.0, aquæ destil., 9.00, glycerine 1.00, M.S., from a dessert to half-teaspoonful, according to age of patient, every two hours; both mixtures, besides, alternately to be applied to the diseased parts with a camel-hair brush four to six times in the twenty-four hours. The nasal cavities also to be thoroughly disinfected by a mixture of turpentine eight parts and olive oil ninety parts, applied in such a way as to bring the entire surface of these cavities in contact with this disinfectant; he accomplishes this by dropping a quantity of the oil into the nose and giving the head such a position as to allow the oil to gravitate downwards and through the posterior nares into the throat.

Nutrient Suppositories.

A new method of rectal alimentation that has points to recommend a trial, was spoken of by Mr. GODLEE at a late meeting of the London Clinical Society. The patient was attended by Dr. Barlow with Mr. Godlee, and suffered from typhlitis. The *British Medical Journal* reports as follows :

Mr. Godlee opened the abscess-cavity, and allowed a large quantity of the pus to escape. The patient eventually quite recovered, without any palpable evidence of the thick bands of inflammatory material which are so troublesome in many cases treated on expectant methods, and had since had no sign in any way of any trouble whatsoever about the cecum. Dr. Barlow, speaking of the dietetic treatment after the operation, remarked "that in this case it was especially desirable to keep the stomach and intestinal tract at absolute rest. For many days, therefore, the very minimum of food, namely, a little barley-water, was given by the stomach, and the patient was fed by the rectum. The thirst was found to be entirely removed by enemata of three-quarters of a pint of water, which were in all cases absorbed. With regard to rectal alimentation, it is often observed that after two or three days the rectum becomes intolerant of nutrient enemata. To avoid this result, food was given in the form of digestive suppositories. Of these, two very convenient forms were made by Mr. Gerard, dispenser at University College Hospital. The first was made by diluting a good meat-extract with water, and peptonising it with Bullock's pepsin, neutralising, and then concentrating, to a soft paste. Cacao-butter was then added in fine shavings, and intimately mixed with one-third of its weight of the peptonised meat extract, and rolled into cones weighing 100 grains. The

second was made by peptonizing milk with pancreatic solution, boiling and concentrating to a paste, mixing and dividing as in the first case. Peptonised milk being now sold in a concentrated form, it may be used instead of ordinary milk, which saves much time and trouble. The suppositories were certainly absorbed, and kept the patient going on for several days. One was introduced every three hours. His tongue became very dry, and after a time he was given some pieces of underdone chop, which he was allowed to chew and to swallow the juice derived therefrom, but not the fibre. Besides maintaining the nutrition fairly, the patient, who was rather an irritable, querulous subject, was satisfied and comfortable, and the advantage in keeping his abdomen quite quiescent was very great indeed." If other cases should confirm the favorable impression as to the advantages to be derived from this method of feeding, when contrasted with the failure which in a few days generally results from the attempt to sustain life by nutrient enemata, as the rectum generally soon becomes intolerant of them, there will doubtless be found a wide use for these suppositories in the very large class of cases in which the stomach requires to be kept at rest. Those who employ them may find, too, that the liquid which the system requires daily may be in some cases administered by the stomach; this would, one might suppose, tend still less to the disturbance of the lower bowel, and leave it still more at rest to digest and absorb the suppositories alone.—*Weekly Medical Review.*

Feeding the Sick with Solid Food.

Our patients may, from the standpoint of diet, be divided into two classes, viz.:—Those who can digest solid food, and those who cannot. The great majority

belong to the former class. In regard to these, it is sound practice to adhere to the main features of current dietetic habits. Diversity and variableness are marked characteristics of our dietary. To prescribe a monotonous regimen is to contravene a beneficial rule. A robust man soon tires of sameness of dishes. The invalid craves for more variety than the robust. Stomachs are almost as individual as faces. In adapting diet to idiosyncrasies, we should lessen the quantity of the offending articles rather than prohibit them. If they must be forbidden, provide substitutes. The practice of forbidding fresh vegetables and fruit is especially objectionable. I have met with cases in which I could attribute the low standard of health only to a protracted abstinence from fruit and fresh vegetables. I think it is possible to go too far in humoring a capricious stomach, especially in hysterical and neurotic constitutions.

I need hardly say that due mastication and cooking of food are essential to easy digestion. This is especially true as regards farinaceous articles and fresh vegetables. The bad reputation of potatoes and pastry is due to their often being imperfectly cooked.

In studying the influence of food accessories—alcoholic beverages, tea, coffee and cocoa—on digestion, it is necessary to distinguish sharply between their action on the chemical processes, and their action on glandular and muscular activity. These two actions are quite distinct, and generally opposed to each other. All food accessories exercise a more or less retarding influence on the speed of the chemical processes of digestion. Some, if not all, exercise a stimulating influence on the glands which secrete the digestive juices and on the muscular contractions of the stomach.

The distilled spirits—brandy, whiskey and gin—but slightly retard the digestive processes, whether salivary or peptic, when taken in dietetic quantities. They obstruct only when taken in volumes approaching intemperance. Considering that they stimulate the glands and muscular activity of the stomach, when taken in dietetic proportions, they may be regarded as distinctly promotive of digestion.

Wines and malt liquors have a different action from ardent spirits. Wines are highly inimical to salivary digestion. Even very small quantities of sherry, claret, hock or champagne inhibit the action of saliva on starch. This is due to their acidity, and may be overcome by the addition of an alkali—soda, seltzer, or an effervescent table water. Wines, though having a stimulating effect on the peptic glands and muscular contractions of the stomach, retard peptic digestion to an extent altogether out of proportion to the alcohol they contain, and should be sparingly administered to persons of weak digestion. Champagne and effervescent wines retard digestion less than the still wines,—claret, hock, etc.

Tea completely inhibits salivary digestion. Coffee and cocoa have but a slight effect. The inhibitory action of tea is due to tannin, and you can no more have tea without tannin than you can wine without alcohol. To mitigate the effects of tea on salivary digestion, we should eat first, and drink the tea last, or, put a pinch of bicarbonate of soda (10 grs. to the ounce of tea leaf) into the tea-pot. This last removes the deterrent effects of tea on starch digestion.

Tea, coffee and cocoa retard peptic digestion, and especially so when their proportion in the digestive mixture rises above 20 *per cent.* All three, therefore,

should be employed very moderately by persons of weak digestion. The strong coffee usually handed around after dinner should be taken only by robust eaters.—*Physicians' and Surgeons' Investigator.*

Feeding the Sick with Liquid Food.

Our resources in this line consist of milk, beef tea and other meat decoctions, cold-made meat infusions, raw eggs and gruels.

MILK.—Milk is our most serviceable liquid food, and were it not for the necessity of variety, we would need but little else. All plans of feeding the sick on liquid food centre around milk. It can be given alone, or in tea, coffee, cocoa, lime-water, soda water, ardent spirits or gruels, or, as butter-milk, koumiss or whey. Milk is not a perfect kind of liquid food however. The casein coagulates into solid masses during stomachic and intestinal digestion, and has to be re-dissolved before being absorbed. Re-dissolution sometimes fails when milk has been taken in quantity, and the curds may block up a narrow part of the intestine, undergo putrefactive changes and irritate a tender mucous membrane, or pass off as curds in the stools. To obviate this drawback, the milk may be predigested or peptonized, but still the bitter flavor of peptonized milk often nauseates. To cover this taste, coffee may be added. Another method is to add a pancreatic extract to the cold milk, and to administer it cold. Once heated to the temperature of the stomach, it is rapidly digested.

Next to milk comes beef-tea and beef decoctions. Beef-tea and its congeners however, rank as restoratives and stimulants rather than nutrients. They contain no albuminous matter, and their small quantity of gelatin cannot be of much account. The notion prevails,

however, that the nourishing qualities of the meat pass into the tea, and that the meat, after beef-tea has been made on it, is useless. This is a double error, It is the meat remnant that contains the real nutriment, and if it be beaten into a paste and flavored, it constitutes a highly nourishing and exceedingly digestible form of food. The beef-tea on the other hand, contains but the sapid extractives and salines of the meat, and a trifle of gelatin. The proteid matter of meat is insoluble in boiling water, or water heated above 160° Fahr. The nutritive value of beef-tea, therefore, is very small.

COLD-MADE MEAT INFUSIONS.—The defect in the nutritive value of beef-tea led Liebig to suggest the use of cold-made meat infusions. He minced the meat, added water to it, and then acidulated the infusion with a few drops of hydrochloric acid. The addition of the acid is unnecessary. Infusions made from minced meat with half its weight of water were found to contain over four per cent. of dried albumen, if allowed to stand for two hours. This amount of proteid is equivalent to that contained in cow's milk. The nutritive value of such infusions is, therefore, high. They cannot be heated above 104° Fahr., however, without destroying their liquid character and forming jelly. The objection then to cold-made meat infusions is their raw taste; this may be covered by beef-tea or Liebig's extract of malt. Infusions made from beef or mutton have an unpleasant, bloody appearance; veal or chicken breast makes the nicest infusion.

BEATEN-UP EGGS.—The yolk, or white, or both, may be beaten up and combined in various ways. Cooked eggs are more easily digested than raw ones, but the latter pass through the stomach without being interfered with, when the

stomach is unable to digest solid food. Once in the duodenum, they are slowly digested on the passage down.

FORTIFIED GRUELS.—Gruels as ordinarily prepared do not contain more than one-half per cent. proteid matter, and consequently have a low nutritive value. They are not an agreeable kind of food either. They lack flavor, but when mixed with milk or beef-tea form a valuable addition to our resources. Gruels made with more than four per cent. of meal become thick and pasty, but if the meal be mixed beforehand with one-eighth its weight of ground malt, twenty per cent. of meal may be used, and the gruel still remain fluid. The diastase of the malt, as the heat rises, converts the thickening starch into soluble starch and dextrine. Such gruels contain two per cent. of proteid and fourteen per cent. of carbo-hydrates, and combined with milk or beef-tea are highly nutritious and especially suitable in typhoid.

A matter of interest in designing food for the sick-room and nursery is the consideration of the special properties of the several kinds of cereal and leguminous substances used as food. The proteid of wheat is not quite identical with that of oats or barley. Lentil flour contains twice as much proteid matter as wheat or oat flour, and almost twice as much lime. Then, too, the proteid of lentil, of leguminous seeds, differs from that of wheat or oats. These differences are probably of not a little importance in feeding the sick and the young.

I should like to press for a more systematic and comprehensive study of dietetics. The effects of diet are profound, far-reaching and exceedingly subtle. The immediate effects of diet are often not the most important. Behind these are remote sequences of vital concern to the family and the nation.—*Ibid.*

The Hippurates of Lime and of Lithium.

DR. V. POULET considers the hippurate of lime as the best preparation of calcareous salts for use in the system, and as especially useful in affections of the urinary passages; in affections of the liver; in diseases of the skin and mucous membrane, where they are dependent upon functional vices of the liver or upon lymphatism; in a great number of diseases of the alimentary canal, both of the stomach and intestine; in diabetes; and in chronic rheumatism, gout, etc.

In urinary affections, the subacute cystitis of the neck of the bladder yields satisfactorily to its use, with relief to the frequent desire to urinate, pain on urinating, etc. In certain cases where the urine manifests an abnormal alkaline reaction it becomes promptly acid again by the use of this drug. In every case, there is a return to the normal limpidity and a cessation of the presence of the mucous globules. It is quite as useful in urinary lithiasis from whatever cause, phosphaturia, uraturia, or oxaluria. If the theory of the liver as the principal seat of the formation of uric acid, as a product of the disassimilation of the hepatic tissue, be correct, it follows that this drug, acting, as it does, through the hepatic gland, should be especially indicated.

In diseases of the liver it gives marked results, either by relief or cure, even when the symptoms are pronounced and decided, having progressed to the production of ascites and œdema of the lower extremities. This applies to subacute hepatitis, chronic hepatitis, catarrhal icterus, hypertrophic and even atrophic cirrhosis in its early stages, biliary lithiasis, certain functional disorders occasioned by hydatid cysts of the liver, etc. Surgery is benefited by

this drug in traumatic or other urinary fistulæ, by modifying the composition of the urine.

In skin diseases, exclusive of those of parasitic origin, whether they come from the tuberculo-scrofulous, or the neuropathic diathesis, the hippurate of lime is useful, exercising an alterative and tonic action. The arthritides, Dr. Poulet considers symptomatic of an affection of the liver—such are pemphigus, and certain uticarias. “With the hippurate of lime, *no more red noses*. In America, where this affection is so common and is the despair of a part of the population, there is no doubt but that this remedy will soon be appreciated at its proper value.”

In dyspepsia and diabetes this agent seems to be especially applicable to inflammatory gastric or intestinal dyspepsias with flatulence and reflex phenomena, commonly called sympathetic. It relieves the constipation very satisfactorily. In diabetes, as a simple solution, and with the aid of the ordinary dietetic regimen, it acts very beneficially.

In affections of the mucous membrane, it is admirably adapted to all cases of gastro-intestinal acidity, to ulcer of the stomach, chronic enteritis, miguet, and to tympanites. In the diarrhœa of infants it produces remarkable results. In chronic rheumatism, gout, difficult dentition, etc., it is useful with phosphate of soda.

The hippurate of lithium, alone or combined with the hippurate of lime, serves admirably in the treatment of gout. The attacks of gout are lessened in intensity and frequency. The tophus is re-dissolved. The nodosities and chronic engorgements, in both the larger and smaller articulations, gradually disappear. — *Bulletin Gén. de Thérapeutique*. — *Journal American Medical Association*.

The Metric System.

DR. LLEWELLYN ELLIOTT publishes the following valuable rules:—1. To convert troy grains or minims into grammes or cubic centimetres: Divide the number by 10, and from the quotient subtract one-third. 2. To convert apothecaries' or fluidrachms into grammes or cubic centimetres: Multiply the number by 4. 3. To convert troy or fluid ounces into grammes or cubic centimetres: Multiply the number by 32. 4. To convert grammes or cubic centimetres into troy grains or minims: Add fifty per cent., or one-half the number, and then multiply by 10. 5. To convert grammes or cubic centimetres into apothecaries' or fluidrachms: Divide by 4. 6. To convert grammes or cubic centimetres into troy or fluid ounces: Divide by 32. 7. To convert inches into metres: Divide by 40. 8. To convert metres into inches: Add ten per cent., or one-tenth the number, and then multiply by 36.—*Medical and Surgical Reporter.*

Aseptol.

From the Philadelphia *Medical Times*, July 11th, we learn that M. SERRAN has directed attention to this substance. It is a liquid of a rose color, and is also called "acide orthoxyphenyl-sulfurex." It is an antiseptic three times as strong as carbolic acid, and it has no disagreeable odor. It may also be given in quite considerable doses by the stomach without any danger. It is also very soluble in water, and destined, it is thought, to replace carbolic acid in most of its uses, especially for internal administration.—*Ibid.*

Artificial Respiration in Sunstroke.

A medical man writes to one of our English exchanges that he treated a case of sunstroke, in the end of March, by

employing artificial respiration (Silvester's method), when, after the usual treatment was employed, he could not detect the least sign of breathing, though the heart was acting strong and well at first. The patient regained consciousness in about ten minutes and recovered.

The success of the mode of treatment employed in this case throws a light on the pathology of the state of the lungs seen in some cases of death from sunstroke.

In a case of passive congestion of the lungs in enteric fever, he caused the patient to inspire deeply six or eight times every half-hour for several days, and also attended to the posture of the patient; the result was recovery.—*Ibid.*

The Symptoms of Datura Poisoning.

Datura, the poison of the Thugs, is still much resorted to for criminal purposes in certain parts of India, and in the *Indian Medical Gazette*, Dr. NIL RATTAN BANERJEE reports thirty-two cases of datura poisoning which were treated in his dispensary during the year 1884. The poison was administered in the form of seeds, either roughly pounded and mixed among cooked vegetables, or with capsicum seeds, which bear a close resemblance to datura seeds, or finely powdered and mixed with flour and made up into bread or sweetmeats.

1. *Dryness of Throat.*—In almost all cases the lips, inside of the mouth, and throat were quite dry and parched. The tongue was dry, with a thick fur. In consequence there was difficulty in swallowing, and the voice was hoarse.

2. *Dilatation of Pupil and Appearance of Conjunctiva.*—The pupils were always dilated and were not affected by light, and in extreme cases the eyeball was not sensible to the touch. The sight could

not be fixed on any object, and the eyelids were mostly kept closed.

The conjunctivæ were clear or of a pale bluish color for the first twelve hours, but became bloodshot afterwards and remained so for nearly twenty-four hours.

3. *State of Alimentary Canal.*—The stomach and bowels were generally found loaded. There was a sour acid smell coming from the mouth, due to undigested food in the stomach.

Tympanites of the abdomen was a constant symptom; in some, especially the fatal cases, special attention had to be paid in relieving this symptom by enemata after the stomach was cleared.

Vomiting took place of itself in one case only,—all the others had neither vomiting nor purging. On the contrary, the bowels were in general constive, and they took long time to move even with purgatives. In a few cases looseness of bowels followed after they were once opened, and in one case the man died of enteritis, discharging blood and mucus.

4. *Delirium.*—This was characterized by incoherent talk and by the peculiar movement of the hands, as if to pick up something from the ground, or moving away any imaginary thing in the air.

5. *General Appearance and Posture of Patients.*—The patients had a distressed appearance, and did not like to be touched. They tried to escape whenever held, and shouted loudly, and attempted to strike and kick when caught. If left alone they lay on the ground curled up, with the legs drawn up to the abdomen, and the chest bent forwards, and incessantly groaned as if they were in great trouble, but did not speak or answer. Whenever they said anything, it was with great reluctance.

6. *Physical Strength.*—There was always a considerable amount of strength

displayed by these patients, and in adults eight or ten persons were required to hold the patient while the stomach-pump was used. This extraordinary development of strength was found in old men of 50 or 55 years (only skin and bones), so much so that a stranger was astonished, and asked whether the patient was a raving madman. It may be said that the patients resisted in this way the introduction of the stomach pump.

7. *Alteration in Voice.*—In unmistakable cases of datura poisoning, the voice and way of talking were very peculiar and pathognomonic. The patient, when recovering, answers questions in an *undertone*. Shortly and quickly, and all of a sudden, appears to lose the string of thought, looks in another direction, and wanders away as if he was thinking of something else. This, however, is very difficult to describe in words; it requires to be seen.

8. *Progress of Case.*—These symptoms, on the average, continued for a whole day and night (twenty-four hours). Then usually recovery took place, with the return of the mental sensibility. Contraction of pupil, and in many cases an attack of fever, took place on the second day. In the fatal cases, the tympanites of the abdomen increased, coma set in, with stertorous breathing. The pulse became weak, and at last imperceptible. Cold perspiration broke out all over the body, and the patient died.—*Therapeutic Gazette.*

DISEASES OF THE NERVOUS SYSTEM.

Torticollis.

Of all annoying diseases of a comparatively trivial nature, there is none to be compared to "wry neck." From one doctor to another will go the victim of this obstinate, unpleasant, rather than painful, disease. It is one of the op-

probria of our therapeutics, and it is the rock upon which the reputation of many a young physician has been wrecked. As a rule it is due to some reflex cause, in many cases to some uterine derangement, as we have elsewhere hinted, and such cause must be sought for and removed. If the nerves supplying the muscles of the neck are not diseased, this affection can usually be cured by patient, well-directed and persevering effort. If, as we say, the cause can be detected and removed, the battle is half won.

In addition to this, we will derive most satisfactory results from the combined use of galvanism and faradism; the steady, non-interrupted current to the contracted, and the *slowly* interrupted current to the paretic muscles. This interrupted current must be *slow*, for if the interruption be rapid, they will throw the muscles into a tetanic state. This procedure must be used regularly every day. Drugs, by the stomach, will do very little good, while most satisfactory results will be produced by the hypodermic injection of arsenic or cocaine into the contracted, and of strychnia into the relaxed muscles. Most wonderful results will be obtained from a system of voluntary gymnastics, directed towards bringing into play the muscles whose duty it is to antagonize those that draw the head out of position.

By perseverance in the use of these simple means, one can frequently successfully combat this obstinate affection. —*Maryland Medical Journal.*

Headache.

DR. W. R. CHITTICK, *Detroit Lancet* :

Congestive Headache is one frequently met with. It is caused by an excessive amount of blood in the head. It is known by a flushed appearance of the

face, congested eyeballs, a full, bounding pulse. The pain is throbbing in character, is made worse by stooping or moving the head quickly. There is distension of the arteries going to the head, or there may be a diminution in the calibre of the veins which prevents a return flow of blood through them. This may be due, and I think it is, to some irritation of the nervous centres. A vitiated atmosphere, by reducing the amount of oxygen, and causing a retention of waste product in the blood is often the cause of it. This will sometimes account for those headaches which patients have on awaking in the morning.

Fresh air, cloths wrung out of *hot* water, caffeine, bromide of potassium, ergot, digitalis, aconite and other arterial sedatives, are the remedies most useful in this form of headache.

Anæmic Headache.—This form of headache is due to a lessened amount of blood circulating through the cerebral arteries. It is usually caused by a spasm of the arteries, and may be removed by the horizontal position and such remedies as will relieve the spasmodic action of the blood-vessels. Nitrate of amyl, nitro-glycerine, cocaine, codeine and belladonna are among those that are the most useful.

Headache due to general anæmia should not be confounded with those due simply to passive anæmia of the brain only. In this disorder there is an impoverished condition of the blood. Persons laboring under this condition of things will often try to do more work than they are capable of, and, therefore, force an illy nourished and nervous system beyond its capacity.

Anæmic blood is like watered milk —is decreased in nourishing qualities ; therefore it is easy to see how an organ like the brain, with its numerous nerves,

will suffer when compelled to work on poor food.

Anæmic headache usually affects that part of the head that is nearest the arteries that supply the brain, namely, the temples, brow, occipital region, etc.

Iron is, of course, indicated where there is anæmia. The preparations that I like the best are Blaud's pills, made freshly; liquor ferri nitratis, perchloride and persulphate of iron, and last, but not least, Rabuteau's pills.

Headache caused by cerebral exhaustion is probably the most difficult to treat. Cerebral exhaustion is caused by over-work of the brain. This is peculiarly an American difficulty. Men and women will work and worry themselves away in spite of all the advice the physicians are willing to give them.

Business men are worried by financial troubles; wives are worried about social matters; young men and boys are worried in regard to school and college matters, or perhaps dissipate; girls are asked to do more in school or shops than is reasonable to ask of a young and developing female. In these days of railroads, telegraph, telephones, fast machinery and other methods of rapidity and competition, there can be found causes enough for over-work. Whatever the cause, the effect produced is annoying and dangerous. The brain is in an irritable condition and forms a central point for general irritation. All sorts of ills, fancies and conditions are produced, and little can be done until the cause is obliterated.

The treatment of such cases is, first, proper food; not only the digestion but the assimilation, must be looked after. In the meantime medicine must be administered. The best drugs for this condition are the alkaloid caffeine (the citrate of caffeine is said to be only a mixture), monobromide of camphor,

codeine, nux vomica, quinine, gelsemium, guarana, fluid extract camelia, iron and other tonics.

Intermittent headache is due to some malarial derangement manifested in this manner. Quinine is the most prominent remedy, and may be aided by other remedies.

Habitual headache is due to some derangement of the system, usually of the stomach or bowels. When we enter upon the discussion of the so-called "stomach" headache we simply enter upon a discussion of the disorders of digestion. Headache arising from indigestion is sympathetic and reflected through the pneumo-gastric nerve, or is the result of toxic material (ptomaines probably), produced by some fermentative changes in the stomach and taken up in the general circulation. It may be a derangement of the liver that causes the headache; then it is called *bilious* headache, and is sometimes very severe. Obstruction to the free escape of bile or interference with the normal functions of the liver—either an increased or diminished secretion are among the causes.

Reflex irritation from the *genito-urinary* organs is also a source of headache. This is noticed in some patients about the period of menstruation. In others displacements and disorders will cause pain in the head, usually on the top of the head.

Astigmatism, if not corrected, will, almost always cause headache, if the eyes be used much. The disturbance in these cases may become so great as to cause disturbance, through the nervous centre, of the stomach. Ear troubles also sometimes cause headache, but as I do not recollect treating any cases from this cause, I will have to pass over it.

External pains of the head, often called headache, are due to a variety

of causes. Syphilis often causes headache, if the membranes of the brain are affected. Rheumatism of the scalp is often mistaken for headache. Neuralgia of the supra-orbital, occipital or auricular nerves is at times very troublesome. These require anti-neuralgic treatment.

A few words on the remedies used in treatment of headache, and I am done.

Caffeine is a very valuable remedy in this disorder, but should not be given in doses of more than two grains at a time; large doses are apt to produce nausea.

Codeine has many valuable qualities. It seems to me to have an action like opium and the bromides combined. Its cost, however (\$12 per oz.), makes it an expensive drug to use.

Monobromide of camphor, in doses of two to six grains, is excellent for slight nervous headache.

A combination of caffeine and codeine is very good, but do not put monobromide of camphor with them—it will surely produce nausea.

Guarana is an excellent remedy for hyperæmic headache, and has some advantages over caffeine.

Fluid extract of camellia and of coffee owe their usefulness to the caffeine they contain.

The bromides are probably used more than any other class of remedies in headaches. Their use should be confined exclusively to congestive headaches, except where they are used in conjunction with other remedies.

Ergot and digitalis are useful when we wish to tone up the blood vessels or diminish their calibre, or to steady the action of the heart itself.

Aconite is occasionally indicated when it is necessary to get control of the heart.

Quinine, salicylic acid, opiates, hyoscyamus, belladonna, gelsemium (partic-

ularly where there is neuralgia), and nux vomica, are often indicated, and when used in combination with some of the remedies first mentioned, will add to their effectiveness.

Nitroglycerine in small doses is very useful in headaches due to spasm or anæmia of the brain. It acts very promptly.

Cocaine, on account of its peculiarly soothing and quieting actions, is excellent in headaches due to cerebral exhaustion and other nervous conditions.

DIGESTIVE TRACT.

Impacted Colon.

PROF. DA COSTA directed, in a case of *impacted colon* of one week's duration, that an injection should be used, of turpentine $\bar{3}$ ss, beat up with the white of an egg and mixed with a pint of hot water, to be followed by simple hot water and salt. In case this treatment failed, warm sweet oil was to be used. Internally was given—℞. Magnesii sulph., \mathcal{D} j; acid. sulphurici dil., gtt.ij; elixir simplic., aquæ. aa f $\bar{3}$ ss. M. SIG.—To be given every half hour.

At the next clinic the patient returned well, the cure having been accomplished by the injections of sweet oil and a pill of aloes, belladonna and colocynth, on the third day of the treatment.—*Coll. and Clin. Record.*

Da Costa on Gastric Catarrh.

PROF. DA COSTA directed, for a case of *gastric catarrh*, that the upper bowel be kept unloaded by calomel, gr. $\frac{1}{4}$, and sodii bicarbonat., gr. ij, taken every night, and sodii phosphat., $\bar{3}$ j, night and morning.—*Ibid.*

Da Costa on Dyspepsia.

PROF. DA COSTA directed, in the case of an *anæmic girl*, with functional dis-

turbance of the heart, due to dyspepsia, a meat diet, plenty of exercise, and—
℞. Tinct. gentian. ferrat., f ʒ j; tinct. nucis vomicæ, gtt. v. M. SIG.—Ter die.—*Ibid.*

Sulphur in the Treatment of Chronic Dysentery.

SCHMITJAN (quoted in *Union Médicale*, Jan. 17, 1886) begins the treatment of subacute and chronic dysentery with an emetic of ipecac, and then gives, every three hours, a teaspoonful of this powder:—Sublimed and washed sulphur, powdered fennel seed, each, 1 part; powdered sugar, powdered gum arabic, each, 2 parts. The sulphur, he says, acts in the same way as saline purgatives and calomel act; moreover, it may have a peculiar topical action upon the inflamed and ulcerated mucous membrane, comparable to that of the sulphurous waters, purging on the one hand, and having an antiseptic and healing effect on the other.—*N. Y. Medical Journal.*

Administration of Quinine in cases of Irritable Stomach.

That quinine requires to be administered in cases which are accompanied with irritability of stomach and bowel, is shown by Dr. AITKEN's attempts (Report, British Medical Association, at Cardiff, 1885) to render the subcutaneous injection of the drug innocuous. Doubtless, too, in zymotics, especially typhoid, where putrefactive (germs) fermentation goes on to a great extent in the stomach, frequently repeated doses of the drug would retard or destroy the processes, while not interfering with digestion. MR. JOHN REID (*Australasian Medical Gazette*, December 15, 1885) proposes, therefore, for cases of irritable stomach, to dissolve quinine in citric acid (glycerin may be added), and made into an ordinary mixture. Dispense bi-

carbonate of sodium in powders, more than sufficient to neutralize the citric acid of a dose. Add the soda to milk in a glass, stir well, then add dose of quinine mixture, still stirring. The effervescing draught, somewhat resembling sparkling koumiss, will be tolerated by the stomach, even when the tongue is red and irritable; the tongue, after the draught, changing its character.—*Therapeutic Gazette.*

Indications in Intestinal Obstruction.

Two cases of intestinal obstruction due to intestinal tumors combined with intussusception are reported by FLEINER in *Virchow's Archiv.* Both cases occurred at Heidleburg, and were operated on by PROF. CZERNY. The details of the cases are of considerable clinical interest, and Czerny adds his suggestions regarding the proper procedure in cases of internal strangulation.

The first patient, a physician of 45 years of age, had developed, together with an adenocarcinoma of the ileo-cecal valve, an invagination of the ileum into the colon.

The strangulation was partial and chronic, but such considerable stenosis ensued that laparotomy was made, with reduction of the invagination and resection of the carcinomatous gut.

Peritonitis carried the patient off on the following day.

The second patient, a baker, 52 years of age, was seized suddenly with all the symptoms of ileus. He mended, and Czerny saw him six weeks after the acute attack. A freely movable tumor was found close under the right costal arch. Czerny diagnosed floating kidney with symptoms of strangulation as a possibility, but thought it more probable that an intestinal tumor with intussusception was the trouble.

That such was the case laparotomy showed. The ileum had slipped into the colon up to the flexura coli dextra. The invagination was easily corrected, and at the end of the involved section a round tumor with a central umbilication was found, a scirrhus. The tumor was cut out, together with a broad healthy margin, and the gut stitched up. The patient was discharged on the 28th day, and presented himself four months after in excellent health.

Czerny remarks in connection with these cases that it is an error to suppose that in all cases of internal strangulation that he prefers to open the belly by a wide incision. He gives it as his rule that laparotomy and search for the obstruction should be made only then when the patient is still in good condition, and the abdomen is soft and yielding, so that, after narcosis, the site and probable nature of the trouble can be made out. If, however, the patient is collapsed, the belly ballooned, and nothing can be made out respecting place or nature of the trouble, then the operation for artificial anus is preferable.

DISEASES OF CIRCULATORY ORGANS.

Mitral Stenosis.

DR. W. H. BROADBENT, in a lengthy and exhaustive paper (*Amer. Journal of the Med. Sci.*), discusses the ætiology, pathology, symptoms, and treatment of mitral stenosis, which he regards as a much more serious affection than incompetency. A peculiar fact is the relative frequency of its occurrence in women. Of 53 patients who died of this affection in St. Mary's Hospital, 38 were females and only 15 were males. Of 78 cases collected by Dr. Hayden, 54 were in females and 24 in males. Dr. Dyce

Duckworth found no fewer than 63 women in 80 cases—*i.e.*, 78.75 per cent. The explanation of this marked disproportion may possibly be found in the greater liability of girls to anæmia at the period of puberty; and Dr. Goodhart has shown how anæmia may give rise to valvular disease. Authorities differ as to the liability of children to mitral stenosis. The author has had more cases of this disease in children than any other form of serious heart disease. Not until the disease is far advanced is there anything characteristic of heart disease in the patient's appearance. Prior to that he often has a good bright color and cheerful expression. Embolism is more frequently caused by this form of chronic heart disease than by any other, the plug coming most frequently from the formation of fibrinous coagula between the muscoli pectinati of the auricle, or in the auricular appendix. It is also in this form that great enlargement of the liver, with true pulsation of this organ, is most frequently met with. In order to observe the pulsation, one requires to press with the hand on the enlarged liver at a part remote from the epigastrium, and a gentle but considerable heave of the organ will be seen as the liver becomes distended by the reflux of blood into the hepatic veins. This congestion probably accounts for the occurrence of ascites before œdema is present in the legs. The pulse is invariably regular in pure cases of mitral stenosis, and only becomes irregular when the heart is obviously failing. A strange feature is the absence of general dropsy. Not infrequently the patients are free from œdema of the legs at the time of death. Only when tricuspid stenosis exists as a complication, which must be diagnosticated by blueness and lividity of the countenance, is extreme general dropsy met

with. Dr. Walshe's conclusions are stated in full. These are to the effect that mitral regurgitation, or obstruction accompanied by hypertrophy and dilatation, even with the muscular fibers of the heart in an advanced stage of fatty degeneration, may exist without the supervention of general dropsy. The physical signs are given in detail. These serve to distinguish the three different stages into which the author divides the course of mitral stenosis. In addition to the peculiar vibratory character of the murmur, the accentuation of the pulmonic second sound, much value as a diagnostic sign is attached to the second sound being heard at and beyond the apex. A murmur heard near the apex, and followed by a first and second sound, can only be presystolic. So long as the second sound is heard at the apex, the affection has not advanced beyond the first stage. During this period no serious symptoms arise from the condition of the heart, and illnesses of different kinds, even severe bronchitis, may be passed through without any embarrassment of the circulation. In the second stage the second sound disappears at the apex, and the first sound now takes the character of the second, becoming short and sharp. An error in diagnosis may now be easily made; the heart sounds are likely to be confounded with one another. To obviate this, one should take a spot in the region of the base, where the first and second sounds are unmistakably recognized, and then from this point follow the sounds towards the apex, when it will be found which of them disappears or which maintains some distinguishing peculiarity. The murmur caused by the blood flowing through a constricted mitral orifice is not always presystolic, but may undergo the following modifications: (1) The presystolic murmur

may be short or long; (2) a murmur occupying the entire diastolic interval, usually diminishing in intensity midway; (3) this murmur cut into two parts—diastolic and presystolic; (4) the diastolic part alone surviving. In the third stage the presystolic murmur disappears altogether, and all that can now be heard is a loud, short, sharp first sound at the apex, with or without a systolic tricuspid murmur. This sharp and loud sound is distinguished from that heard in dilatation with thinning of the left ventricle by the absence of the second sound to the left of the apex. In point of gravity, mitral stenosis stands next to aortic regurgitation. The average age of death in 53 cases at St. Mary's Hospital was found to be 33 for males and 37 for females. Tricuspid stenosis is a frequent complication of mitral stenosis, and, when present, renders the prognosis much more grave. General rules are laid down for treatment. Depletory measures are considered to be of great efficacy to relieve the over-burdened right heart. Venesection is the most prompt and effectual of these, and will, in the author's opinion, come into more general use as the profession becomes familiar with the remarkable results that may be witnessed in apparently hopeless cases. Leeching and cupping are also useful. As an accessory, free purgation is advisable, a mercurial powder or pill being the most suitable for this purpose. Caffeine appears to act more favorably in conjunction with digitalis than when given as a substitute for that drug. Digitalis should be given with great care, and the heart's action carefully watched, as it may all at once become quite irregular. The drug is then to be suspended and a mercurial purge given; after, the digitalis may be administered, or some one of the other heart tonics.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

A Case of Deformity of the Fore-Arm and Hands, with an Unusual History of Hereditary Congenital Deficiency.

DR. A. SIDNEY ROBERTS.—Aaron MacIntyre, æt. 73, six feet four inches in height, a pedlar by trade, and a native of New Hampshire, was admitted to the Philadelphia Hospital on March 7, 1885. His fore-arm and hands exhibited the following congenital deformity:

On the right side (see Fig. 1) the



FIG. 1.

humerus is normal, except that its inferior extremity is rounded so that the condyloid notch is scarcely perceptible. The ulna is absent, the radius forming with the outer condyle of the humerus an articulation which admits of limited motion in all directions and in complete extension and flexion. The pisiform, cuneiform and unciform bones are absent. Only the first and second metacarpal bones are present. The thumb and index finger are present and normal, except that the first phalangeal articula-

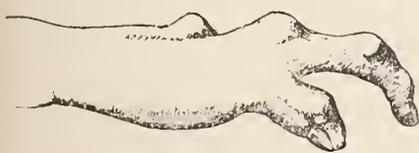


FIG. 2.

tion of the latter is ankylosed, and the finger is, as a whole, slightly curved towards the thumb. The third, fourth and fifth digits are wanting.

On the left side (see Fig. 2) the olec-

ranon process of the ulna is markedly curved towards the inner condyle of the humerus. The third metacarpal bone is absent. The first and second each have a thumb, the two thumbs being united by connective tissue and skin, the thumb nails being contiguous, and each complete in itself. The metacarpo-



FIG. 3.

phalangeal joints are enlarged. The index finger is somewhat curved on itself. The middle and ring fingers are absent. This leaves a fissure between the index and little fingers which extends to the wrist, as shown in Fig. 3. The patient has considerable power in his hands, with full use of the parts present.

The following history of similar deformities in his family is interesting, and there is no reason for doubting the veracity of the patient's statements. His grandmother on his mother's side had one index finger stiff. Two uncles on his mother's side had each a stiff little finger. One sister had a hand deformed like the patient's left hand. She had a perfect child. Another sister's child had a hand deformed like his right hand. The patient has been married twice and is the father of seven children. The two by his first wife are perfect. Of the five children by his second wife, two were perfect and three were deformed with malformations similar in character to his own.

Although many cases somewhat similar to or resembling the one above described have been reported, principally by Annandale, to whom the reader

is referred for a further clinical study of these affections, the unusual heredity observed in the present instance was deemed worthy of more than passing notice. Here heredity seems to have assumed unusual prominence, several generations having reproduced at at one time or another malformations which, although not absolutely similar, have been markedly so in the type and locality of the deformity. In studying the etiology of congenital malformations, we find the subject surrounded by much that is mysterious and confusing, owing to the varying importance attached by authors to the influence of physical and psychical conditions of the patients upon the child in utero.

Hereditary similarities have been observed alike in the most extensive and most minute forms. These may vary from the shape of a particular part of the body, or of a special organ such as the nose or ear, to the small pigment stain known as a "mother's mark." Accompanying these physical marks, similar mental tendencies and physical carriage can be observed for successive generations, giving to races and persons their marked individuality. In the same way that organs perfectly normal, but characteristic, are reproduced, physical defects and abnormalities are transmitted from parent to child. Most congenital malformations, especially those due to arrested development, have been referred to pathological changes affecting the child in utero. It being granted that the fœtis has its own circulation and nutrition, and that, consequently, disease of a part may take place resulting in effusions, exudations, atrophies and hypertrophies, with consequent marked nutritive changes, this will not account for all the malformations met with. For whilst these lesions undoubtedly cause certain de-

formities, it has been found experimentally, according to Wagner, that malformations may be produced by wounding the ovum, and thus preventing the development of the part implicated.

Thus the action of mechanical agencies, such as blows, falls, etc., at an early period of gestation have a claim as causative agents in the production of anomalous development. The question of maternal impressions, through the influence of fright, shock, etc., is also to be considered and their possibility as factors cannot be entirely denied on *a priori* grounds, the literature of the subject abounding in many instances, where the relation of cause and effect are seemingly very clear. The result of the most recent investigations, however, would tend to show that the effects apparently brought about by these, are the results of fœtal disease or spontaneous amputations. Simpson and Montgomery have described cases where portions of the digits and extremities have been so amputated, and Simpson has called attention to some rudimentary digits sprouting out from the end of the stumps. These effects have also been demonstrated by preparations, where it is shown that by the encircling of the extremities by turns of the umbilical cord, or by bands of false membranes, spontaneous intra-uterine amputations have resulted. Lastly, slight lesions in undeveloped fœtal organs can cause great disturbances by preventing proper nutrition of the parts and thus the progress, size and quality of the organ being interfered with, the resulting adult development is either defective or entirely wanting.

These, in brief, are the causes of congenital malformations, and while many of the questions in regard to this class of cases are still in doubt, sufficient etiological explanation can be deduced

in the reasons already stated for most of the cases met with, without resorting to apparent coincidences or fanciful theories.

A Case of Fracture of the Anterior Superior Spine of the Ilium.

DR. THOS. C. PEEBLES, of Lutherville, Md.:—G. P. was under the influence of liquor, and while going down a hill he was sitting on the lazy-board of the wagon and fell off in front of the back wheel, which must have passed over his right leg in the length of the limb from the pelvis to the foot. He was carried home and put to bed.

I was called to see him next day and I found that he had been bleeding all night, as the bed was saturated with blood. I could find no fracture of the thigh, leg or foot, but on the skin there was a broad red band extending from a little below the anterior superior spine of the ilium to just above the knee on the inside, and again from below the knee to the foot and across the instep. Four inches below the anterior superior spine of the ilium on the front of the thigh was a small wound from which the blood had come. On probing this a hard substance was felt. I at first thought it might be a piece of wood or some other foreign body driven into the flesh. Dr. J. Jarret, of Towson, saw the case with me, and we decided to cut down and remove the substance; so I enlarged the wound and took hold of the object with a pair of forceps to clear it out, when I found it was bone with muscle attached to it; in fact, it proved to be the anterior superior spinous process of the ilium itself with a portion of the crest; a triangular piece of bone, about two inches long and one wide.

I cannot satisfactorily explain how the wagon wheel carried the portion of

bone down under the surface to the point indicated; nor, again, how such a heavy load could pass over a man's limb without doing more damage. It is true that the road was very muddy and the ruts were very deep.

He wore a pair of long cow-hide boots, which showed the track of the wheel, especially over the instep where the boot was very much mashed and cut.

The wound was washed with a solution of carbolic acid and the limb raised, but a large slough took place along the front of the thigh, and the patient's temperature rose to 105° and remained so for three days. Finally, he made a good recovery, and can cross his legs in spite of the loss of the superior attachment of his sartorius muscle.—*Md. Med. Journal.*

Original Deductions Based on a Study of One Hundred Cases of Fracture of the Upper Extremity, Excluding the Hand.

DR. SAMUEL W. SMITH (*Medical and Surgical Reporter*).—The author gave a tabulated list of the different fractures, but said he claimed nothing new in the treatment and general consideration of the subject, except with regard to the invention of two splints, one for the treatment of fractures of the clavicle and the other for fractures of the arm and forearm.

It is a padded gauntlet-shaped piece of leather, laced to fit the forearm, running on either side back of the bend of the elbow. To this part is attached a strap and buckle. A padded collar, with strap, buckle, and ring, is fitted to the uninjured shoulder. Through this ring the strap from the elbow piece passes, and by tightly drawing this strap, the arm of the injured shoulder is under sufficient control to bring the fragments into perfect apposition. A sling is made

to pass from the ring of the collar on the uninjured side of the neck for the hand of the injured side.

Regarding fractures of the condyles of the humerus, he said:

In cases of the reparation of the epiphysis, I have given preference to the long anterior leather splint, extending from the shoulder to the hand, and applied with the forearm in extension, then flexed to a right angle. With a severer fracture of both condyles, the so-called "T" fracture, none of the splints in common use gave me entire satisfaction in preserving the lateral angle of the arm, so essential in retaining the carrying point and preventing the gun-stock deformity, a deformity that seriously lessens the ability to use the limb for any work, especially carrying a weight by the side, to say nothing of the special distress the deformity causes to women.

A varied experience, full of disappointments, in the use of the known splints for the more severe fractures of the condyles set me to work to make a splint with the following requisites:

1. To hold the fragments in apposition.
2. To lengthen or lessen the external lateral angle of arm with fixation.
3. To leave the entire elbow-joint exposed for local treatment during the whole time of wearing the splint without disturbing it.

The result of this work was a splint that my practice has proven to most happily meet every requisite mentioned.

I will now describe my splint:

It is made with two rods of untempered steel, extending from the upper part of the arm to the wrist, with a ball-and-socket joint at the elbow, and screws for fixation; the lower ends pass into a sheath screw on either side of the wrist; the upper ends pass through two

iron posts set in tin and made fast to the arm by plaster-of-paris bandages, the rods being made firm in the posts by thumb-screws. On each side of the wrist is a post through which the sheath-screw passes, and made fast to the wrist in the same manner as the upper parts, and fastened with fixation screws. By moving the sheath-screws, the lateral angle of the arm may be contracted or widened as needed, thus overcoming any tendency to loss of the carrying point or gun-stock deformity. A turn of the fixation screws at the elbow and wrist will allow the forearm to be flexed, extended, pronated, supinated, and fixed at any desired point, without other interference with the splint.

Non-Union of Fractures, Together with a Consideration of Some Modern Methods of Treatment.

DR. GEORGE R. FOWLER'S (Brooklyn) paper may be thus summarized:

1. In all cases of simple delayed union, the percussion method of Thomas, combined with an efficient retention apparatus, will be found to offer the readiest and most efficient means of bringing about union, provided this does not depend upon some dyscrasia. In cases of fibrous union, benefit may also be expected from this plan, provided absorption and attenuation of the ends of fragments, or eburnation, have not taken place.

2. Brainard's method of drilling the fragments, and this failing, freshening the ends of the bones and uniting the periosteum by either the method of Jurdain or Rydygier, combined or otherwise, according to the exigencies of the case, with wire suture of the ends of the fragments, should take the place of the old Dieffenbach operation. This should be done with a modified antiseptic procedure, and is applicable in

cases in which the percussion method of Thomas has failed because of delay in instituting early treatment, and in pseudarthrosis.

3. Cases in which it is found impossible, because of excessive loss of bone substance, to unite the periosteum by sutures or to wire together the ends of the bones, should be treated by bone transplantation, under anti-septic precautions, either by the method of MacEwen, or that of von Nussbaum.—*Med. Medical Journal.*

Reduction of Dislocations by Pressure.

DR. CHARLES YOUNG (*British Medical Journal*):—I have twice reduced dislocations of the thumb by grasping the hand with my two hands, and pressing with my thumbs on the dislocated articular surfaces; and two or three times I have reduced partial dislocations of the shoulder forward, by raising the arm with one hand and pressing back the head of the bone with the other, standing behind the patient.

A Simple Evaporator.

DR. CLEIZE, in the *Glasgow Medical Journal*, writes that, wishing to remove an in-growing toe-nail, and being without a spray producer, he covered the toe with a pledget of the size of a crown piece, poured ether on it, and evaporated this by means of a pair of bellows; in five minutes anæsthesia was complete, and lasted while the nail was removed and the matrix seared with the actual cautery—*Medical Record.*

Floating Kidney—Etiology.

Under this caption, the *Medical Record* seems to favor the view of Dr. EUGENE MARTEL, who believes that floating kidneys are mostly caused by pregnancy. His supposition is based on the fact that in most pregnancies the occiput is

forwards and to the left, and the feet of the child opposite the right kidney, which some statistics show to be the one oftenest affected. The kicking of the fœtus while its feet are opposite or just under the kidney is supposed to be the cause of the loosening of this organ.

[It would be of interest to know how many left floating kidneys there are in these statistics, and whether the proportion of loose left kidneys and right occipito-anterior positions tally, or if there is much variation. Also worthy of note is the question, how large a proportion of *men* have floating kidney. By far the largest proportion of women examined are married, and on that account we should expect to meet many more such instances among them than among those that are single. It seems to us, on mature reflection, that Dr. Martel is wrong, and that the causes of floating kidney in married women instead of being lodged in their own womb, pre-existed in those individuals while still residents in the wombs of their mothers.]

A. H. P. L.

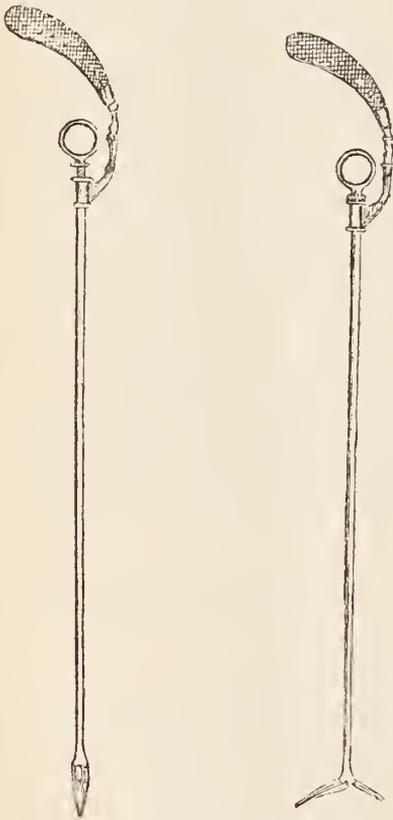
An Improved Bullet Extractor.

DR. W. J. HOFFMAN, (*Maryland Medical Journal* :)

The accompanying illustration represents an instrument for the extraction of bullets from deep-seated localities in the human body, as well as for the removal of foreign bodies from the trachea and œsophagus. For the latter, the contrivance is either curved or it may consist of a flexible steel rod with a tube constructed of spiral band of steel.

The instrument consists of a tube one-fifth of an inch in diameter, and fourteen inches in length (or more if desired), armed at one end with two blades, closely resembling a serpent's jaw. To the opposite end is attached a handle.

A steel rod passes through the entire length of the tube; a ring for the manipulation being attached at the rear end, while at the opposite extremity are secured, by means of a slot and pin, two slightly curved arms which connect it with either blade. By pressing the ring forward, the blades are opened, closing them being effected by drawing it backward. The extremity of one of the blades terminates in a short tooth, di-



rected inwards, the opposing blade being armed with two between which the former enters presenting a smooth rounded surface when closed and ready for introduction.

The present instrument is a slight modification of one devised by the writer in 1870 while attached to the Prussian Medical corps (during the

Franco-German war of 1870-71), when it was employed with great success, and in numerous instances in which the then available bullet-forceps entirely failed. The Turkish government recently adopted the above-mentioned instrument, and the writer had the honor of being appointed to supervise the manufacture of a sufficient number for immediate use in the present campaign.

Mr. Charles Fisher, of Washington, D. C., is the manufacturer.

Dental Art.

W. AUSTIN CURRIE, D. D. S., in the *Medical Record* of Jan. 9th, 1886, calls attention to the desirability of dentists studying art and applying it to their work. By raising certain parts of the face in putting in new teeth, he can give a pleasant expression to a face that has for a long time had a sinister expression. In various ways, he can accomplish a variety of decidedly noticeable changes. He is one of the, if not *the* pioneer, in dental art, and calls attention to the wide range of possibilities in the future if the matter is actively taken in hand by those who are competent. He concludes very truthfully in saying: "One thing in which all will agree with me is this,—a little art cannot injure us in any way, even if it is æsthetic."

The Treatment of Frost-bitten Fingers and Toes.

DR. LAPATIN, in the proceedings of the Caucasian Medical Society, advises that fingers and toes which have been slightly frost-bitten, and which subsequently suffer from burning, itching, and pricking sensations, should be painted, at first once and afterwards twice a day, with a mixture of dilute nitric acid and peppermint water in equal proportions. After this application has been

made for three or four days, the skin becomes darkened and the epidermis is shed, healthy skin appearing under it. The cure is effected in from ten to fourteen days. The author has found this plan very effectual amongst soldiers, who were unable to wear their boots in consequence of having had frozen feet. They were, in this way, soon rendered capable of returning to duty.—*Medical and Surgical Reporter*.

Powdered Rice as a Styptic.

According to the *Indiana Medical Gazette*, powdered rice is stated to have marked hæmostatic properties. Mixed with lint, in proportion of from four to eleven per cent., the lint thus treated being used as a compress, it is more effectual than oxide of zinc, subnitrate of bismuth, salicylic acid, or carbolic acid.—*N. Y. Medical Journal*.

Administration of Ether.

MR. LAWSON TAIT states that the administration of ether has special risks for two classes of patients: Those suffering from damaged kidneys, and those prone to bronchitis.—*Medical Herald*.

Antipyrin as a Styptic.

DR. J. MCCAUSLANE, *Medical Age*:—Mrs. M., a middle-aged lady, had a posterior molar tooth extracted from left supra maxilla at 9 a. m., on the 18th inst. The operation was followed by a troublesome hemorrhage which her dentist with the styptics at his command failed to control, and for which she consulted me thirty-six hours after, claiming she had lost "half a gallon of blood." On examination I discovered the blood welling up from the bottom of the cavity in two fine but continuous streams. I applied the solid stick of arg. nit. (after a failure to control the bleeding by packing with styptic cotton) and

sent her home, thinking all secure. Half an hour later she came back, bleeding as freely as ever. Now, thought I, is a good opportunity to test the styptic. I filled the cavity with cotton first dipped in water then rolled in powdered antipyrine, and not another drop of blood escaped. The effect was instantaneous.

Extirpation of the Lung.

DR. DOMENICO BIONDI, of Naples, some time since proved that animals recovered after removal, by operation, of one entire lung. In a more recent communication, published in the *Wiener Medizinische Jahrbücher*, the same physician shows that animals may survive the removal of portions of lung artificially infected with tubercle. After injecting, by Ehrlich's method, masses of bacillus tuberculosis into the parenchyma of the lung, so that the clinical and anatomical symptoms of tubercle were produced, he removed, at the end of a few weeks, the diseased lungs; and in all cases recovery was complete. Whether pulmonary tubercle in man, not artificially produced, could be precisely diagnosed and localized to one lung, and then treated in the same manner, and whether total removal of the organ or excision of a diseased lobe would be, in such a case, the less perilous operation, are questions which can hardly be decided by the physicians and surgeons of to-day; yet, bearing in mind the surgical procedures, performed with success in this country, that were once considered impossible, and then unjustifiable, it is hardly unreasonable to believe that excision of the lung is an operation of the distant, if not of the immediate future.—*British Medical Journal*.—*Maryland Medical Journal*.

[We heartily concur in the above enthusiastic view of our contemporary.

and hope that the day is not far distant when such surgical interference, for tubercle of the apex, for instance, in conjunction with the best hygienic treatment, will be proved a practicable operative measure.]

A. H. P. L.

The Surgical Treatment of Peritonitis.

A simple incision of the abdomen to let out purulent and other foreign matter from the peritoneal cavity during peritonitis, is a safe procedure. Not only is it safe, but it is most often the patient's only hope of recovery. So safe is this measure, that in all cases of doubt as to the cause of peritonitis, and where it is evidently very acute and most probably purulent, it is the duty of the attendant to perform laparotomy for the purpose of positive diagnosis, and, if necessary, cleansing and subsequent drainage. The principal danger attending the opening of the abdomen is in the shock produced by contact of the viscera with the air and a lower temperature. This is overcome best by rapid work in a well heated room. Otherwise there is no reason why the opening of this cavity should be more dangerous than the usual operations for disease of the pleuræ. Another decade will demonstrate such to be a fact. Cleanliness of the most perfect kind is here more necessary than elsewhere, because of the sensitiveness of the exposed parts and the difficulty in extracting small foreign bodies from among the many intestinal folds and other viscera.

How to Reduce Traumatic Fever.

Apply bags of cracked ice, or of ice water, or the rubber coil, across the clavicles and base of the neck, and the temperature of the large amount of

blood coursing through the subclavian and carotid arteries and the jugular veins is rapidly diminished, thus causing a fall of body heat within a short time.

An Improved Method of Operating for Cleft Palate.

A correspondent writes to *The Lancet* concerning what he considers a great improvement in the operation for cleft palate. Hitherto great difficulty and not a little danger have arisen from hemorrhage during the operation, necessitating frequent and very skillful assistance, periodical discontinuation of the anæsthetic, and distinct intervals in the performance of the operation. In addition to these, other and minor troubles are experienced. All these difficulties may be avoided, and the operation rendered perfectly safe and easy, by the simple process of inversion as applied to the head only. This can easily be attained by bringing the patient's shoulders well up to the end of the operating table, and allowing the head to hang over the edge in the fully extended position. In this position the roof of the mouth would be horizontal or slightly inclined downward towards the operator, who should stand at the head of his patient. The anæsthetic is given through the nose by a small tube, and is quite out of the way of the surgeon. Only one assistant is required, who should stand to the left of the operator. In paring the edges no change of hands is required, but the corresponding hand should be used in elevating the tissues of the hard palate and in passing the sutures. Under these circumstances no blood can enter the larynx or œsophagus, the palate remains unobscured by blood, and whatever hemorrhage occurs finds its way into the nasal cavities, and at the conclusion of the operation may

be emptied by simply turning the patient's head to one side.—*Medical Record.*

[A most excellent modification.]

A. H. P. L.

Conditions Predisposing Bone to Tuberculosis.

DR. ROSWELL PARK substantially draws the following conclusions in the annals of surgery, while reviewing a paper by Prof. Charpy, that appeared in the *Rev. de Chir.*, of September, 1884, on "The conditions that favor and those which do not favor tuberculosis of bone."

1. Bones may be divided into *red, yellow* and *white*.
2. Red bones are mostly vascular.
3. Yellow bones are mostly fatty and not very vascular.
4. White bones are neither very vascular nor fatty, but hard, dense, heavy, slender, brittle, and without decided markings.
5. Great vascularity *antagonizes* tubercular processes.
6. Much fat, even with diminished vascularity, *antagonizes* tubercular processes.
7. Compactness, with diminished vascularity and absence of fat, *favors* tubercular processes.
8. Vascularity of bone is most marked in childhood, and diminishes with age, and from without inward. Thus the bones of the fingers and palms become devascularized before those of the forearm and arm.
9. Fatness of bone is normal in adult life, and preponderates over vascularity. Those bones and parts of bones farthest removed from the heart are the first to commence and complete their fatty changes.
10. White bones are compact and slender, but neither fatty nor vascular,

from inertia due to insufficient exercise or heredity. Exercise of muscle produces strain upon the periosteum of bone at the muscular attachments, causes congestion, and thus increases osseous vascularity.

[The physiological treatment of suspected tuberculosis of bone, or of a tendency in that direction, would be liberal physical exercise of increasing activity and amount, for the purpose of augmenting the vascularity of bone and its peripheral growth, because of the intermittent strain upon the periosteum, and bone at all points of muscular, tendinous and ligamentous attachments.]

A. H. P. L.

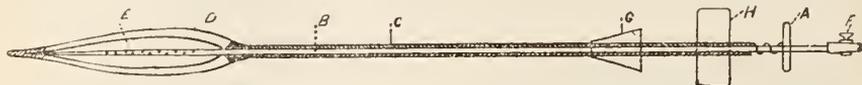
VENEREAL DISEASES.

Lordly's Combined Urethral Dilator and Applicator.

DR. J. E. M. LORDLY, of New York City, kindly sends us the following description of an instrument devised by himself for the treatment of subacute gonorrhœal urethritis.

The instrument represented in the diagram I have devised and used successfully in the treatment of subacute gonorrhœal urethritis. It is the size of a No. 6 catheter when closed, and can be dilated two and a half inches of its length to the size of No. 37 French scale, if necessary. With it the operator can dilate the urethral canal at any given point, and at the same time apply a medicated powder or injection direct to the diseased surface of the mucous membrane while it is stretched, a condition most favorable to its treatment. In the treatment of gonorrhœal urethritis, I am convinced that more reliance should be placed on the proper manner in which the medications are applied rather than on the medications them-

selves. I have been more successful of late in the following plan of treatment : I first wash out and bathe the urethral canal by using a small gum elastic ca-



theter, and injecting a quart or more of a warm carbolized solution; then, having determined the site of the diseased surface of the urethra with a *bougie à boule*, gently insert the closed dilator the required distance, and by a half turn of the thumb screw A, the hollow staff B is slightly drawn within the silver tube C, thereby expanding four thin spring steel wires D, as shown in the diagram, the steel springs dilate the urethral canal about two inches of its length, and while the diseased mucous membrane is fully stretched, a fine medicated and antiseptic powder is blown down the hollow staff B, through its perforated end E, thus making a direct and limited application where it is most needed, and where it will do the most good. The powder prevents the surfaces of the canal from coming in contact at the point where it is applied, and certainly facilitates the method of cure.

Should a medicated solution be preferred, it can be retained within the canal for any length of time by sliding the rubber cone G along the staff, pressing it against the meatus and turning the stop cock F. The small metal plate H affords a firm hold of the instrument during the operation.

The instrument was made for me by Dr. W. Molesworth, of 654 6th Avenue, and works very satisfactorily.

[We believe this instrument to be a good one and that it meets a demand. It can be used in more ways than its inventor claims. Besides having the functions of a dilator, syringe and applica-

tor, it may be used to locate and measure strictures although it would be necessary to modify the handle for the latter purpose, by adding a scale. The

addition of the rubber cone G for the retention of injected fluid is valuable.]

A. H. P. L.

On Treatment of Impotency.

DR. ULTMANN, of Vienna, has recently published (Urban and Schwarzenberg) a little pamphlet which contains many points of interest to the practitioner. (*Deutsche Medizinal Zeitung*.)

The various forms of impotence are classified as follows: 1. Organic Impotency. 2. Physical Impotency. 3. Impotency from irritable weakness. 4. Paralytic form of impotency.

1. Organic impotency depends upon structural defects or morbid conditions of the part (hypospadias, epispadias, elephantiasis, and tumors of the penis), and is usually absolute.

2. The physical form is usually temporary, and especially frequent in nervous individuals. Causes are onanism, gonorrhœa, prostatitis, inflammation of bladder or testicles, or, finally, lack of confidence (which increases the function of the inhibitory nervous apparatus). It is a strange fact that some men cannot execute the act with certain women, unfortunately often their own wives.

3. Irritable weakness leads to a premature seminal discharge; the cause is often onanism or too great an impetuosity.

4. In the paralytic form there is no erection at all; diabetes, morphinism, and affections of the central nervous system are the work of ordinary etiological factors.

The prognosis is mostly unfavorable in No. 1, a surgical interference being more promising; Nos. 2 and 3 offer a favorable prognosis. The therapeutics consist of general measures (quinine, iron, cold water cure, mountain and country air) or local impressions. These are intended to produce erections by artificial means, such as by a surprise as to time and manner, and to thus restore the confidence of the patient in his own capacity.

There are three means of producing an artificial erection: *a.* The progressive bougie-cure with metallic instruments. *b.* The cold bougie (die Kühlsonde) or Wintermiz's psychrophor. *c.* Introduction of astringent urethral suppositories with Ditte's porte-remède, or cauterization of the prostatic portion with Ultzmann's dropper.

This treatment is also applicable in impotency caused by irritable weakness as the reduction of the hyperæsthesia and excessive excitation is here the true indication.

In the paralytic form the prognosis is naturally doubtful, though the stated local procedures and faradization lead, not infrequently, to gratifying results.—*Therapeutic Gazette.*

Tumor of the Testicle.

Mr. F. M. CAIRD thus writes in the *Edinburgh Medical Journal*:

In the present instance we have an example of cystoma simplex, or rather cystoma atheromatousum of Kocher. The history and description are as follows:

G. M., æt. 24, was admitted to the Royal Infirmary of Edinburgh, on the 30th of September last, suffering from enlargement of the left testicle. It seems that sixteen months previously he had received a blow on the testicle.

On the following morning all pain had disappeared, but the organ felt tense and hard, and from that time it has gradually increased in size, but without pain. Four years ago he had had what was apparently soft sore and bubo, otherwise his health has been very good. He is well nourished, and in good condition. He has no glandular enlargement. There is a slight stricture at the triangular ligament. The affected testicle is firm, hard, and of a globular form. The skin over it is stretched to a certain extent, and the scrotal veins are prominent. The cord normal.

In the belief that the growth was probably sarcomatous in character, it was extirpated on the 3d of October, and the patient made a rapid recovery. The tumor was injected with gelatine and carmine through the vessels of the cord, and laid aside to harden in alcohol. On bisection a small quantity of serous fluid escaped.

On examination it was found to measure about $3\frac{1}{2}$ inches in length, 2 inches from side, and $2\frac{1}{2}$ from behind forwards. In shape it was somewhat oval, with an obscurely bossed surface. It felt firm and elastic. The tunica vaginalis was normal. The epididymis and cord were spread out along its posterior surface and it was capped by the stretched and flattened out remains of the testicle. The cut surfaces displayed a mass of whitish rounded bodies embedded in the midst of a dense injected matrix. There was a large irregular cavity lying towards the posterior aspect of the tumor. Interstitial septa could be traced running towards the periphery of the tumor where they blended with its coverings.

On closer examination the rounded bodies were found to have a zoned character where seen in section, as if they were made up of various concen-

tric layers. They could readily be picked out entire, just as one might turn out a wen, and there was left a cavity with smooth whitish walls. It frequently happened that some of these pearl-like bodies had several centres, as if three or four cysts had fused, and in such cases the cavity had alveoli, or depressions corresponding to the number of centres. In no case did we find a communicating chain of cysts. The large irregular cavity appeared to show that a series of cysts had fused and broken down; its walls, moreover, were not vascular, in this respect resembling the septa, with which they were continuous, and pointed to some failure of nutrition. The walls of the cavity were lined with a thick white cartilaginous looking layer, covered in its turn with a granular pultaceous mass. This, under the microscope, was found to consist of breaking down epithelial scales, fat globules, cholesterine crystals, and granular *debris*.

Sections under the microscope brought interesting details into view.

The general groundwork of the tumor was seen to consist of a firm vascular connective tissue, showing here and there deposits of leucocytes. Small nodules of hyaline cartilage were also present. The glandular part of the growth consisting of cysts, might be divided, according to the character of the epithelial lining, into three sets:

1. The greater number of the cysts were lined with tessellated epithelium. They possessed a true Malpighian layer with prickle cells, and over this a horny superficial layer, the squames of which gradually coalesced into an amorphous mass.

2. There were a very few lined by a cylindrical epithelium.

3. Here and there there were cyst-like cavities which contained a closely

packed granular amorphous plug, apparently epithelial.

The tumor was enclosed in a dense capsule of tunica albuginea. The testis lay quite outside this, and had a fibrous envelope prolonged over it also, but was distinctly separate from the tumor. The epididymis showed fatty degeneration of its epithelium.

Beyond the presence of cylindrical epithelium, common also to the tubules of the rete testis, we have little to guide us here in regard to the development or true site of this new growth. The epididymis and testis seem, however, to be perfectly distinct from it, although the histology so far favors the view taken by Curling that such cystic disease originates in the rete testis.—

Medical and Surgical Reporter.

Simple Radical Operations for Hydrocele and Varicocele.

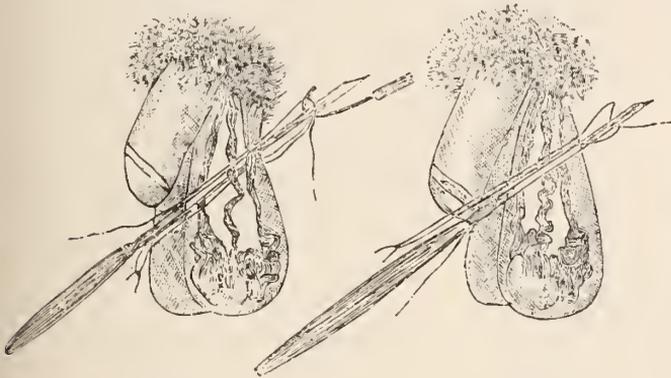
DR. E. L. KEYES, in the *Medical Record* of Feb. 20, advises the injection of ʒj. of deliquescent carbolic acid in glycerine into the sac of an hydrocele after it has been emptied of its contents with the aspirator or hypodermic syringe. The patient can very often go about his business as usual, in fact, the operation can be done in one's office without occasioning any delay to the patient.

In the operation for varicocele, he passes a needle, with an eye point, and threaded with fine strong catgut, through the scrotum from before backwards and internal to the enlarged veins, between them and the cord. The thread is withdrawn from the needle upon its posterior emergence.

Then he draws the point within the scrotum and anterior to the enlarged veins, moves it external to them, and again backwards, emerging at the pos-

terior orifice, where the needle is again threaded and wholly withdrawn through the anterior orifice. He then ties the ends tightly together in a triple knot, cuts them off closely and the ligature slips out of sight. Both punctures are

is safe in young children, but becomes dangerous near puberty, and is grave in adults. After this double arthrotomy, the gaping pubic bones are forcibly approximated, the edges of the ectopic bladder freshened and united, and an apparatus applied to hold the pelvis in its new position for several weeks till union is effected. Trendelenburg's apparatus consists of a broad, well fitting, padded belt, the ends of which cross the abdomen and hang over the side of the bed, weighted with ten or fifteen pounds weights each.



No. 1.

No. 2.

covered with adhesive plaster. As a rule the dartos is included in the loop of the ligature at the posterior opening, and this overcome by forcibly lifting the skin above it, while traction is made upon the ligature in front before tying, thus tearing the included dartos. The whole operation is done under modified antisepsis, and this we are sure could be omitted without endangering the results, at least we shall act on this conviction until it is demonstrated in our experience to be wrong.

A. H. P. L.

New Operation for Ectopia Vesicæ.

In one of the later numbers of the *Centralblatt für Chirurgie*, there appears a paper by Prof. TRENDELENBURG, of Bonn, on the above subject. He recommends that the sacro-iliac synchondroses be divided from behind forwards, and that it is best to extend the incision only half-way forwards. The finger of one hand is held in the rectum to identify the superior gluteal artery and the great sciatic notch. The operation

Cold Water Treatment in Gonorrhœa.

The various methods of treating gonorrhœa are nearly as numerous as the sands of the sea, we were going to say, and still the end is not yet. The discovery of the gonococcus has given a new direction to the methods employed and has greatly aided in discarding the method of treating it by the internal administration of remedies. Dr. H. Picard reports success with the method proposed by Langlebert (*France Medicale*). It consists simply of keeping compresses dipped in cold water (10°-14° C.) constantly around the penis, taking care that the organ is placed up against the abdomen. The method is only applicable to acute or subacute cases and the author claims that the majority are well in a fortnight. The advantages, he claims, are a sure and rapid cure, the avoidance of internal medication, and, we might add, a great deal of enforced rest. The disadvantages accompanying it are the necessity of often renewing

the application, especially at night, and the danger of contracting colds, rheumatism and colic.—*St. Louis Medical and Surgical Journal*.

[We would counsel caution in the employment of this treatment, because of the risk of gonorrhœal rheumatism from the constant application of cold to so sensitive a member of the body in an inflamed state.]

A. H. P. L.

Treatment of Gonorrhœa in the Female.

Dr. E. W. ERANDIN, in the *N. Y. Medical Journal*, of Feb. 13, 1886, in answer to a previous paper by Dr. A. F. Currier, on "Gonorrhœa in the Female," disagrees with the latter's recommendation of the treatment of this condition with applications of the subnitrate of bismuth, and claims that the nitrate of silver is the only agent of great therapeutic value. He employs a 3 ss to ʒ j solution. The vagina is dried, a fresh application saturated with the solution is touched to the cervix, a teaspoonful of the solution is next poured into the vagina, and the speculum slowly extracted with a rotary motion and left open. This insures contact between the fluid and vagina.

[In a succeeding number of the same journal, Dr. Currier replies that his recommendation of subnitrate of bismuth applications were not made with the purpose of conveying the idea that nothing else did good, but that he claimed for the treatment the highest average of successes.]

A. H. P. L.

Combined Urethrotomy in Stricture.

MR. REGINALD HARRISON, in the *British Medical Journal*, advocates that the cutting of all urethral strictures be accompanied with an incision into the urethra somewhere between the strict-

ure and the bladder. The object is to pass a catheter through the external opening into the bladder and thus draw off all urine till the severed stricture has entirely healed. In this way he prevents the passage of urine over the internal incision, a process that usually interferes with healing. In operating in this way, Mr. Harrison gets better results than by the old method, which he has long stoutly opposed.

[We, too, deem this plan a good one, and recommend its trial in all suitable cases. It is good rational treatment.]

A. H. P. L.

DISEASES OF THE SKIN.

Treatment of Comedo.

It presents the appearance of small black points, disseminated through the skin either on a level with it or as a slight whitish elevation having a central black dot. The parts which are most frequently attacked are the face, neck and back. In the face the region about the alæ of the nose, the cheeks, the forehead and in the ears are the most often observed localities, whilst the shoulders are more frequently the seat of the trouble than the back. Most frequently these little points will be noted where the hair ceases growing, as about the edge of the scalp and of the beard and where the ducts of the sebaceous glands are rather large.

It is essentially a functional disease of the sebaceous glands in which, through some reason, the innervation is below par. As a result a greater or less inspissation of the sebum takes place, that part which is most external hardens and contracts, the small space left at the outlet getting filled with foreign material which colors it black. Sometimes the color is due to pigment derived from the skin (Unna).

Constipation, dyspepsia and allied disorders of the gastro-intestinal canal are the most marked factors in its production, whilst hepatic troubles and derangements of the chylo-poitetic viscera will also act as causative agencies. Anemia is a cause, as also chlorosis and derangements of the genito-urinary organs in the male or female. Certain employments, such as coal mining, working in tar, etc., by direct mechanical action will often call the trouble into being.

Like all affections of the sebaceous glands it tends, in a very short time, to become chronic and like them it is obstinate and difficultly amenable to treatment. It occurs more often in the male and is seen at or near the time of puberty or later. It is a rare occurrence in infants or in the aged. It is more often associated with acne than alone.

The treatment should be directed to



Fig. 1.—Comedo Extractor. The ends are much larger for the purpose of clearer illustration.

the general condition in the first place, and this should be very carefully attended to, in order to establish a condition as near the normal one as possible. Every organ and viscus should be enquired after and examined, as local treatment will often prove entirely unavailing until the general condition has been corrected. The local means to be used consist, in general, in stimulating measures. If the comedones are not too numerous they may be pressed out by means of a comedo extractor, as this forces the plug out and leaves the duct of the gland and the gland itself in a better condition to be stimulated. An extractor should have round edges in order not to cut the skin and should be pressed vertically over the comedo. If a large number of the comedones exist,

it is best to extract but a limited number at a time, a process which the patient easily learns to do for himself. After this operation *hot* water should be applied, by means of a rag, to the parts involved and then the following application made: ℞. Sulphuris loti ʒ ss—ʒ j; hydrarg. oleat. 5 per cent., ʒ ss.; ung. aquæ rosæ, ʒ j. M. Sig. Apply at night.

It is always best to go through this operation at night, as the ointment will have a longer time to act before it is disturbed.

A very good application is a paste recommended by Unna and which is particularly applicable where the comedones occur in large numbers. It is composed as follows: ℞. Acidi acetici dil. ʒ j; glycerin puris, ʒ ij; kaolin, ʒ iij. M. Ft. pasta. Sig. Apply at night.

It is needless to mention here the large list of stimulating ointments which may be made. More depends upon the management of the case than upon medication. The skin should be stimulated by frictions, especially when it is washed and the circulation encouraged as much as possible. A good way of thus stimulating is to use an alkaline soap which will perhaps burn somewhat and cause the skin to become a little harsh. Both these conditions are, however, relieved by using a soothing ointment immediately after and is not perceptible if the excess be wiped off with a soft, dry cloth.

Care should be taken to press out the plugs in as many comedones as possible as this is a beneficial operation, preventing the distension of the sebaceous glands and many after troubles of the skin dependant upon that condition besides acting as a local stimulant.—*St. Louis Medical and Surgical Journal*.

[We see no necessity for anybody's purchasing an expensive "extractor," as

a simple watch key with rounded eyes will do the work exactly as well as the best special instrument ever made. It also seems unnecessary, in our experience, to use anything but a colored placebo and several *hot* water applications daily, followed by vigorous rubbing with a crash towel.]

A. H. P. L.

Lupus Treated with Ice Bag.

PROF. GERHARDT, of Berlin, acting upon the supposition (Koch's) that lupus was caused by tubercle bacilli, and that cold might sufficiently benumb these microbes to check the disease, applied ice bags to these growths twice daily, for a period of three hours each time. Pressure was avoided by lowering the bags from a height, this just allowing them to touch without adding their might.

[We must confess little expectation from this treatment, but in consequence of the persistence of the affection, recommend a trial.]

A. H. P. L.

The Non-Tuberculous Nature of Lupus.

DR. GAMBERINI, in Nos. 3 and 4, 1885, of the *Giorni. Itali. del. malat. venr. e del. Pelle*, concludes :

1. That lupus is not identical with tuberculosis.

2. When tubercle is found with lupus, it does not necessarily follow that tuberculosis is the cause of lupus, because bacilli have been only occasionally found in this tissue, while in tubercular tissue they are plentiful.

3. The theory of identity in the causation of these two diseases, is not supported by the results of experiments upon rats.

4. There is a remarkable difference in the response of lupus and tuberculous ulcerations to therapeutics.

5. Lupus and tuberculous affections of the skin are very unlike in their etiology and symptomatology.

Prevention of Baldness.

It has been estimated that one-half the adult men of American birth living in our cities are bald-headed. The estimate is not exaggerated, if it is applied to persons above the age of thirty, and it may be rather under the mark. This much neglected surface should be thoroughly cleansed at certain intervals. It should be carefully and regularly examined, and if it be unhealthy, dry, and scurfy, the proper applications should be made to it. The wearing of unventilated hats is one of the greatest sources of failure of nutrition of the hair, and these must be avoided. The beard never falls out, because it gets plenty of sunlight and air. These are what the hair of the scalp needs, also.

Women are less bald than men, because, for one reason, their scalps are better ventilated. In fine, civilization has made the hair-producing organs of the scalp delicate and feeble. They have to be nursed and cared for, or they atrophy and disappear. Young Americans who do not wish to lose their hair before they are forty must begin to look after their scalps before they are twenty. — *New York Med. Record.*

For Chilblains.

℞. Lin. belladonnæ, fl ʒ ij; lin. acroniti (Br. Ph.), fl ʒ j; acid carbolic, mx; collodion, q. s. ad ʒ j. Mix and apply with a camel's hair brush.

DISEASES OF WOMEN.

Methods of Diagnosis.

LAWSON TAIT, F. R. C. S., in an article published in *New York Medical Journal*, says substantially :

It is perfectly impossible for me to convey by any kind of description how I can tell by the touch an inflamed vaginal mucous surface from one that is healthy ; neither can I describe the feeling that the everted surface of the cervix gives to me which declares the condition of chronic endometritis. But I know that my educated finger-tips can make this distinction. If, on the other hand, I discover a pelvic tumor, long practice enables me to tell, with almost perfect certainty and without the use of the sound, that it is a retroverted fundus or adherent tube or ovary, or, by its fading away toward the broad ligament, on one aspect of the uterus or another, that it is an intra-peritoneal hæmatocele, while the peculiar resistance of a myoma conveys to my mind an accurate impression which needs no probing the uterus to substantiate. So a cyst reveals itself in a way I can not communicate. As a result of all this I very rarely use the sound.

As a matter of fact, I have found that these two instruments, the speculum and the sound, as methods of diagnosis have been productive of uniformly more harm than good. That a blennorrhagic discharge from the vagina of any patient requires the introduction of a speculum is one, I am fully persuaded, of the stock beliefs of the great bulk of general practitioners. But it is certain that nothing of the kind is requisite, and a very large amount of mischief, there can be no doubt, has been produced by this belief. It is not at all an unusual thing for me, on taking part in a consultation

with the family physician concerning some such case, to be told by him that he very much regretted that he had not made an examination by the speculum. Others have told me that they made the said examination, and, when asked what they saw or what they did, the answers usually given are that they did nothing, they merely made the examination ; that is to say, they passed the instrument, and with that proceeding were perfectly satisfied, evidently under the belief that the passage of a speculum was quite as much a curative agent as a method of diagnosis. Similarly with the sound ; I have heard many practitioners tell me of their experience with the sound, or rather their want of it, and I judged that they looked upon it as a sort of magical charm, the introduction of which into the uterus was to achieve unmeasured good. As a matter of fact, the sound is one of the most dangerous instruments which ever was invented for the treatment of human suffering, and in my own practice obtains hardly any kind of employment at all.

One of the most important methods of diagnosis in abdominal disease, and the first to be considered in examining any case, is inspection, and concerning this method a very great deal of nonsense has been talked. For example, Sir Spencer Wells has told us that inspection will reveal the presence or absence of adhesions ; but, in my own belief, and certainly from the experience of cases in which Sir Spencer Wells himself has made the diagnosis, there is no possibility of determining by inspection, or any other method, the presence of adhesions anywhere in the case of an abdominal tumor.

A careful examination, by the eye, of the contour of an abdomen, when the patient is lying on her back with the walls of the abdomen perfectly flaccid,

will reveal a good deal to the experienced practitioner. A completely and uniformly distended abdomen may mean that the patient is suffering from peritonitis, intestinal obstruction, ascitic effusion, a parovarian tumor, an ovarian tumor, a large myoma of the uterus, or pregnancy. The process of discriminating between these various conditions may very rapidly be completed by one who is accustomed to dealing with them. Thus, peritonitis may be at once detected or eliminated by the presence or absence of the short and rapid pectoral breathing, which shows that the patient is loth to use her diaphragm. In fact, by this alone, and without almost any further inquiry, I have satisfied myself as to the nature of the case by a single glance. Ascitic effusion, on the other hand, is revealed at once by the absence of the pectoral breathing, by the greater flattening of the distension, by its tendency to assume a pyriform shape, the broadest diameter just above the pelvis, by the thickening of the walls due to anasarcaous effusion, and the presence of white lines in the skin of the flanks. If the crest of the ilium sticks out under stretched skin, the diagnosis is again almost complete without further inquiry. If, on the other hand, these subsidiary features are absent, and there be a uniform and complete distension, two conditions widely distinct may be suspected. These are parovarian cyst and hydramnios; and here again some very curious mistakes have come under my notice, some of which have had very ghastly results. Parovarian cysts after labor sometimes grow with astonishing rapidity. Hydramnios occurs always with twin pregnancies, and generally in unmarried women, who are, of course, disposed to conceal their unfortunate condition, and where inspection can not be depended upon to discriminate

these cases. But inspection will help us very largely to detect pregnancy and myoma, for in these cases the distension is always greatest either at the middle of the tumor or at its upper part, differing in this way completely from ascitic distension; and here one of the most important agents in the diagnosis of abdominal diseases—palpitation—comes at once to our assistance, and to the skilled fingers it ought not to take more than a few seconds to discriminate between all and any of these conditions. The percussion-note which is uniform in a case of peritonitis, will easily determine the condition which is present. One or two delicate touches of the fingers of one hand, while the fingers of the other lie with the most gentle lightness on the other side of the abdomen, will determine the presence of fluid, and it is in this method of palpation where the fingers of the skilled practitioner at once becomes visible. The inexperienced hands press firmly upon the walls, and may be seen to move to and fro in an aimless fashion, as if they intended to rock a cradle. The gentlest and tenderest touch alone will reveal what is required. A few trials of the different diameters of the abdomen will teach in as many seconds the leading features which are present: First, that there is fluid; secondly, that it is, or is not, near the surface, being contained, or not so contained, within a thin-walled cyst; thirdly, it is one cavity or not; fourthly, the probable character which it presents. The wave excited by gentle tapping is retarded or urged on by the more or less gelatinous nature of the fluid. All these conclusions can be indicated with the utmost rapidity to the skilled fingers, and it is absolutely impossible to teach how this can be, save by the constant practice of the pupil. The parovarian cyst may be

diagnosed entirely from one condition—that is hydramnios—and, partly by its thin walls and partly by the presence of hydramnios, to which I have alluded, is very easily detected. Ascitic fluid is revealed in the same way, with the additional fact that here and there we get tympanitic percussion-notes.

The large uterine myoma is defined by its firm sense of resistance and its uniformly full and pseudo-fluctuation, also by the fact that it has a smaller diameter at the base than it has at the middle or upper part. Pregnancy, the rock ahead to inexperienced practitioners, can be infallibly revealed by palpation. First of all there is fluctuation, due to the liquor amnii, and it can be easily detected, and this declares the cystic nature of the mass. If the hand be made to lie gently on the parietes for a few minutes, a rhythmical contraction of the uterus, by which at one time it is hard as a cricket-ball and at another soft as a cushion, will become perfectly apparent, and this is an infinitely more certain sign than the fœtal heart or the sound of the placental *bruit*. The fœtal heart is a sound which may guide and sustain the practitioner in his conclusions; but it is so easily imitated by intestinal noises, and so difficult often to find, that it is not to be depended upon with perfect certainty. The placental *souffle* is probably more certain than the fœtal sounds, but placental sounds are very often, in rapidly growing tumors of the uterus, so completely imitated that there is always a certain amount of doubt connected with them; but the relaxation and contraction of the uterus in pregnancy is a method of diagnosis which, when once made apparent, can never be mistaken for anything else.

If I may, in conclusion, take one more illustration to show how completely the results of daily practice, or what may be

called rule of thumb, may triumph over the mere teaching of the schools, I would mention the much discussed bi-manual method of examination. I read recently a long rigmarole of nonsense by a German, who evolved from his super-abundant inner consciousness, but not from clinical experience, the conclusion that no man could properly examine the pelvis in this way unless he had the patient on her back, turned in the lithotomy position, he being placed opposite the perinæum. In the first place English women would not submit to such brutality, and it is wholly unnecessary. The most complete and satisfactory examination of any woman's pelvis can be made while the patient lies quietly on her left side in bed without the exposure of one square inch of her skin. Any man who requires more than this is either a pupil or a dullard.

So it is with such a special instrument as Sim's speculum. I have heard some of my American friends say that it is impossible to do any operation on the vagina satisfactorily without it. All I can say is that I have now cured some three hundred cases of vesico-vaginal and recto-vaginal fistulæ, never having failed in any case nor having ever refused one, and I habitually pass the sutures with my finger-tips, wholly unaided by a speculum of any kind.

[There is much good in this paper by Tait, but there is also some nonsense. Operating on a vesico-vaginal fistula without a speculum is about as rational as amputating a limb blind-folded.]

A. J. C. S.

Pessaries: Indications for, and Methods for their Application.

DR. HENRY K. LEAKE, in a clinical lecture published in the *Texas Courier-Record of Medicine*, concludes his remarks on this subject as follows:

My method of placing pessaries, is, so far as I can learn, different from that of all others who use them. The prescribed method of the books is well set forth in the following quotation from Hart and Barbour's *Manual of Gynecology*, a most excellent work. As should always be done, the uterus is first placed in its normal position, which, according to Schultze, if you please, is an exaggerated anteversio-anteflexion—"having oiled the instrument, grasp it with the lower end between the finger and thumb of the right hand. Separate the labia with the first and second fingers of the left hand. When the vaginal orifice is narrow, hook back the fourchette with one finger or get the posterior corner of the end, which is being introduced within the vaginal orifice, and press back the perineum with it so that the anterior corner is not pushed against the clitoris or vestibule. Now push the pessary backwards in the axis of the vagina till it is half within the cavity and rotate it so that the concavity of the sacral curve looks forward. Pass the index finger behind the instrument into the vagina and place the tip of it against the upper bar; carry the pessary onwards, keeping the upper bar well against the posterior vaginal wall to prevent its slipping up in front of the cervix."

I venture to suggest that the prolixity and uncertainty of this method is only equalled by the simplicity and efficiency of the one which I have been accustomed to employ for many years.

The Sims' speculum dilates the vaginal canal and reveals to the critical eye of the surgeon its whole extent, thus enabling him to perform operations within its cavity with as much ease as those he undertakes on the exposed parts of the body. Why not utilize the same means for the perfect fitting and introduction

of pessaries? For illustration, take a case of retroversion. The patient lies in Sims' position with the perineum well retracted by the speculum in the hands of a qualified assistant. The spirit lamp used in modelling your instrument burns brightly on a table at your left hand. You now introduce well into the cavity of the uterus, the Elliott or Emmett's repositor, and reversing the action of the instrument, you have the satisfaction of witnessing the organ revolve, right under your eyes, into its normal position. The repositor being now withdrawn it is replaced by the sound, the handle of which is given to the assistant, who holds the uterus in its new position, until a pessary can be fitted to the conformation of the vagina and cervix. Experience will enable you almost at a glance to determine the size and shape of the pessary required. Having heated the hard rubber over the spirit flame, its curves are unbent or increased, its fenestra widened or narrowed, or any other form given the instrument, which is desirable, before leaving it permanently in position. Resuming control of the sound, its handle is passed through the fenestra of the pessary and the latter strung along the continuity until the cervix is reached, when by tilting up the lower end, or depressing the upper bar, the latter glides readily in position up behind the cervix; after which the sound is withdrawn and the speculum removed. The patient is now made to stand erect and is subjected to a final examination. The index finger, well lubricated, being introduced into the vagina and carried up to the vault, is swept around the cervix, noting the position of the pessary and the effect, if any, produced upon the affected organs. This plan of fitting and introducing pessaries seems to be the most rational of any yet recom-

mended. Indeed, I do not see how it is possible in any other way to conform the outlines of the instrument to the anatomy of the vaginal walls and cervix, and thus meet the exact requirements of each case. The same position is to be recommended also in re-examining and re-fitting pessaries, the precaution being to inspect them before removal.

All patients who have had pessaries introduced for backward displacement should be instructed in the knee-breast position advised by Dr. Campbell. They should assume this for at least five minutes night and morning. By this rational procedure the strain upon the pessary is lessened somewhat, thereby assisting its traction-lever power. Moreover, the blood, which has yet a tendency to stagnation in the weakened and dilated vessels of the displaced uterus, as well as other organs contiguous thereto, flows out and seeks remote areas in the head and trunk of the body, which is placed by this manœuvre on a lower level. Thus the weight of these organs is diminished, a better circulation favored in them, and much comfort, if even for a short time, afforded the patient. A special injunction should, for obvious reasons, be given regarding the rectum and bladder, which should be kept as empty as is consistent with health; and all straining and lifting interdicted. Corsets should not be worn and the under garments must be suspended from the shoulders. Vaginal injections of hot carbolized water should be directed once daily at least, and in using them a large amount of water employed; but care will be necessary in taking them lest the pessary be floated from its position by the force or largeness of the stream. The syphon syringe is, except in special cases, to be preferred. Iron tonics should be regularly administered; those containing strychnia being the

best—its special action is assumed, being exerted upon the muscular tissue of the uterus as well as that of the ligaments.

The following conclusions seem warranted from the foregoing discussion of this subject:

First. That, whilst there exists great difference of views as to the expediency of using pessaries, the practical gynecologist also is influenced in his opinions by his own individual experience, and will not servilely bow to the authority of those, who perhaps, reject such aids on insufficient grounds.

Second. That the classical pressure symptoms, including weight in the pelvis, sacralgia, bladder and rectal irritation, difficulty and pain on locomotion, dragging pains in hips and lower abdomen, etc., combined or uncombined with systemic effects, are relieved by a skillful adjustment of pessaries, and must be continued to be held as an indication for their employment.

Third. That, in all cases of anæmia, neurasthenia, hysteria, presenting themselves, the cause may be located in some displacement of the pelvic organs, and this point should be determined by immediate examination.

Fourth. That due regard must be had to the natural mobility and normal position of the uterus in the placing of pessaries.

Fifth. That, contrary to the general view, retro-flexion can be redressed and maintained in position by a skilful adjustment of the traction lever pessary.

Sixth. That pessaries should be fitted and placed with the patient in Sims' position, this being the most favorable for such procedure.

Seventh. That, while the evidence thus far has been discouraging as to the curability of uterine displacements by means of pessaries, we must, at least, acknowledge their powerful aid as palli-

atives, and we are justified in believing that the future statistician will demonstrate their greater efficacy in tables showing permanent results.

Laceration of the Os and Cervix Uteri, and the Operation of Trachelorrhaphy.

The following is the summary of a lecture recently delivered by DR. GRAILY HEWITT on this subject.

The operation is indicated by the presence of considerable hypertrophy of the os, the result of laceration and the more so if hypertrophy and eversion be conjoined; by the presence of chronic severe local pain, evidently traceable to the irritation of a raw surface less extensive in amount, or traceable to cicatricial hardening at the bottom of the fissure; by the association of marked laceration with a troublesome displacement of the body of the uterus; by the presence of a severe recent laceration, even in cases where no severe symptoms have had time to develop themselves, with the view of preventing (1) cellulitis; (2) the occurrence of cancer; (3) the supervention of symptoms generally; lastly, by the presence of general severe prostration, inability for locomotion, etc., obviously traceable to laceration.

The operation itself is not, in most cases, a difficult one, but, in some cases it is so. In assisting to hold the cervix down, I have found the large tenaculum hooked forceps, depicted in the last edition of my work on *Diseases of Women*, made by Mayer and Meltzer, of very great utility. Some times the nodular hypertrophy renders co-aptation of the edges, after paring them, not easy, owing to one side of the rent being very short, the other very long. Another difficulty is, in some cases, the excessive hardness of the tissues to be

perforated by the needle, which is sometimes so great that much force is required to penetrate the tissues. The needles need to be very strong for such cases. I have found No. 6 silver wire most suitable for sutures, and have generally removed them in not less than ten days. Probably it would be better to leave them a week or two longer, in cases where the patient is very weak and nutritive action feeble. The importance of a preparatory treatment before proceeding to the operation has already been pointed out.—*British Medical Journal*.—*Journal American Medical Association*.

[In this lecture there is a very unfortunate use of terms. Laceration or hypertrophy of the os uteri are hardly imaginable.]

A. J. C. S.

Iodoform in Uterine Catarrh.

KUGELMANN, having noticed that iodoform very promptly cures coryza and laryngitis, concluded that it would be beneficial in cases of uterine catarrh. He introduced the powder into the uterus by means of a very fine catheter. The applications were renewed twice a week, and with excellent results. The catarrhal hypersecretion diminished or ceased immediately in every case.—*Gazette Med. de Paris*.—*Ibid*.

Remarkable Neurosis from Uterine Displacement.

DR. AVELING, of London, relates (*Lancet*) the following case: The patient was a married lady of 38 years, the mother of a family; no history of hysteria or other neurosis. In October, 1884, one of her children struck her left eye with the back of his head. Six weeks after she felt something wrong with the eye, and had noises in the ears, tenderness of the nose, and pain

at the back of the head when she stooped or had the bowels moved; she had also hesitation and stammering of speech. These symptoms gradually got worse till March, 1885, when she had three blisters on the nape. The headache became constant and was accompanied with vomiting. During this time she was seen by several eminent London physicians and surgeons. Finally she spoke to her ordinary medical attendant about certain pelvic symptoms she had felt for a long time. These were feelings of weight, and bearing down and dysuria. The physician examined and found extreme anteversion of the uterus, with a full bladder, the fundus of the uterus resting on, and making, as it were, a bed for itself in the bladder. On replacing the uterus and emptying the bladder, all the head symptoms disappeared. The relief was temporary—with return of the displacement, the symptoms returned. Lying with the hips raised on a high pillow also relieved the symptoms. Dr. Aveling was called in consultation, and succeeded in giving complete relief by inserting a Graily Hewitt cradle-pessary. Six weeks afterwards the relief continued.—*Weekly Medical Review*.

Electricity as a Therapeutic Agent in Gynecology.

DR. PAUL F. MUNDÉ, in a paper read before the New York Academy of Medicine, enumerates the following practical points for the use of electricity in gynecology.

1. The galvanic current is far more generally useful than the faradic, which as a rule has a stimulating effect. The galvanic, on the other hand, acts as a sedative.

2. A mild, steady, galvanic current will answer every purpose, and is in

every way preferable to a powerful, interrupted one. The faradic current, however, is useful in proportion to its strength.

3. Whenever the constant current causes pain, it is doing harm.

4. Personally, he could never decide which pole, the negative or the positive, should be placed within the body, provided care was taken that the current should not be too strong. The effect is apparently the same whichever pole is used internally. There is, however, one prominent exception. In cases where there is circumscribed pain, the positive pole is the one to be placed near the painful point. In using the faradic current, it is of no consequence which pole is employed internally or externally.

5. He had always found it safe to begin with a mild current and gradually increase it to the required strength.

6. When internal electrolysis is to be employed, it is always best to introduce the internal pole before closing the connection, on account of the sensitiveness of the external parts. Dr. Mundé said he employed an electrode covered with leather for introduction into the vagina, but that he had been recently informed by an electrologist that this in reality afforded no protection to the parts.

7. To be of any service, the treatment must be frequently repeated for a considerable length of time. As a rule, it is useless to make applications less frequently than twice a week, and in many cases they should be made every other day. A course of treatment by localized galvanization should last from three to six months.

8. The results of faradization in chronic affections are less favorable than those of galvanism. But, while relief from pain and an amelioration of the general condition are very often

obtained by this means, a complete cure is not to be looked for in many of the affections which come under the gynecologist's notice.

Among the pathological conditions referred to in which treatment by electricity is applicable, were deficient development of the uterus and ovaries, amenorrhea, subinvolution and menorrhagia. Where there is deficient development, faradization should be employed in conjunction with the use of sponge tents and constitutional measures. For the treatment of chronic pelvic cellulitis, of obstructive and neuralgic dysmenorrhea, the galvanic current often benefits after all other forms of treatment have failed.—*Ibid.*

Vulvar and Vaginal Enterocele.

By T. GAILLARD THOMAS, M. D. (New York). Recognizing five varieties of hernia which may appear in the vagina or vulva—(1) cystocele or hernia of the bladder, (2) rectocele, or hernia of the anterior wall of the rectum, (3) vaginal enterocele or descent of a portion of the small intestines into the vagina, (4) pudendal enterocele, pudendal hernia, or descent of the small intestines into the labium majus of one or both sides, (5) perineal enterocele, perineal hernia, or descent of the small intestines by protrusion through the perineum—he discusses only the last three.

Vaginal enterocele—is formed by a loop of small intestine pushing the peritoneal lining of the sac of Douglass down, and, infringing upon the vaginal wall, causing it to arch inward until there is formed an intra-vaginal tumor, which sometimes protrudes through the *ostium vaginae*. The walls of the sac then consist of peritoneum and the inverted vaginal wall. The symptoms apt to develop are: Difficult locomotion, pelvic tenesmus, colicky pains,

tendency to constipation, and, in time, vomiting, with parturition, liability to obstruct labor is added. A tumor of variable size is found in the vagina; it is soft, supple and yielding, decreases upon pressure, gives a sense of gurgling to the finger if not to the ear, increases upon the patient's coughing or straining, yields resonance upon percussion and is very generally reducible if the patient be placed in the knee-chest position and efficient taxis be practiced. It should be differentiated from prolapsus of the vagina, uterus, bladder or rectum, or a combination of these displacements; from vaginal, parovarian, or ovarian cyst; from a fibrous tumor low down in the pelvis, a cold abscess of the pelvis, or a marked case of tubal dropsy. Two cases of acute vaginal hernia, consequent upon traumatism are related, and care in manipulating the wall of the vagina inculcated. Vaginal hernia, so long as it remains in the pelvic cavity is a matter of little moment, since, because of the absence of a neck, it is not prone to strangulation, although it may occur from pressure of the foetal head, inflammatory processes, faecal impaction, torsion of the contents of the sac or the existence of a neoplasm.

Pudendal enterocele appears as an elastic tumor about the size of a pigeon's egg, near the middle of the labium majus of one side, and may be formed (1) by the intestines following the course of the round ligament through the inguinal rings and (2) by passing downward between the vagina and the ramus ischii, reaching the labium from within the pelvis; at the beginning, the latter variety exactly resembles vaginal hernia, but instead of inverting the vagina before, it separates the vaginal wall from the ischium, and insinuates itself between these parts. The two varieties of pudendal hernia may be differentiated by

the fact that in the second, the finger will pass into the pelvic cavity between the ischium and vagina, when pushing the tumor upward, entering the pelvic roof at the level of the os uteri or thereabouts, and the tumor will reappear on coughing, in spite of pressure on the inguinal canal. Diagnosis should be made from cyst or abscess of the vulvo-vaginal gland, cyst of the labium majus or minus, and abscess of the former, fatty or fibrous tumors of the labium, and tumors descending from the pelvic cavity. He considers almost pathognomonic of this condition: (1) airy feeling on palpation, (2) gurgling on replacement, (3) diminished tension in the dorsal decubitus, (4) diminution of bulk upon taxis, (5) resonance upon percussion, (6) succussion upon coughing and (7) intestinal pains of a colicky character.

Perineal enterocoele in the female consists of the descent of the intestines between the vagina and rectum, posterior to the broad ligament and continuing until the perineal muscles are forced apart, and the gut, with its peritoneal envelope, is arrested by the skin. He quotes Astley Cooper's statement that, having reached this point, it does not project as an external tumor, and can be felt in the male from the rectum, and in the female from the rectum and vagina.

All these varieties of hernia are readily amenable to taxis, which is greatly facilitated by the genu-pectoral position. In case of strangulation, the surgical practice usual in hernia is indicated. The necessity for this, however, is rare, the greatest danger being attached to errors of diagnosis, by reason of which the tumor may be subjected to operation as a cyst, polypus or fibroid, or an abscess, a number of cases of which are quoted. But one variety, the pudendal, originating from the inguinal canal, can

be helped much, and the others can be relieved but slightly by pessaries, pads and other mechanical devices. A case is related of a large vaginal hernia—containing a soft, shapeless tumor, probably a local hypertrophy of the pelvic connective tissue in addition to the intestine—in which the author performed laparotomy, emptied and inverted the sac, and, dragging it up, fastened it in the abdominal wound. The patient made a good recovery and, although apprehensive about her future, the author would be inclined to repeat the procedure in a similar case.—*N. Y. Medical Journal.—Annals of Surgery.*

Uterine Dilatation.

DR. GOODELL exhibited his improved uterine dilator to the Obstetrical Society of Philadelphia. He said that the main difficulty in the operation for the rapid dilatation of the cervical canal lies in the liability of the blades of the instrument to slip out. This he had, in a great measure, overcome by having shallow grooves cut into them. Into these grooves the tissues sank, and the resulting friction keeps the instrument in place.

Since he had called the attention of the society to his instrument, not quite a year ago, he had performed the operation forty-one times for dysmenorrhœa and sterility, making in all two hundred and nine such cases. In not a single instance had dangerous symptoms followed, and the average of success was a very large one. He had become firmly convinced that for dysmenorrhœa and sterility the operation of rapid dilatation of the cervical canal would, except in some very rare cases of stenosis of the os externum, wholly supersede the cutting operation, the use of tents, or the slow dilation by any means what-

ever. For, by the former, not only is the measure of success far greater, but the danger from inflammation is very much less. He dilated the parts from three-quarters of an inch to one inch and a quarter, as measured by the handles, watching the cervix carefully to see what strain it could bear. His instrument could be opened to the width of one and a half inches, but he resorted to that extreme divergence only when wishing to introduce his finger for diagnostic purposes. This he could not ordinarily do unless the parts were relaxed from hemorrhage. Usually, however, when not suspecting the existence of a polypus, he did not find it needful to pass in his finger, for after a moderate dilatation he introduced a fenestrated forceps and opened it at haphazard. In this manner he has repeatedly caught and twisted off a polypus without knowing it was present, the subsequent removal of the growth through the os uteri being the most difficult part of the operation.

Dr. Baer (the President) stated that when the uterus contains a polypus, the continued hemorrhages reduce the contractility, and a single dilatation will sometimes enlarge the os sufficiently to admit the fingers or forceps; but, if the uterus is healthy, it contracts immediately after the withdrawal of the dilator. He could not recall an instance of inflammation following rapid dilatation. Sterility of long standing is seldom cured by dilatation or any other means.—*Philadelphia Medical News.*

Shortening of the Round Ligaments— "Alexander's Operation."

The following is a portion of the remarks of Prof. C. B. NANCREDE, published in *Medical and Surgical Reporter.*

On account of a lacerated perineum and the uterine subinvolution conse-

quent upon too early "getting up" after her rapidly-recurring labors, and also from her severe manual labor, a complete procidentia of the womb has taken place, so that the extruded uterus and everted vagina have assumed much the appearance of the male genitals, the mucous membrane from long exposure and friction resembling the external integument. Neither pessaries nor supports will any longer afford relief, and an operation of some kind is demanded.

Complete anæsthesia having been now induced, I cut freely down upon the right inguinal canal, taking the spine of the pubes on that side as my starting point, and prolonging my cut obliquely upwards and outwards about two and a half inches. Of course, the more frequently the surgeon repeats this operation the shorter will be the incision. On a thin subject, the incision need not be so long as I make it in this corpulent patient. Unless the surgeon has witnessed the performance of this operation more than once, it is advisable to practice it upon the cadaver. Following Alexander's directions, I hook out with an aneurism needle the mass of fibro fatty tissue from the external inguinal ring, after dividing a few of the inter-columnar fibres so as to freely open the canal. It may be well to say here that the external ring can be readily recognized after the aponeurosis of the external oblique has been freely exposed, by a little pellet of fatty tissue which bulges out from it. Having separated the fatty tissue with the finger-nail and a director from the sides of the canal, I recognize the ligament by the genito-crural nerve which runs along it, which latter structure I carefully separate, preferring not to cut it as Alexander advises, unless I see fit to do so at a later stage. Great care must be exercised not to fray out the ligament, only the

finger-nail, closed, blunt-pointed scissors, or a director being used—at least, this is my experience, although it is somewhat opposed to that of Alexander. You must proceed with care lest the peritoneum be opened, but there need be no fear of invaginating this serous sac into the canals, if the ligament be properly separated from its surrounding connections. Having dissected out both ligaments so that they play freely through their respective canals, I pass a stout catgut ligature successively through the ligament, the inner column of the ring, and the inner (upper) margin of the skin incision, repeating the same procedures on the outer column, etc., with a second thread. These sutures are then tied with sufficient firmness to retain the uterus, but not strangulate the ligament, the uterus, before they are tied, being replaced by a sound introduced into its cavity. The wound is now thoroughly syringed out with the mercuric bichloride solution, the surplus ligament tucked in, a capillary catgut drain secured to the bottom of the wound, which, after closure by a few points of interrupted suture, is dusted over with iodoform powder, and an antiseptic gauze dressing is applied.

In passing, let me beg you to observe the method I employ of inserting the catgut drain (a mere brush of catgut threads, as ordinarily used, always proving a snare): A bundle of some dozen or more fine catgut threads are tied together at its middle by another ligature threaded through a needle, by means of which the drain is securely stitched to the bottom of the cavity. Now, three or four strands brought out between each pair of silver sutures, *the individual threads being kept closely in contact outside the wound*, allow of capillary drainage. By the time discharge should have ceased—and remember, this form of drain is only effective

for blood or serum, not pus—the gut within the wound is absorbed, and the remainder comes away with the dressings. The advantages of this method, introduced by Mr. J. Chiene, are self-evident. Both ligaments are drawn up into position at the same time, so as to draw equally upon these structures, and held by an assistant while the sutures were passed. The left ligament as usual, you notice, is about half an inch longer than that of the right side.

Although, for safety, we employ antiseptic methods, we do not expect union by the first intention throughout. A medium-sized, well-fitting Smith-Hodge pessary is next introduced into the vagina, and the patient is placed in bed with her knees tied together and flexed over a pillow, and the head and shoulders somewhat raised to ensure relaxation of the abdominal parieties, thus avoiding any drag on the wounds. She will now have administered a hypodermic of morphia and be sent to the ward. You will notice before she goes, that the uterus is well raised up and strongly *anteverted*. Thus, even if the sutures should separate early, the newly-formed adhesions will be subjected to no dragging strain, since all expulsive efforts will only tend to still more anteverte the organ, drive it forwards, and rest it, as it were, upon the pubes, while by means of the loose broad ligaments, as before explained, the small intestines are allowed to crowd down below and actually *elevate* the womb. Please to remember that the rectocele and cystocele resulting from the torn perineum and relaxed, long-everted vagina, will not be cured, although, perhaps, materially improved, but the *womb* will no longer descend. Let us hope that by this new operation another opprobrium of medicine is removed, and a great advance in uterine therapeutics made, serving as another

milestone on the forward journey of this century's remarkable advances in surgical science.

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DISEASES OF CHILDREN.

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To Remove Small Calculi from the Bladder in Male Children.

MR. THOMAS ANNANDALE, Professor of Clinical Surgery in the University of Edinburgh (*British Medical Journal*), presents the following new plan to remove small calculi from male children. He quotes Erichsen to the effect that he scarcely recollects to have met with a middle-aged man who had been operated on in childhood by the lateral method. Mr. Annandale believes that he has overcome the difficulties in the way of using a lithotrite in these cases. He relates then a case of a boy aged $4\frac{1}{2}$, who, while under chloroform dilated the urethra by passing Nos. 6, 7, 8 and 9 silver catheters in succession; only No. 9 was slightly grasped by the urethra. Before this instrument was removed four ounces of antiseptic fluid (corrosive sublimate 1 to 4000) were injected through it into the bladder. This catheter being withdrawn a small lithotrite equal in diameter to a No. 8 bougie was introduced into the bladder. The stone was seized and it was then found that by depressing the handle of the lithotrite its vesical extremity, together with the stone, could be readily felt through the abdominal wall immediately above the pubes. The lithotrite being held in position, a small incision an inch in length was made in the middle line of the abdominal wall over the pubes and for a short distance above it. The various tissues were divided until the wall of the bladder was exposed at the point against which the blades of the lithotrite and the enclosed stone were pressing. A little further depression

of the handle of the lithotrite caused the extremity of its blades covered by the stretched wall of the bladder to protrude through the wound in the abdominal wall; and a small incision having been made through the wall of the bladder by cutting upon the extremity of the lithotrite, the instrument with the stone were pushed through the wound. The stone was here extracted from the blades of the lithotrite, and the open extremity of a No. 7 india rubber catheter was seized and drawn into the bladder and along the urethra as the lithotrite was removed, thus leaving a drain for the urine to escape from the bladder. The wound in the abdominal wall was closed by two horse-hair stitches, and a drainage tube inserted into it so as to aid the escape of any urine which might flow from the bladder wound. Irrigation with corrosive sublimate 1 to 2000 was employed during the operation, and the wounds and parts around were covered with a dressing of corrosive sublimate wool. The stone removed was the size of a horse-bean, of uric acid formation. The urine was slightly tinged with blood for the first twenty-four hours. Forty-eight hours after the catheter and drainage tube were removed, and the patient had not the slightest bad symptom. For twelve hours after the removal of the drainage tube the urine came by the abdominal wound; but, after this, it passed almost entirely by the urethra, and the patient was running about the ward, perfectly well, on the tenth day after the operation.

Mr. Annandale claims that this is not simply a supra-pubic lithotomy, but a much less serious proceeding. Its advantages over lateral lithotomy are: 1. That the urethra, prostate and neck of the bladder are left uninjured. 2. That it is a much more simple proceed-

ing and does away with the principal risks which have occasionally been encountered in performing the operation on children.

Mr. Annandale confesses that it requires some manipulative dexterity to seize a small stone in a male child's bladder, but not greater dexterity than every operating surgeon should possess.—*N. C. Medical Journal*.

The Treatment of Cholera Infantum.

DR. W. BYFORD RYAN, closes an article in *Indiana Medical Journal* as follows :

The causes which lead to this deplorable state are, in my opinion—

1. *The enervating influence of excessive heat, producing, as in Asiatic cholera, spasm of the peripheral arterioles.*

2. *Hyperemia of the gastro-intestinal apparatus, produced (a) by chilly nights following excessively warm days, and (b) by the reflux of blood from the emptying of the surface capillaries.*

3. *The vulnerability of the gastro-intestinal viscera in the young generally, and especially in those whose digestive organs are enfeebled by premature weaning or by improper food.*

Spasm of the arterioles, or what amounts to the same, paralysis of the trophic nerves, produces peripheral anemia. The congestive influence of chilly nights, added to the emptying of superficial vessels, favors engorgement of the internal vascular system. The atonic condition of the digestive organs, made more vulnerable by premature weaning or improper food, also invites the fugitive blood. *Atonic vessels long distended permit the rapid endosmosis of the serum of the blood.* Hence, vomiting, diarrhœa, *serous* ejecta, anemia, excess of fibrin and solids in the blood, and the coagulability of the blood itself,

thrombi and emboli, the plugging of cerebral vessels; hence, death—if, indeed, death do not claim his victim previous to the formation and lodgment of a clot.

If this view of the causes and pathology of cholera infantum be correct, the rational treatment must necessarily be in direct antagonism to the dictum of Hahnemann, and in full accord with its antipode, *contraria contrariis*, which is—

(a.) To restore the blood supply to the surface, thereby relieving measurably the visceral engorgement.

(b.) To establish and maintain capillary action of the entire economy, thus arresting extravasation of serum with all its attendant evils.

(c.) To give tone to the muscular and mucous coats of the bowel.

(d.) To supply proper nutriment.

These are the indications. Can they be satisfactorily met?

Having come to conclusions satisfactory to myself as to the ætiology of infantile cholera, I cast about me for rational means with which to combat existing conditions.

We find peripheral anemia; belladonna is the most potential means for flushing the superficial capillaries.

We find the vascular system of the intestines and stomach engorged and sieve-like, permitting liquor sanguinis to escape into the lumen of the viscus; belladonna produces dryness of mucous membranes.

We find extreme irritability of stomach and intestines, giving rise to vomiting and excessive diarrhœa; belladonna produces partial anæsthesia of these mucous surfaces and promptly relieves this condition.

We find progressive anemia, produced by endosmosis of serum; belladonna arrests the waste immediately.

Finally, basing the assertion upon actual experiment by myself and those upon whom I have, with the earnestness of positive conviction, pressed the importance of its administration, I can safely say that belladonna will, in every case, arrest both the vomiting and the diarrhœa at once, and that no child sick of this dread summer complaint, who has a fair constitution, need be lost if it have this treatment, combined with and followed by such tonic measures and nourishment as will suggest themselves to any intelligent physician.

Minute doses of nux vomica and arsenic I regard almost as essential as tonic treatment. I refrain from suggesting formulæ, but cannot close my remarks without protesting against the use of mercurials in a disorder where there is no lack of bile secretion, and where the blood is being rapidly broken down without the help of agents which produce that effect.

Measurements of the Feet of New-Born Children.

According to a German journal, the *Revue des Sciences Médicales*, describes a procedure studied by GONNER, which may be of interest from an obstetric point of view. The question is as to whether there exists a constant proportion between the size of the foot and of the head; its solution becomes of interest in cases of breech presentation. A series of measurements taken at the clinic at Bale seems to establish the fact that the difficulty of delivering the head may be calculated from the length of the foot of the child. As a result of measurements made upon one hundred newly born infants, it was found that a foot measuring eight centimetres, (3 1-5 in.) in length, corresponded with a weight of the child of 3,000 grammes (6½ lbs.), and that when the foot meas-

ured more than eight centimetres, it was to be expected that the child would weigh more than the average fœtus at term; in such a case, therefore, special difficulty in extraction was to be apprehended. When the foot measured less than 7.3 centimetres (2.9 inches), the fœtus had not reached full term in most cases. These results were obtained from children of the working classes; the influence of heredity, occupation, race, etc., may change the figures considerably.—*Lyon Médicale*.

Tubercular Meningitis in Children.

Liverpool Medico-Chirurg. Journal.—

The paper is based on a study of forty-six cases and 41 autopsies. In nineteen of the latter series there was only slight opacity of the membranes, in twenty-two there were well-marked deposits of yellow lymph. In nine caseating masses were found in the brain. In every instance there was a great excess of fluid in the ventricles.

In forty of the forty-one cases in which the whole body was examined, there was cheesy deposits either in bronchial or mesenteric glands, or tubercular deposit of the same nature in the lung, liver, kidney or bone.

Of sixty-three cases, forty-eight were between two and seven years of age, and no case was over ten years old.

Caseation of bronchial and mesenteric glands from persistent catarrh in the lungs or intestines is an important factor in the etiology. These are believed to act as foci of infection. Heredity has a good deal to do with this tendency to caseation; but the statement that tubercular meningitis is brought about by over-study, poverty, bad feeding, etc., finds no support in the facts adduced in the author's experience. Great importance is attached to the observation of premonitory symptoms, as when a

previously robust child loses flesh, tires easily, becomes fretful and irritable, loses appetite, complains occasionally of the head, has disturbed sleep, horrible dreams, and constipation. These may last for months, but an attack can often be avoided by prompt measures. Iron, cod-liver oil, the bromides, change of air, etc., may arrest the disease, and a perfect return to health be brought about. The author has seen recovery even in cases where the disease was fully developed. It is often only partial, the child remaining feeble-minded for the rest of its life.

In diagnosing this disease from general tuberculosis, in which the predominance of the lesion is elsewhere, the brain being very slightly involved or free from disease entirely, great importance is attached to the temperature. In the latter it is always higher than in tubercular meningitis, varying from 102° to 104° , while in meningitis it usually ranges from 99° to 101° . He draws the following conclusions:

1. Tubercular meningitis is not a disease *per se*, but owing to the fact that ventricular effusion, when excessive, produces death rapidly, it is convenient to consider this phase of the general disease separately.

2. Ventricular effusion is caused by occlusion of the vessels by nodular growths of tubercle in their walls.

3. The disease is rare after ten years.

4. Great attention is to be paid to prophylaxis. A sudden change in disposition under the circumstances before noted, should lead to a careful examination of the pulse and temperature.

5. Confinement in close rooms and worry of lessons may produce nervous exhaustion, and a child with a phthisical family history may develop, in consequence, tuberculosis, but not necessarily meningitis. The facts are that the great

mortality from this disease is before school age with most children.

6. Tubercular meningitis is nearly always associated with a caseating centre which serves as a focus. Infection being carried by the vessels probably.

Two chromo-lithographs showing the tubercular growths in the blood-vessels, and a tabular arrangement of forty-six cases, complete this exceedingly valuable paper.—*Archives Pediatrics*.

On Infantile Aphasia.

PROF. BERNHARDT, of Berlin, presents his views about infantile aphasia in a little pamphlet (*Deutsche Medizinische Zeitung*), from which we abstract some salient points.

1. Genuine infantile aphasia is not so common an affection as is commonly believed; about ninety cases are all that are recorded.

2. Its etiological factors are nearly identical with those producing the affection in the adult phases of life, with special consideration, though, of the various characteristics of childhood. The principal causes are reflex conditions after indigestion, entozoa, psychical irritation, infectious diseases, acute and chronic brain affections.

3. Infantile aphasia is chiefly a symptom of cerebral infantile paralysis.

4. Hemiplegia does not necessarily exist along with aphasia.

5. The affection may disappear spontaneously, especially after prudent and systematic physical exercise.

6. The nature of the cerebral lesion in cases of aphasia existing since birth, is not known, since no autopsies are recorded. The therapeutics of the affection is little effectual; antiphlogistic measures at first, and later the galvanic current, together with the preparations of iodine and bromine, suggest themselves.—*Therapeutic Gazette*.

OBSTETRICS.

Epithelioma of the Cervix, Complicating Labor.

DR. C. C. FREDERICK (*Buffalo Medical and Surgical Journal*) advises the following treatment of this rare occurrence:

1. When the disease is not too extensive, it should be removed early in pregnancy.

2. When the disease is extensive, it should be removed near or at the time of labor.

3. "When this cannot be done, the safety of the mother is best consulted by bringing the pregnancy to an end as soon as possible."—(Herman.)

4. When the labor has come on, expansion of the os should be aided by numerous small incisions in its circumference, and the use of rubber dilators.

5. Dilatation of the os being in progress, and uterine action not sufficient to force the head through the cervical canal, forceps or version may be resorted to.

6. When dilatation cannot take place after removal of the diseased tissues, the incision of the os and use of dilators, either from the size of the tumor or rigidity of the tissues, Cesarean section should be done.—*Weekly Med. Rev.*

Uncontrollable Vomiting During Pregnancy Cured by Feeding Through an Esophageal Tube.

The *Philadelphia Medical News* relates the following case of Dr. BRUENNICHE (Centralb. f. Gynaek.): An unmarried woman with scanty, irregular menstruation, suffering severe gastric disturbance for two months, entered a hospital, and, under diagnosis of ulcer of the stomach, the possibility of pregnancy was denied. Soon after admission, vomiting became so severe that all

food was rejected and inanition was threatened. Alimentation by means of an esophageal tube was now resorted to, and broth—followed by cold water, before withdrawal of the tube—was first fed to the patient without causing vomiting. Milk was then administered, and no vomiting being produced, it was followed by bouillon, etc., with like favorable results. After five days an attempt to swallow food caused reappearance of nausea and vomiting, and the use of the tube was again necessitated. Pregnancy was now readily diagnosed. In three weeks the use of the tube was dispensed with, and the woman discharged cured.

A significant fact in connection with the case is that it was only necessary to introduce the tube into the entrance of the esophagus, showing that the location of the sensitive region, irritation of which occasioned the vomiting, was situated higher up in the digestive tract than the stomach.—*Ibid.*

[This measure is worthy a trial in a limited class of cases, though we fear the result will not often be as satisfactory as in the case reported. If the "sensitive region" is so high up in the digestive tract, it is difficult to see why the injecting tube should be better tolerated than the food itself. Certain it is, the above described case is not the type of the severest cases of uncontrollable vomiting. The "pathology" differs, and each case must be studied by itself. The immediate cause of the trouble will sometimes be found in the digestive tract, sometimes in the pelvic organs. A mal position of the uterus, or some lesion of the cervix or other pelvic tissues may be the starting point of the mischief. The nervous system may be the principal offender, or the vomiting may be uræmic. There can, therefore, be no royal road to a successful treatment of this disorder.] J.

CONSTITUTIONAL DISEASES.

Veratrum in Typhoid Fever.

Dr. M. M. HAMLIN, writing to the *American Medical Journal*, said:—Almost every practicing physician knows the great and never failing effects of the fl. ex. veratr. vir. in all acute inflammations, where there is a full and bounding pulse, flushed face, etc., with high temperature; also a great many physicians prize it highly in the treatment of various forms of erysipelas, etc.

But I wish to speak of its effects in typhoid fever with a high temperature, a dry skin, sordes on teeth and a dry parched tongue, with pulse frequent and feeble. In seven cases treated, I used the fl. ex. veratrum vir. in sufficiently large doses to hold the temperature down to 103 degrees, beginning its use as soon as the fever reached that point, and continued its use until the temperature in the morning came down to 98½ degrees, let that be two, three or even five weeks, giving it as follows: ℞. Fl. ex. veratr. vir., fl. ʒ. 3 dr.; simple syr. squill, fl. ʒ. 6 dr. M. Sig.—Begin with nine drops every three hours, and increase one drop every dose until the fever is controlled and held below 104 degrees.

I have administered as high as twenty-one and twenty-two drops every three hours for a whole day and night. As soon as the least moisture appears on the skin, or the temperature starts down, I decrease the dose of veratrum at the rate of three drops at a dose. Of course I have a thermometer at the house, and have the temperature taken before each dose while giving the large doses.

Alternated with the above, I always give five to seven drops of turpentine (the oil) in mucilage of acacia every three hours. Also, a flannel cloth wrung out of a mixture of spirits turpentine

and mutton lard, equal parts, is kept constantly on the bowels until the skin becomes reddened. Then this is left off a few days, and reapplied if tympanitis continues.

Nourishment.—Sweet milk, alone, generally is given just before or just after the turpentine emulsion, every three hours, with as much regularity as the veratrum, and as much as the patient will take, too—the more the better.

Never let a typhoid patient remain in one position too long, but have him turned—not turn himself—from one side to the other every three hours. This last refers only to patients who linger, and by lying too long on one side or the back causes congestion of the lungs.

In a practice of nearly five years in this county (Franklin), I have treated twenty-three cases of typhoid fever, with a loss of only one case—treated with quinine—and the plan above indicated is the one that has given the best results. Fever usually begins to decline about the fifteenth, or anyhow the twenty-first, day. In the above plan I have never been troubled with hemorrhage, stranguery—as in cases where blisters were used—and very little trouble has arisen from diarrhœa. Patients sleep well generally, and make a rapid recovery.

One case treated as above indicated—except the local application—was a lady five and a half months pregnant, as she then declared, and as was after proven to be so by the birth of a fine 10-pound boy at the time designated by the mother, whose fever on the morning of the sixteenth day was one full degree lower than the previous morning, and continued to decline at that rate until clear of fever, when recovery followed.

This is now the treatment that I pursue. Under it the weak pulse becomes strong, slow, and soft; the dry, rough skin becomes soft and pliant; in fact is

all that could be desired; but understand, I am not an enthusiast, and should this treatment fail would not hesitate to try another. There are other conditions for which I use *veratrum*, of which I may say something sometime in the near future; provided, however, that this escapes the editor's waste basket.

The Physio-Pathology of Fever.

MARAGLIANO has studied during the last three years the behavior of the vessels of the skin in beginning and in receding fever, with the hydroplethysmograph of Mosso, often eight to ten hours without interruption. A first series of observations was made on patients who, in the course of the experiments, were spontaneously attacked by fever. The main results of these observations were the following:

1. A febrile temperature was found to be preceded by a progressive contraction of the vessels of the skin.

2. During the height of contraction—when the vessels attain their minimum lumen—we find the climax of the febrile temperature.

3. As long as the temperature remains at its highest level the contraction of the vessels persists.

A second series of experiments was instituted on patients in whom the fever set in after a previous reduction of the temperature to normal by antipyrin, kairine, and thalline. In these experiments Maragliano observed the same phenomena as stated above.

In a third series of experiments patients were used in whom the febrile temperature fell to normal during the experiment, without the exhibition of antipyretics. The following results were here obtained: 1. The fever attack is preceded by a progressive dilatation of the vessels of the skin. 2. This dilata-

tion increases simultaneously with the sinking of the temperature, and reaches its maximum when apyrexia appears.

These investigations prove the old theory of fever as advanced by Traube. Basing on the results of his calimetric examinations, Maragliano feels certain that in fever we have to deal with a retention of heat, with concomitant ischæmia of the vessels, and in defervescence with an increased thermal discharge, with a concomitant vascular dilatation. Still our author does not by any means believe that the retention of heat is the sole cause for the fever. On the contrary, he is positive that still another factor, viz., increase of heat-formation, plays an important rôle in the causation agencies of fever. The increased production of urea and of carbonic acid gas furnish a satisfactory proof for the existence of this increased heat-formation. As to the true significance of this intensified combustion process, we require a good deal more of detailed knowledge. Possibly it is caused simply by an overheating, as it were, following upon the retention of heat.

Naunyn, Lehmann, and others have recently shown that if animals are subjected to an artificially effected rise of temperature, they give off more urea and carbonic acid. Maragliano has observed the same phenomenon in men, if they are subjected to a heightened temperature, such as in consequence of warm baths.

At any rate, there is no doubt that an increase in the heat-production takes place, no matter what causes the latter might have. Therefore we can conclude that the rise of temperature in fever is caused by both a heat-retention and an increased heat-production. This does not of course, exclude the presence of other still unknown factors.

The experiments and observations

made in this connection on various antipyretic drugs are equally interesting.

The first series of experiments were made with kairine, antipyrin, thalline, the salts of quinine, and salicylate of sodium, on individuals who were perfectly afebrile and healthy. The results obtained with Mosso's hydroplethysmograph and Winternitz's calorimeter were as follows:

1. All employed antipyretics cause in apyretic individuals a considerable vascular dilatation.

2. They cause also an increased discharge of animal heat.

3. They produce a fall in the excreted carbonic acid gas.

A second series with these drugs was made on fever patients, and gave the following results:

1. The antipyretic effects of these drugs are caused by a vascular dilatation. When their influence is exhausted, vascular contraction and subsequent rise of temperature ensue.

2. During the period of their activity increased discharge of heat invariably takes place. After their exhaustion the heat discharge decreases, and the temperature rises again.

3. The influence to antipyretic drugs is intimately connected with a reduction of the oxidizing processes within the economy.

As a general conclusion to Maragliano's valuable researches, we can advance the theory that antipyretic remedies act by being able to eliminate the two most important pathogenetic causes of fever. In other words, they prevent vascular contraction, and the thus resulting storing up of animal heat, and increase the heat discharge; besides, they combat successfully the increase of heat formation by reducing the intensity of the oxidizing processes of the economy.

This double action of the antipyretic drugs is probably caused by an influence exerted on the innervation of the vascular system and the so called trophic nerves. Possibly their action affects directly the medullary centres, which, according to the latest researches of Fano, exert a great influence on the nutrition of tissues.—*Therapeutic Gazette*.

Typhoid Fever.

DR. JOHN C. PEARSON (*Lancet*), is convinced that many cases of typhoid fever can be lessened in severity and duration by the early and persistent administration of the solution of chlorinated soda. He generally orders—℞. Sodæ chloratæ, ʒ iss.; aqua, ʒ vj. M. Sig. Tablespoonful every three hours.—*Ibid*.

Typhoid Fever.

As affording some valuable data for prognostic and diagnostic purposes, we made the following abstracts from DR. EDWIN T. DOUBLEDAY'S paper in the *Medical Record*, November 7, 1885. The number of cases observed was 178. Relapse occurred in 33 cases; more than one relapse in five cases; in 9 of these cases the cause was sitting up too early. Diarrhœa occurred in 115 cases; eruption in 96; epistaxis in 57; delirium in 46; bronchitis in 19; phlebitis in 6; abscess in 7; otitis media suppurativa in 3; general furunculosis in 8; intestinal hemorrhage in 12; cystitis in 3; retention of urine in 22; albumen, hyaline and granular casts in 13; albumen, without casts, in 13; lobar pneumonia in 7; temperature reached 107° in 4 cases; in 11, 106°; in 46, 105°. Quinine alone was used in 46 cases, 43 recovered; antipyrin alone in 12 cases, 11 recovered; kairin alone in 3, 2 recovered.—*Medical and Surgical Reporter*.

Anæmia of Malaria.

A correspondent writing to *Medical World*, says : In anæmia following malarial fevers, I would suggest—℞. Quiniæ sulphatis ; ferri sulph. exsic, āā, ʒ j ; ex. colocyth, comp., gr. xx ; strychniæ sulph, gr. j. M. ft. pil. no. xxx. Sig. One to be taken three times a day.

For Intermittent Fever.

DR. A. H. MERRY, writing to *New England Medical Monthly*, says :

I have found the following formula very useful in breaking up chills and fever, one lot of the pills being generally sufficient. ℞. Quiniæ sulph., grs. xvi.; calomel, grs. viij ; resin of podophillin, gr. ss. ; gelseminin, gr. jss. Mix and make into eight pills. Sig. Take one every hour till all are taken. They want to be taken after the fever has gone.

Three Cases of Thermic Fever.

Before the Rhode Island Medical Society, DR. O. C. WIGGIN read a paper on this subject, saying :

The cause of sunstroke is not necessarily solar heat, but heat always. The predisposing causes may be summed up in all previous conditions which have tended to debility or undue exhaustion. In a large proportion of cases there is abundant warning of an approaching attack. The most uniform premonitory symptoms are lassitude, feeling of fullness and pain in the head, throbbing of the temples, dizziness, discomfort at the præcordia, loss of appetite, nausea, thirst, palpitation, and scanty urine. The prostration, head symptoms, and palpitation, increase in violence up to the time the patient is lost in insensibility.

Treatment varies considerably accordingly as the heart or the nerve centres are more profoundly impressed. Spas-

modic contraction of the heart seems to be the immediate cause of speedily fatal cases. In these cases there is absence of high temperature, and consciousness is not impaired until the sudden dissolution; the skin is at first cool and moist, feet and hands cold, countenance pale and anxious, nose cold and studded with beads of sweat. Symptoms of distress are referable to the heart. Indications in these cases are plainly to restore the action of the heart and the capillary circulation. Hot, and not cold, applications are to be applied to the skin. Stimulants in form of ammonia valerianate, strong tea, and morphia in small doses. Chloroform is unquestionably the salvation of some cases, and it would be of many more, could it be brought into timely use, but unfortunately the heart has ceased to beat, has solidified, so to speak, before aid is forthcoming.

In those cases in which symptoms referable to the brain and spinal cord predominate, cold applications to the entire body are demanded, and are the first remedial agents to be thought of. The vaso-motor nerves are paralyzed. The rise of temperature is rapid and extreme. The excretory functions are nearly in abeyance. Temperature must be reduced as speedily as possible.

Alcohol is seldom required in treating sunstroke. Ammonia valerianate is evanescent in effects, but its action is speedy and unequivocal. Tea is the remedy *par excellence* for sustaining the heart's action. Moreover, if there is a legitimate use of tea as a beverage, it is during hot weather. Opium in some form is of service in the painful symptoms of sunstroke. Leeches or the lancet are indicated in cases of extreme congestion of the brain.

The vaso-motor paralysis, which obtains in thermic fever, necessarily leads

to a more or less engorged state of the vital organs. The lungs, next to the brain, are the most frequent seat of congestion. It is sometimes startling to notice the shortness of the interval between the stroke and marked dullness and râles.

Passive congestion of meninges is a common occurrence among convalescent patients. Inability to endure heat for a long time after insolation is almost a constant sequela. The victim of sun-stroke but rarely recovers the former standard of health.—*Weekly Medical Review*.

Intermittent Fever Brought Back by Pain.

The Paris correspondent of the *American Practitioner and News*, says: It has long been pointed out by Professor Verneuil and others, that intermittent fever may reappear after years under the influence of local pain or traumatism. The following note, published by DR. LIEGEY, in the *Courier Medical*, affords another example in confirmation of this statement. Dr. Liegey was consulted by a young man of twenty-five, good constitution, and habitual good health, who had no other ailment than an attack of intermittent fever contracted at Berri at the age of eighteen. Some time before he had been to the doctor he suffered from neuralgic pains of the face, appearing to arise from a decayed molar of the left side, the extraction of which produced complete relief. A short time after he was seized with similar pains arising from a decayed molar on the right side of the lower jaw. On the same day, at about four in the afternoon, this young man was seized with violent shivering, although he was in a warm room at the time. This was followed by a general heat of the body which was well marked, and which was

followed by copious perspiration. On the following days the patient had exactly the same symptoms, about the same time, which lasted about four hours, though in a mitigated form, on each occasion. Supposing that the tooth acting like a thorn, was the cause of the intermittent fever, the doctor extracted it, and henceforward the fever disappeared without the patient taking any quinine or any other drug to combat the fever. Dr. Liegey adds that he is not aware of another example being recorded of a decayed tooth producing a veritable paroxysm of intermittent fever.—*Western Lancet*.

Disinfectants.

The following is a portion of the report of the committee appointed by the American Public Health Association to prepare a list of the various disinfectants best adapted for various conditions:

For Excreta.

(a) In the sick room :

For spore-containing material ;

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1:500. In the absence of spores ;
3. Carbolic acid in solution, 5 per cent.
4. Sulphate of copper in solution, 5 per cent.
5. Chloride of Zinc in solution, 10 per cent.

(b) In privy-vaults :

Mercuric chloride in solution, 1:500.

(c) For the disinfection and deodorization of the surface of masses of organic material in privy-vaults, etc. :

Chloride of lime in powder.

For Clothing, Bedding, Etc.

(a) Soiled underclothing, bed-linen, etc. :

1. Destruction by fire, if of little value.

2. Boiling for at least a half-hour.
3. Immersion in a two-per-cent. solution of mercuric chloride of the strength of 1:2000 for four hours.

4. Immersion in a two-per-cent. solution of carbolic acid for four hours.

(b) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water or in a disinfection solution :

1. Exposure to dry heat at a temperature of 110° C (230° F.) for two hours.

2. Fumigation with sulphurous acid gas for at least 12 hours, the clothing being freely exposed, and the gas present in the disinfection chamber in the proportion of four volumes per cent.

(c) Mattresses and blankets soiled by the discharges of the sick :

1. Destruction by fire.

2. Exposure to super-heated steam—25 lbs. pressure—for one hour. (Mattresses to have the cover removed or freely opened.)

3. Immersion in boiling water for one hour.

4. Immersion in the blue solution (mercuric chloride and sulphate of copper) two fluid ounces to the gallon of water.

Furniture and Articles of Wood, Leather and Porcelain.

Washing, several times repeated, with:

1. Solution of mercuric chloride 1:1000. (The blue solution, four ounces to the gallon of water, may be used.)

2. Solution of chloride of lime, 1 per cent.

3. Solution of carbolic acid, 2 per cent.

For the Person.

The hands and general surface of the body of attendants, of the sick, and of convalescents at the time of their discharge :

1. Solution of chlorinated soda diluted with nine parts of water (1:10).

2. Carbolic acid, 2-per-cent. solution.

3. Mercuric chloride, 1:1000; recommended only for hands, or for washing away infectious material from a limited area, not as a bath for the entire surface of the body.

For the Dead.

Envelop the body in a sheet thoroughly saturated with :

1. Chloride of lime in solution, 4 per cent.

2. Mercuric chloride in solution, 1:500.

3. Carbolic acid in solution, 5 per ct.

For the Sick-Room and Hospital Wards.

(a) While occupied, wash all surfaces with :

1. Mercuric chloride in solution, 1:1000. (The blue solution containing sulphate of copper may be used.)

2. Chloride of lime in solution, 1 per cent.

3. Carbolic acid in solution, 2 per ct.

(b) When vacated :

Fumigate with sulphur dioxide for 12 hours, burning three pounds of sulphur for every 1000 cubic feet of air-space in the room ; then wash all surfaces with one of the above-mentioned disinfecting solutions, and afterward with soap and hot water ; finally throw open doors and windows and ventilate freely.

For Merchandise and the Mails.

The disinfection of merchandise and of the mails will only be required under exceptional circumstances; free aeration will usually be sufficient. If disinfection seems necessary, fumigation with sulphur dioxide, as recommended for woollen clothing, etc., will be the only practicable method of accomplishing it.

Rags.

(a) Rags which have been used for wiping away infectious discharges should at once be burned.

(b) Rags collected for the paper-makers during the prevalence of an epidemic should be disinfected before they are compressed in bales by—

1. Exposure to super-heated steam (25 lbs. pressure) for ten minutes.

2. Immersion in boiling water for half an hour.

(c) Rags in bales can be disinfected by injecting super-heated steam (50 lbs. pressure) into the interior of the bale.

The apparatus must insure the penetration of the steam into every portion of the bale.

Notes on the Treatment of Diphtheria by Prof. Da Costa.

Diphtheria may continue in an individual for a long time, relapses occurring from self-infection. Treatment must be preventive and individual. In the first place, the strictest isolation must be enforced: remove all unnecessary furniture, clothing and the like from the room; disinfect the sputa, linen and everything from the patient, and, if possible, remove the paper from the walls and wash with some disinfectant. Do not allow members of the family to come in contact with well children, for fear the former may convey the poison to the latter.

The individual treatment is both general and local. In the former, *alimentation* and *stimulation* are of the greatest importance, given, as in typhoid, every two or three hours, day and night. Alcohol is given to the point of tolerance. Begin with ʒ ss to ʒ j of brandy every hour; increase till heart and pulse are improved. The amount a patient suffering with diphtheria can take is incredible; a child, æt. 2 years, has been given a tablespoonful of brandy every hour, and ʒ j is quite common. There is present a condition comparable to that found in snake poisoning. Begin the stimulus early.

As to *medicines*, one of the earliest and best treatments is by potassium chlorate, ʒ j to ʒ iss per diem, in di-

vided doses, well diluted. Next to this, either alone or combined with it, is *tinctura ferri chloridi*, gtt. x every hour or two, for a child æt. 10 years.

The rising treatment now is with calomel. It consists in giving large doses frequently, not minding the free movements from the bowels. Give one grain every hour till twelve doses have been taken, then the same amount every second hour. This has been often tried in the *laryngeal* form, in larger doses, and is of especial utility in this variety of the disease.

Corrosive sublimate, gr. $\frac{1}{20}$ to $\frac{1}{12}$ every hour, is a similar but hardly as effective treatment.

Jaborandi is a very new remedy in this trouble. The idea is that when the patient sweats well the membrane will loosen. As it is very depressing, it is not safe unless the patient is quite strong.

Locally, strong caustics have been abandoned. Cleansing, disinfecting gargles are the modern treatment. Carbolic acid, with borax and soda, may be used. Thymol holds a high place, never weaker than ten grains to the ounce. *R.* Thymol, ʒ j; glycerini, f ʒ iij; aquæ, f ʒ iss. *M.* Sig. Gargle. Dilute if necessary.

Permanganate of potassium, a favorite with the English, equal parts of lime water and glycerine, or two parts of the former to one of the latter, are very useful and grateful. When the patient is old enough, these are best used in the form of spray. Equal parts of Monsel's solution and glycerine may be used when the redness and swelling are very great. Do not scrape the membrane.

The most prominent among the solvents for the membrane are lime, bromine and pepsine. Of lime, it is difficult to get enough. Bromine is too irritating. The remedy that has done

best is a saturated solution of pepsine in the form of spray.

Lactic acid, jaborandi and numerous other agents which have been used for this purpose, have some solvent power, but not enough.

Complications or Varieties.—For *nasal diphtheria*, in addition to the ordinary treatment, carried on, if anything, more actively, keep the posterior nares well washed out with: ℞. Sodii sulphitis, ʒ ij; glycerini, f ʒ ij; aquæ, q. s., ad f ʒ iv. M.

Pepsine may prove yet more effective. This washes away the membrane, checks decomposition of the same and prevents blood poisoning. Use with the post-nasal syringe.

In *laryngeal diphtheria*, besides the ordinary treatment, the best results have been obtained by having the patient breathe fumes from slaking lime. Also an occasional emetic, while patient has sufficient strength, does good.

Diphtheritic paralyses, with good management, usually recover. The blood is always deteriorated and patient is anæmic. Give iron, nourishing food, red wines, strychnine, for the paralysis, best hypodermatically, if patient is old enough.—*Coll. and Clin. Record.*

Treatment of Diphtheria.

In the discussion of a paper by DR. WINTERS, published in *Medical Record*, DR. W. H. THOMPSON, said: In any disease which is propagated in the following way, namely, by the introduction into the system of a small quantity of a morbid germ or agent, which is followed by a period of latency, during which time no one knows what is taking place; then by a period of development and reproduction corresponding to three great facts seen in nature, that is, germination, development, and repro-

duction; he could not see how, in such a case, the system was going to be liberated of the morbid agent by elimination through the skin, kidneys, or other excretory organs. The skin cannot be expected to eliminate the disease in the case of small pox, for it is itself the seat of lesions occurring in the course of the disease; the kidneys cannot be expected to eliminate the poison of scarlet fever, as they themselves are often the soil in which the disease manifests itself; nor could he understand why we should expect in diphtheria, which is an analogous affection, being a communicable disease, to eliminate the poison by means of the skin, kidneys, or alimentary canal. Therefore, in starting out to select measures for counteracting this formidable complaint, he freed his brain completely of all thought of a medicine which would have the power to eliminate the diphtheritic poison. But what we might do, if we saw the case early enough, and thus have time, was to eliminate or prevent the occurrence of some of the secondary results of the diphtheritic process. While he did not think the bowels, the kidneys, or the skin carried off anything of the diphtheritic poison, he would freely admit that in febrile diseases generally, diphtheria included, a formidable complication consisted in the arrest of gland secretion in all parts of the body. Whenever fever occurred, it at once caused suspension of the secretions of the alimentary canal, and of the excretions in various parts of the body, and wherever arrest of the natural excretions took place for twenty-four or forty-eight hours, the patient must suffer more or less from this accumulation of poisons in the system. Now the germ of diphtheria—meaning by the term germ a seed which reproduced itself—found a better soil for development in blood which was poisoned by

retained excretions. He therefore always administered at the beginning of febrile diseases, notably scarlet fever and typhoid fever, a medicine which would keep the bowels in their usual state of activity, and not more.

Regarding other indications in the treatment of diphtheria, the first was, as far as possible, to prevent the depressing effects of the specific poison. Here he uses the term specific poison advisedly, meaning thereby the poison generated by the growth of the diphtheritic material. That poison had the same relation to the diphtheritic material that the poison of septicæmia has, to the bacteria which occasions pyæmia. The bacteria which causes pyæmia is a living thing, which reproduces itself, and can be introduced on the lancet and made to affect the system. Septicæmia, on the other hand, is due to a poison generated by this, and can be separated from it. So in diphtheria we have a poison generated in the local necrotic process of diphtheria, which is very dangerous, which is paralyzing to the nervous system, and particularly to the muscular tissue of the heart. He believed, therefore, in the use of antiseptics, among which the muriate tincture of iron takes a high rank, as do other preparations of iron. The muriate tincture is an antiseptic for two reasons: first, because it carries chlorine, and, second, because it brings oxygen into the system. The disinfectant properties of chlorine may be further obtained by the use of Labarraque's solution and generating chlorine gas in the room.

Another feature in the treatment was the use of alcohol, which should be administered at the time of feeding, usually with milk. To wash out the throat with a solution of chlorate of potash would give the child much relief by softening the exudation and increasing the secre-

tion of mucus, enabling the child to expectorate freely.

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DISEASES OF THE NERVOUS SYSTEM.

Treatment of Neuralgia by Neuber's Method.

DR. SCHAPIRO recently read a paper, at the Medical Society of St. Petersburg, upon the results of researches on treatment of neuralgia by Neuber's method of hypodermic injections of a solution of osmic acid. His observations include eight cases of trigeminal neuralgia (three males and five females). The age of the patients varied from thirty-eight to sixty. In every case the disease was of a very severe type and of long standing. The result of the treatment was complete cure in five cases (three females and two males), great alleviation of the pain in two cases, and no success at all in one case (female). The number of injections made in each case was from one to twelve (twenty in one case), five to ten drops being injected every time. The duration of the treatment was from one to sixty days. Dr. Schapiro adopts a modification of Neuber's 1 per cent. aqueous osmic solution on account of the osmic acid soon undergoing decomposition in a watery solution. After a whole series of combinations, he concluded that an addition of glycerine to the watery solution prevents for a long time osmic acid from undergoing any change. In not one of the cases treated by him was an injection followed by any ill effect. The patients are now under the author's observation (two to six months after the commencement of the treatment). — *Medical and Surgical Reporter.*

Urari in Tetanus.

Before the Academy of Medicine in Ireland, Mr. MCARDLE read the notes of

a case of acute traumatic tetanus, in which two-third grain doses of urari every fifth hour resulted in a cure, the more remarkable effects produced by the above-named doses being relaxation of the contracted muscles in from six to ten minutes after administration, very rapid and tumultuous action of the heart, cyanosis, labored breathing, and dilatation of the pupils. Once the patient was sufficiently under the influence of urari, the evacuations from the bowels were regular. Mr. McArdle suggested the combination of urari with pilocarpine, in the hope that the cardiac and respiratory trouble produced by the former might be prevented by the latter. He also showed that urari, to be of service, must be used in large doses, and that the drug is cumulative.—*Ibid.*

DIGESTIVE TRACT.

Digestion: its Physiology and Pathology.

Professor EWALD and DR. J. BOAS publish ("Beiträge zur Pathologie und Physiologie der Verdauung;" Virchow's "Archiv," Bd. ci, Heft 2) the results of a number of valuable experiments they have made on inmates of the Woman's Infirmary in reference to the physiology and pathology of the digestive act. One of the inmates was especially suited for this purpose. She was a young woman with a peculiar neurosis of the stomach, of an hysterical nature, in whom for the past six years vomiting had occurred spontaneously almost immediately on the ingestion of fluids, and from two to three hours after partaking of a solid meal. Her appetite was normal, and her general health good, and she increased in weight while in the hospital. Repeated examinations showed the process of digestion to be normal. Inspection of the contents of the stomach when she was fasting showed (1)

that they were constantly free from aliment; (2) that as a rule the reaction was neutral, in a few cases slightly acid; (3) that neither free hydrochloric acid nor lactic acid was present; (4) that peptone was constantly absent. This is in direct contradiction to what Schultz has recently stated—that the stomach, fasting, has its contents strongly acid. To meet the objection that the act of vomiting might influence the chemical changes, experiments with the siphon stomach-tube were made on other inmates of the hospital in whom there were no disturbances of digestion. These gave results identical with those in the case of Seeger—the patient subject to vomiting. By employing certain reagents, the observers were enabled to separate lactic acid from hydrochloric acid, and detect their presence respectively in the contents of the stomach. On giving Seeger sixty grains of white bread, it was found that in ten minutes afterward the contents of the stomach gave a slight lactic acid reaction. The reaction increased in intensity for thirty or forty minutes, after which the lactic acid began to disappear and free hydrochloric acid took its place. As the latter increased, the lactic acid diminished, until a stage was reached when it completely vanished. They would therefore divide the process of digestion into three stages—the first, in which lactic acid is present but no hydrochloric acid; the second, or intermediate, in which the lactic acid reaches its acme and hydrochloric acid first appears; the third, in which the lactic acid rapidly disappears while the hydrochloric acid increases in quantity. On giving the patient pieces of thin sliced meat, the same three stages were observed, but the duration of each was longer than when white bread was given; the first occupied fifty minutes;

digestion as yet had made but little progress, the meat fragments were still of a fleshy red color, and the transverse striæ were quite distinct. The intermediate stage extended to ninety minutes after the meat had been eaten. Even yet the digestion had not made much progress, the reagents showing the presence of sarco-lactic acid and a slight amount of hydrochloric acid. In the third stage (ninety to a hundred and twenty minutes) no sarco-lactic or lactic acid could be detected, while free hydrochloric acid existed in abundance. With a fish diet exactly similar results were obtained. Very convincing evidence that the lactic acid is a product of fermentation of the food taken, and not a secretion from the stomach, was afforded by the experiments of giving the patient egg albumen alone. The examination of the stomach contents did not show the presence of lactic acid in any of the stages. Quite different were the results when potatoes, which are a great producer of this acid, were given. Lactic acid was detected as early as ten minutes after eating, and persisted for a long time. To fully comprehend the strength of the position they take in reference to the rôle played by lactic acid in digestion, another of their experiments must be related. They allowed the patient to masticate thirty grammes of thin sliced meat and twenty grammes of white bread. These were divided into five equal portions; one portion of each was treated with a 0.3 per cent. solution of hydrochloric acid. They were all put into the incubation oven for three hours at a temperature of 40° C., then left for seventeen hours at the temperature of the room. There were thus four portions: 1, 15 grammes of thin sliced meat; 2, 15 grammes of thin sliced meat plus 10 c. cm. of a 0.3 per cent. solution of hydrochloric acid;

3, 10 grammes of white bread; 4, 10 grammes of white bread plus 10 c. cm. of the 0.3 per cent. solution of hydrochloric acid. These, on being tested, gave the following results: 1, strong lactic acid reaction, no peptones, no sugar; 2, also strong lactic acid reaction and slight peptone reaction; 3, strong lactic acid reaction; 4, no lactic acid reaction. A strong antagonism, they say, exists between the two acids. If the digestive act is interfered with in any way, the lactic acid stage is lengthened in duration. An interesting fact in connection with this was noticed in the patient Seeger. During menstruation the period of digestion was prolonged, and so was that of the lactic acid. Delayed digestion would, therefore, go hand in hand with the persistence of that acid in the stomach. Therapeutically, the authors would only say this much in this paper; that the results of their experiments place the selected diet tables in a new light. All those articles of food considered difficult of digestion are known to be great lactic acid producers. The addition of hydrochloric acid not only supplies the essential acid of digestion to the stomach, but causes the lactic acid to disappear, thus removing a factor of delayed or prolonged digestion. The authors are still continuing their investigations, and promise to make known the further results in a future paper.—*New York Medical Journal.*

Differential Diagnosis of Hepatic Diseases.

DR. W. E. QUINE (*Western Medical Reporter*): The diagnosis of a disease of the liver is accomplished by comparing, successively, each group of symptoms known to be characteristic of a disease of the organ, with the group presented to our patient, and then deciding which of the former fits our case.

The presence of jaundice is a prominent feature of some groups, while its absence from others is equally noticeable. Hence its presence in any case of disease before us, limits the process of comparison to those diseases whose symptomatic groups contain it.

The same may be said of other striking symptoms, such as pain, ascites, enlargement of the affected organ, etc.

Consider the diagnostic relations of jaundice first :

1. Remember that its absence is not proof of the absence of hepatic disease.

2. Intense jaundice, clay-colored stools, and a distended gall bladder, indicate obstruction of the common duct.

3. Jaundice, preceded by a history of severe pain, is of calculous origin, and due to obstruction of the common duct.

4. Jaundice, associated with an antecedent history of similar attacks, points to gastro-duodenal catarrh, or to biliary calculi, as the primary morbid state.

5. If it occur suddenly, in apparent health, it is due either to obstruction of the ducts, or to emotional disturbance.

6. If it appear slowly, yet progressively, it is due either to stricture, or to compression of the common duct. Stricture usually has an antecedent history of biliary colic, and compression is often associated with a discoverable tumor.

7. Slight but persistent jaundice is due either to incomplete obstruction of the biliary ducts, or to passive congestion of the liver. Passive congestion depends on some thoracic obstruction to the circulation—either disease of the heart, or disease of the lungs.

8. Very slight jaundice, associated with an abnormally small liver, indicates sclerosis of the organ.

9. Jaundice, associated with enlargement of the liver, is, in acute cases, of

catarrhal origin; and in chronic cases it is usually due to cancer, but occasionally due to hypertrophic sclerosis. It occurs in over fifty per cent. of the cases of cancer.

10. If jaundice be attended with fever, it is due either to gastro-duodenal inflammation, or to inflammation (infective) of the portal vein; or it is a complication of some specific febrile disease.

11. Jaundice, associated with ascites, indicates either cancer or sclerosis. In cancer the liver is abnormally large, and in sclerosis it is abnormally small. In cancer, ascites occurs in seventy-five per cent. of the cases,

12. Jaundice, associated with cerebral disturbance, indicates either acute thoracic inflammatory obstruction to the circulation, or a specific febrile disease; or, in very rare cases, acute yellow atrophy of the liver.

13. Jaundice is not a characteristic symptom of hepatic abscess, waxy degeneration, fatty infiltration, or hydatid tumor of the liver, though it may occur in any of these diseases.

Consider now the diagnostic relations of some other prominent symptoms of hepatic disease :

1. Enlargement. — This is marked, and symmetrical, in amyloid degeneration, and sometimes in passive congestion; marked, but asymmetrical in cancer, hydatid tumor, and in ninety per cent. of the cases of abscess; symmetrical, but not marked, in congestion (ordinarily), acute biliary obstruction, fatty, and pigmentary infiltration, and hypertrophic sclerosis.

2. Enlargement and Jaundice. — These conditions co-exist in cancer, obstruction of the bile ducts, passive congestion and pigmentary infiltration. Jaundice is marked in fifty per cent. of the cases of cancer, and in all cases of

biliary obstruction; but in passive congestion and pigmentary infiltration, it is usually slight.

3. Enlargement, Jaundice, and Ascites.—The conditions co-exist in cancer.

4. Shrinking and Jaundice.—Occur in acute yellow atrophy.

5. Shrinking and Ascites.—Occur in sclerosis.

6. Fever.—In acute yellow atrophy, the temperature of the body is 100°, or over; and in hepatic abscess there is usually an obscurely periodical fever, of variable intensity, associated with much sweating.

7. Emaciation.—It is rapid in cancer, and usually in abscess; and slow in cirrhosis.

8. Hemorrhagic Tendency.—It is very marked in acute yellow atrophy. It often exists in cases of chronic jaundice and anæmia depending on cirrhosis, cancer, and pigmentary infiltration.

9. Cerebral Symptoms.—They are striking in acute yellow atrophy, and in advanced pigmentary infiltration.

Finally, let us consider the diagnostic features of the important diseases of the liver and biliary passages:

1. Catarrhal Jaundice.—Begins with symptoms of gastro-duodenal catarrh; the jaundice lasts two or three weeks, and is associated with some enlargement of the liver and local discomfort; the stools are clay-colored, and sometimes the gall-bladder is noticeably distended.

2. Obstructions Cystic Duct.—Here there is a pyriform tumor, but there is neither jaundice nor clayey stools.

3. Obstruction Hepatic Duct.—No tumor of the gall bladder; decided jaundice, and, depending on the seat of obstruction, the stools may be clayey, or of normal coloration.

4. Biliary Colic.—Usually comes

on two or three hours after a meal, or immediately after vigorous exercise; calculi appear in the stools; jaundice occurs within a day or two. There is no evidence of intestinal derangement (colic); no stercoral vomiting (intestinal obstruction); no pyuria or hæmaturia (renal colic).

5. Passive Congestion.—There is either disease of the heart, or obstructive disease of the lungs; the liver is large, sometimes very large, firm and tender; sometimes there is bilious vomiting and purging, and also slight jaundice.

6. Sclerosis or Cirrhosis.—Nearly always a history of intemperance, constitutional syphilis, or chronic biliary obstruction ("biliary cirrhosis") precedes it; onset insidious; course, three months to six years. The liver is small; dyspeptic symptoms are associated with ascites, and prominence of the epigastric veins.

7. Acute Yellow Atrophy.—Extremely rare; seventy-five per cent. of the cases occur between the ages of 15 and 35 years; seventy per cent. of the cases occur in females, and fifty per cent. of the total number occur during pregnancy. The characteristic symptoms are usually preceded by the ordinary symptoms of catarrhal jaundice, for a variable number of days or weeks. The characteristic symptoms are dilated pupils, severe headache, great restlessness, insomnia; convulsions in thirty-two per cent. of the cases; delirium in sixty per cent.; coma in seventy-six per cent.; hæmorrhages in eighty per cent.; if pregnancy exist, abortion or miscarriage with frightful hæmorrhage is almost inevitable; temperature 100° or over, but there is no typical range; pulse ordinarily very frequent (140), but subject to extreme fluctuations (down to 70) several times in the course of the day;

jaundice marked; urea scanty. The disease cannot be differentiated from acute phosphorus poisoning, except by knowledge that phosphorus has been taken.

8. Circumscribed Hepatitis, or Abscess.—There is usually a history of residence in a tropical climate, and of an antecedent dysentery. Ninety-five per cent. of the subjects are males. Acute cases begin with a chill, or chilly sensations, fever, and profuse sweating. Usually the fever is vaguely periodical, but sometimes it is quite irregular. The "typhoid state" is developed. There is enlargement in ninety per cent. of the cases, and bulging; fluctuation *may* be discovered. Chronic cases are attended with obscure symptoms; usually a low irregular fever (pulse 100, temperature 100°); despondency; gradual failure of health; vomiting, some enlargement of the liver; muddy complexion; and evidence of pointing, or rupture of the abscess. In cases of doubt it is good practice to aspirate the liver for diagnostic purposes.

9. Amyloid or Waxy Degeneration.—There is a history of profuse suppuration, or of syphilis or tuberculosis without suppuration. Liver is large, smooth, and hard; spleen also; there is albuminuria; late, the gastro-intestinal canal becomes irritable; general health impaired; course of the disease is slow.

10. Fatty Infiltration.—Liver is large, smooth, soft, and its edges are rounded. Dyspeptic symptoms usual; also symptoms of heart failure. Without the latter, diagnosis cannot be made.

11. Pigment Infiltration.—Always associated with a history of chronic malarial infection. At first the liver is enlarged, but later it shrinks. Symptoms of gastro-intestinal catarrh occur, and they are associated with bronzing or pigmentation of the skin, a hæmorrhagic tendency, headache, tinnitus, ver-

tigo, delirium, and involuntary discharges.

12. The Cancer.—The cancer is secondary in fifty per cent. of the cases, to cancer of the stomach, rectum, etc. Sometimes there is a history of heredity. Cachexia occurs; rapid emaciation and impairment of health; anæmia and a hæmorrhagic tendency; jaundice in fifty per cent. of the cases; ascites in seventy five per cent. of the cases; the liver enlarges rapidly, but irregularly; there is lancinating pain.

13. Hydatid Disease.—Results, usually, from close association with infected dogs. The health is undisturbed, unless pressure effects of the tumor derange it. The liver is the seat of a great, irregular, painless tumor, which *may* exhibit "hydatid fremitus" when percussed. In case of doubt, aspirate. The fluid is non-albuminous, and it contains "scolices."—*Western Medical Reporter*.

Nux Vomica in the Treatment of Prolapsus of the Anus.

M. SCHWARTZ (*Les Nouveaux Remèdes*, December 1, 1885) has employed the extract of nux vomica with success for the last ten years in the treatment of prolapsus of the rectum, not only in children, but even in adults in whom this condition had been neglected and had passed to the chronic stage. He administers it in a dose of $\frac{3}{4}$ to 1 grain dissolved in an ordinary tumblerful of water, of which 7, 8, or 10 drops are taken every four hours. He claims that in twenty-four hours the prolapsus will have disappeared. For children the dose is 5 drops, and for infants, up to two years of age, 2 to 3 drops. In order to prevent recurrence he advises the continuance of this medicine, in two doses daily, for a week after the cure. If the prolapsus is of long standing, and

does not yield to this treatment, he adds to the above 60 grains of the extract of rhatany.—*Ibid.*

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An Appetizing Tonic.

According to the *Union Médicale*, Dr. A. FORT recommends the following formula: Bruised gray cinchona bark, 25 parts; bruised bitter-orange peel, 6 parts; bruised calumba root, bruised gentian root, bruised rhubarb root, chamomile flowers, each, 4 parts. Percolate first with 300 parts of cognac and then with 750 parts of water. Dose, a table-spoonful before each meal, to improve the appetite in anæmic and debilitated patients.—*Ibid.*

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DISEASES OF THE URINARY ORGANS.

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A Modification of Fehling's Test.

BUCHNER has proposed the following modification of Fehling's method for sugar. Many saccharine urines only give an opalescent yellowish-red coloration, and no red precipitate of cuprous oxide, when heated with Fehling's solution, making therefore the presence of sugar appear doubtful. In such cases, the urine is to be boiled with excess of cupric sulphate solution (1:10). The greyish-green precipitate is to be separated, and potassic hydrate, or some Fehling's solution, to be added to the filtrate, on boiling which the red sub-oxide of copper will be deposited, if even a small proportion of sugar be present.—*London Medical Record.*—*Journal American Medical Association.*

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The Source of Urea.

MR. D. W. AITKEN, of Edinburgh, reports the following interesting case:—Early in January, 1886, he was called to see a boy who had, the day previous,

received a rather severe blow upon the right lobe of the liver. When seen, he was complaining of much pain in the right hypochondrium. The skin was slightly, and the conjunctiva distinctly, jaundiced. The stools were pale, while the urine was bile-colored, and gave the bile reaction with nitric acid; there was no fever. But herein lies the important matter. The urine was highly alkaline. On the addition of nitric acid, there was such violent effervescence, that the froth was forced out of the test-tube, although the urine was not much more than one inch deep. He got his friend, Dr. Drinkwater, to carefully examine the urine. He reported that the alkalinity was due to ammonium carbonate, and, on estimating the urea, he only found 3 per cent.

This evidence seems to him to point strongly to the liver as the seat of producing of urea. Dr. Graves has already reported several cases of absence of urea which he believed to be represented in the urine by the ammonium carbonate, but here we have a history of the organ involved.—*British Medical Journal.*—*Ibid.*

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Calomel as a Diuretic.

The action of calomel in causing diuresis in morbid conditions with dropsy is not generally recognized. In health, indeed, it may be said that the drug has no such action. Dr. Jendrassic has found in cases of cardiac dropsy that calomel in appropriate doses causes well-marked diuresis, a "sort of diabetes insipidus," by which the results of want of cardiac compensation, dropsy and œdema, are dissipated. The effect comes on within twenty-four hours, one and a half grain of the drug being given three to five times a day. No diarrhœa is usually produced; but in some cases it had to be prevented by the administration of

laudanum. Salivation and stomatitis were obviated by the prescription of a chlorate of potash gargle from the first. The result in all cases in which the treatment was adopted was beneficial, no unfavorable depressing symptoms being noticed.—*British Medical Journal*.—*Atlanta Medical and Surgical Journal*.

DISEASES OF RESPIRATORY ORGANS.

Treatment of Pneumonia with Inunctions of Mercurial Ointment.

The treatment of pneumonia with mercurial ointment, proposed by BARTHEL and MORITZ, of St. Petersburg, in the *St. Pet. Med. Woch.*, is, as a typically antiphlogistic measure, of a pretty old date; for as early as 1850 the mercurial treatment was recommended by Wittich as a check and in opposition to the practice of French physicians to the employment of abstraction of blood. Of course the calomel which Wittich and his contemporaries prescribed, was not exhibited in the antiseptic sense as the mercury ordered at present by the above named Russian physicians. But no matter whether the metal is supposed to reduce the excess of fibrin, diminish congestion of the lungs, and favor resorption of the inflammatory exudate, or whether we mean to kill by its action the specific etiological factors of the disease,—Friedländer's pathogenetic microbes,—the mercurial treatment of pneumonia is usually attended by good results.

The success of iodoform and similar inunctions in a large number of peritonitic and meningitic affections induced Barthel and Moritz, chiefs of the Obuchow Female Hospital of St. Petersburg, to try the inunction of mercurial ointment in croupous pneumonia.

That mercury, if applied in the form of an ointment to the skin, was ab-

sorbed, of course is a well established fact, and has been known ever since Voit's memorable publication, "The Absorption of Mercury and its Combinations in the Body."

For the last two years this has been the only medication used in croupous pneumonia, and shows a favorable mortality rate as compared with the records of former years. The mortality rate of 31.4 was lowered by the mercurial treatment to 6.2 per cent., certainly a remarkable difference.

The inunctions are to be begun with at once when the diagnosis is established. Morning and night a drachm is to be used; in very grave cases 3 instead of 2 drachms may be used daily. The inunction is to be made on the extremities, abdomen, and back; the thorax is to be left exempt, as the skin in this locality is wanted intact for the water compress.

There were used in one case 2 drachms of mercurial ointment; in three cases, 3 drachms; in seven cases, 4 drachms; in six cases, 5 drachms; in one case, 6 drachms; in one case, 7 drachms; in seven cases, 8 drachms; in three cases, 9 drachms; in one case, 10 drachms; in one case, 12 drachms; in one case, 13 drachms.

In spite of directly ordered gargles of chlorate of potassium, the authors observed in some instances slight gingivitis and moderate salivation, though never a serious stomatitis or colitis. Alongside of these inunctions the inevitable compress was applied on the thorax, as intimated above, and digitalis and quinine given, according to the indications of the case.

In view of the very favorable record produced by this mercurial treatment, we can only support the recommendation by our Russian colleagues of mercury in croupous pneumonia.—*Therapeutic Gazette*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

A Case of Amputation of the Thigh in which Cocaine was Successfully Applied as a Local Anæsthetic.

DR. THEODORE R. VARICK (*New York Medical Journal*):—The subject of this case was a man, aged thirty-nine years, of extremely intemperate habits, but otherwise healthy. He received a compound fracture of his right leg while in a state of intoxication. The accident occurred some six miles distant, about nine o'clock in the evening, and he was brought in an ordinary coach to St. Francis's Hospital, where he was received between three and four o'clock in the morning.

During the journey the soft parts became much lacerated by the jolting of the vehicle over rough roads, and by the struggles of the patient.

All efforts, through a period of five weeks, to save the limb proving abortive, amputation was decided on. An attempt to administer ether was attended with such alarming symptoms that it was abandoned.

One week from the date of this attempt, on consultation with the surgical staff, it was decided to try the effect of cocaine as a local anæsthetic by Dr. J. L. Corning's method, Dr. Corning having kindly consented to be present and conduct the necessary manipulations.

February 13th, in the presence of several medical gentlemen, Dr. Corning proceeded to apply the cocaine. The patient manifested an excessive degree of alarm, and complained loudly at the slightest touch, especially at the application of Esmarch's bandage. After the first puncture, and all through the subsequent procedure, when his atten-

tion was diverted he made little complaint.

As this report has reference solely to the evidence of anæsthesia, I shall only consider its effects at the various stages of the operation.

The operation by antero-posterior flaps was the one chosen, cutting from without inward for the anterior, then transfixing the limb and making the posterior flap by cutting from within outward.

1. The first incision through the integument—no pain.

2. The second incision through the deeper tissues to the bone—no pain.

3. Transfixion of the limb—no pain.

4. No pain until near the completion of the wound, which was occasioned by carrying the knife beyond the line marked on the integument.

5. On carrying the knife around the bone to divide a few remaining attachments, there were some manifestations of pain.

6. The use of the saw occasioned loud complaints, although the subsequent removal of a spiculum with the bone-forceps was not noticed.

7. There appearing some redundancy of flap, the scissors were used for the purpose of trimming. This procedure was absolutely painless.

8. The insertion of sutures was unnoticed except at the angles of the wound.

After the ligation of the vessels, which was painless, hot water slightly below the boiling-point was applied to the abraded surface, with no expression of pain.

The object of this application (hot water) has been set forth in a paper read by me before the New York County Medical Association, in February, 1885, and published in this *Journal*. ["See *N. Y. Med. Jour.*," Feb. 28, 1885, p. 237.]

NOTE.—A one-per-cent. solution was used for the skin, and a one-half-per-cent. solution for the deeper tissues.

Some of the hot water accidentally overflowed the wound and ran over the integument as far as the nates, at which he complained bitterly, and expressed the opinion that it was "rough to cut a fellow's leg off and then scald him to death."

It will be noticed that no inconvenience was experienced until the water passed beyond the limits of anæsthesia.

15th.—The dressings having become soiled by the oozing, they were removed and clean ones substituted. During the changing of the dressings, he was loud in his expressions of pain, and declared to my son, Dr. W. W. Varick, who was present, that he suffered more from the dressing than he did from the operation.

In view of the results observed in this case, which I believe to be the first major amputation to which the method of Dr. Corning has been applied, the unanimous verdict of those present was that it was a success.

If to Koller is due the discovery of the anæsthetic property of cocaine, it was reserved for Corning to utilize the great discovery, and render it applicable to the greater operations of surgery.

[It is gratifying to note this practical application of Dr. Corning's "happy thought" about this mode of using cocaine. We called attention to his paper in our January number, and stated that it thus became possible to perform major operations on the lower limbs without the necessity of making the patients unconscious.]

A. H. P. L.

A Case of Amputation at the Hip Joint in which Reinjection of Blood was Performed and Rapid Recovery took place.

DR. A. G. MILLER reports in the *Edinburgh Medical Journal*, February, 1886, a case of strumous disease of the left hip joint, with a large abscess communicating with the joint. As opening

and draining the abscess only gave temporary relief, amputation of the left leg at the hip joint was decided upon. An elastic bandage having been applied from the toes to the middle of the thigh, and a powerful elastic tourniquet at the groin, a rapid circular cut was made down to the bone in the upper third of the thigh, and the femur sawn through. A gush of blood, estimated at about four ounces, took place, and was all caught in a vessel containing a solution of phosphate of sodium. The femoral artery and some smaller vessels were then tied, and the tourniquet removed. After this a few more vessels required ligaturing, and a few ounces of blood escaped, which, however, were collected and injected along with the previous quantity into the deep femoral vein. By an incision on the outer side of the thigh the head of the femur was then dissected out. The wound was thoroughly washed out with a corrosive sublimate lotion, dusted with iodoform, brought together with sutures, and the stump wrapped up in sublimated wool. After the operation the patient suffered from no shock whatever, nor had he any depression of temperature. He made an uninterrupted and good recovery, and three weeks after the operation was able to sit up in bed. The highest temperature recorded was 100.3°. There was slight hæmaturia for two days.

The patient being in a very weak and anæmic condition before the operation, and the hemorrhage during the operation having been greater than usual, owing to the great vascularity of the parts from the extensive disease, it is very unlikely that he would have survived the shock of the operation had the greater part of the blood not been reinjected.

Dr. Duncan, who watched the hemor-

rhage, and measured the blood collected and reinjected, calculates that the patient had an ultimate gain of blood after the operation. He estimates it thus :

There was pressed back into the general circulation by the elastic bandage, say $\frac{2}{3}$ v. ; reinjected of blood measured, $\frac{2}{3}$ xi. ; lost in sponges and sawdust, say $\frac{2}{3}$ iii. ; lost from destruction of corpuscles, say $\frac{2}{3}$ i. ; net gain of blood, say $\frac{2}{3}$ i. ; but to this must be added lymph from leg, say $\frac{2}{3}$ v. ; solution, $\frac{2}{3}$ iv. : and also a diminished demand on the general circulation on account of the leg having been removed.—*Therapeutic Gazette.*

[It often seemed to us that the mortality of hip joint disarticulation could be reduced by an amputation in the upper third of the thigh and subsequent excision of the femoral head. An opportunity to try this plan has never occurred to us, however, and it is gratifying to note that this case tends to prove the desirability of such a modification of the usual hip joint amputation.]

A. H. P. L.

A New Treatment for Fractured Olecranon.

DR. CLAYTON PARKHILL (*Denver Medical Times*), recommends as a method of treating fractured olecranon that the fractured surface be denuded, by a subcutaneous operation, of all ligamentous or fibroid cartilaginous tissue that may have formed. For this purpose he recommends an instrument with a blade similar in size and shape to a tenotome, but having a double edge, bent at an angle of forty-five degrees with the shaft. The skin should be punctured at one side of the line of fracture, making a valve wound. A curved canulated needle, threaded with strong silver wire, is introduced at this

opening, and carried as close to the bone as possible, so as to include, if it be to the distal side of the fracture-line, the fibres of origin of the forearm muscles and the periosteum. Crossing the gap between the fragments, let the instrument emerge on its opposite side, at a point corresponding to that of entrance. Leaving the wire in position, withdraw the needle. After being again threaded, let it be re-entered at the point of exit, and carried across the opposite fragment, including the fibres of insertion of the triceps and the periosteum, to emerge at the first point of puncture. When the needle is removed, it will be observed that the four ends of the wires issue from the two points of puncture. The amount of soft tissue included by the wires must vary with the case and the judgment of the operator. A careful examination should be made to see that the ulnar nerve is not within the tissue surrounded. By twisting the corresponding ends of wire, the fragments will be brought into apposition. If desirable, the ends may be cut close and allowed to disappear, thus making the ligature wholly subcutaneous. One wire might be used after the manner of ligating a varicocele ; but should it be desirable, either after the cure is completed, or at any other time, to remove it, it will be found that two wires can be taken out with less pain to the patient and greater ease to the operator, than one.

A certain amount of inflammation will be engendered by the ligature, but probably not more than will be necessary to the process of cure. Should it be excessive, however, circumstances will be most favorable for its control.

An anterior splint should be used, holding the arm in a slightly flexed position.

This operation was at first intended

only for ununited fractures. Statistics show such a small proportion of cases in which bony union has taken place, that it becomes a question whether it is not a proper method of procedure in recent fractures.

The writer offers the above simply as a suggestion to the profession. While he has not had an opportunity of testing its efficiency, he believes that it combines all the desirable points of the received operations and avoids their dangers.

[The suggestion seems a very good one and deserves a fair trial. It is probably safer than the usual method of wiring, although perhaps not as efficient.]

A. H. P. L.

The Treatment of Painful Fissure of the Anus, without Operation.

A. D. MACGREGOR, M. B., C. M., Kirkcaldy, N. B., says in the *British Medical Journal*: In the interesting and instructive lecture on the perineum, by Mr. C. G. Wheelhouse, the operation of "stretching" the sphincter ani is advocated, in preference to "cutting" the muscle. This treatment Mr. Wheelhouse recommends in fissure of the anus, because "we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning." I have hitherto treated these fissures without any operative interference at all, and with such success as to warrant a continuance of the method.

Order a full dose of castor oil, with some rhubarb for its secondary astringent action, forbidding the customary laudanum. When this operated have the bowel well washed out with an enema containing Condy's fluid. This done, pass the speculum, and paint the fissure with a solution of chloride of

zinc (twenty grains to one ounce); then introduce a piece of lint, smeared with boric ointment, the contraction of the sphincter keeping it in contact with the sore. The bowels are kept in check by *pilula plumbi et opii*. Liquid food is only allowed.

The subsequent treatment consists in the use of a powder (powdered boric acid, half a drachm; violet powder, one ounce), which is sprinkled freely on lint, and introduced into the anus to dry up and discharge, and continue the use of the boric ointment.

By these means the fissure is entirely healed in about six days, and there is no return of the symptoms.

I have always found one application of chloride of zinc enough; it usually causes some smarting and uneasiness, but nothing more effectually purifies the ulcer, or stimulates the reparative process. The introduction of cocaine robs the operative procedure of one drawback—the necessity of taking an anæsthetic; yet, I may recommend a trial of this treatment, at least in the case of those who have an innate horror of anything approaching "cutting."—*Manryland Medical Journal*.

Self-Reposition of Hernia.

A new method of reduction of strangulated hernia by manipulative measures is published by Karl Nicolaus, of Muellheim, Baden, in the *Centralblatt fuer Chirurgie*, No. VI, 1886. The method is certainly a novel one. The author of the report makes reference to the many astute hypotheses that are advanced in explanation of the causes of hernia and of strangulation, and to the meagre detail with which the maneuvers at reposition are dwelt upon in our standard authorities. Nearly all coincide in the opinion of the feasibility of

taxis and give certain modifications of such practice. In the difficult cases narcosis and a position of the patient that tends to relax the abdominal parietes, such as the dorsal recumbent position with flexed thighs, are recommended as adjuvants to the manual practices.

In order to demonstrate experimentally the inadequacy of all the measures of taxis, already abundantly shown in practical experience, the author suggests that a section of intestine, about a yard long, be drawn through a piece of rubber tubing, about two inches long, of a calibre that will permit a pretty thick catheter to be pushed through the tube within the lumen or at the side of the gut. If water be poured into the upper portion of the gut, it becomes highly distended above the tubing, but not a drop flows through and escapes from the free lower end of the intestine. Pressure upon the distended portion will cause it to burst, mayhap, but no fluid will escape by these manipulations. However, only a light traction upon the lower empty segment is followed by a free flow of water; the same result follows if the catheter be pushed upward through the tubing.

In strangulation the same conditions obtain; the distended gut lies outside of the outer hernial aperture, the empty gut inside the inner hernial aperture. In taxis we compress the filled and distended section, which, as our experiment demonstrates, is not a good method of promoting the escape of the fluid, and which may lead to a bursting of the gut. Gentle pressure upon the distended section, and alternately upon the tubing, alone leads to a gradual emptying of the fluid; this last procedure of alternating pressure upon the strangulated gut and upon the strangulating channel is the mode by which taxis affords relief.

Contrasted with this procedure, the ease with which by traction upon the empty end, the escape of the fluid and the liberation of the gut is accomplished, is most striking.

These considerations, and the well established observation that hernia, which is irreducible, *intra vitam*, by taxis, can be reduced, after the abdomen is opened, *post mortem*, by a most gentle traction upon the intra-abdominal loops, led Nicolaus to seek methods of reduction in which traction should take the place of pressure.

Nicolaus refers to the rude methods by which reduction through the weight of the intestines alone was attempted; thus the method of Corvillard of suspending the patient by the feet; the method of suspending by hands and feet; the wheelbarrow method, the inclined plane, etc. The barbarity and fruitlessness of these methods is well known, and they offend all feeling of *chirurgical tact*.

The method of Renaulme, who placed his patients in the knee-elbow position and thus believed that the weight of the free intestinal loops might accomplish traction upon the engaged loop, was also abandoned on account of its inefficiency. The principle, however, as we shall see, is correct.

Nicolaus points out that in all these positions the intestines cannot act by their force of gravity, because either the intestines come to lie upon the unyielding posterior walls of the abdominal cavity or meet with the resistance of the insufficiently relaxed anterior parietes. A position, therefore, must be adopted that relaxes the abdominal wall most perfectly and throws the hernial apertures as high up as possible over the level of the most dependent part of the cavity. This position, according to Nicolaus, is the knee-shoulder position,

or Sims' lateral recumbent position upon the healthy side, with the pelvis well elevated.

In these positions it may be clearly shown, that not the force of gravitation alone is a factor favorable to the reduction by traction, but much more so, a most interesting physical phenomenon that is so established. Namely, in these positions, the intra-abdominal pressure becomes negative, that is to say, sinks below the atmospheric pressure. This circumstance obtains in the indicated positions to a much greater degree than in the knee-elbow position of which Hégar says: "In the knee-elbow position the viscera on the lower level, the thorax, the intestines, the parietes, must exercise a traction upon the parts at a higher level. This leads to a reduction of the abdominal pressure. It becomes lower than the atmospheric pressure. This can be demonstrated to be the case by introducing a catheter into the bladder. Generally the atmospheric air audibly rushes into the bladder through the catheter."

Nicolaus' method, then, consists in the exercise of traction upon the engaged intestine, by establishing a high degree of negative intra-abdominal pressure, and thus permitting a full exercise of the force of gravitation. The patient is made to kneel upon the bed, and throws himself upon the shoulder corresponding to the healthy side. The thighs are to be kept at right angles to the plane of the bed. Bladder and rectum should be emptied, and gentle taxis may be exercised. If necessary the knees may be still more elevated by placing them on a firm bolster. Rotation outward of the thigh of the engaged side may also be made; thus, as Hyrtl states in his *Topographical Anatomy*, the outer aperture of the inguinal canal is made more patent.

In support of his theoretical deductions, Nicolaus reports seven cases of strangulated femoral and inguinal hernia that yielded under the indicated treatment.

The circulation of the blood in the incarcerated loop is certainly much favored by the aspiration exercised by the negative pressure. In cases Nicolaus found that persistence in maintaining the positions indicated led to a good result after a few hours. A change from the knee-shoulder to Sims' position is advisable, when the patient should have the rest and comfort that an alteration of position brings.—*Weekly Medical Review*.

[We know something of the value of traction from experience and have found Nicolaus to be correct. To his gravity traction may, however, with advantage be added the factor of manual traction. This is readily performed by pressing the abdominal wall backwards at a point near the median line and then making gentle outward traction against the gut, pressing inwards from the constricting orifice. This portion of the intestine can always be felt in thin subjects, and most often even in those that are quite fat, after they have been put in the genu-acromial posture. It is apparent as a thick, somewhat tense, cord.] A. H. P. L.

Treatment of Incarcerated Hernia.

FINKELNSTEIN reduced fifty-four cases of incarcerated hernia in the following manner: The patients were placed on their backs, and of a mixture of 100 parts of æther sulph. and 20 parts of oil, one to two tablespoonfuls were poured upon the hernia—say every quarter hour. (The oil is merely to prevent the burning sensation of the æther.) After three to four such applications the bowel was usually liberated

and returned with hardly any manipulation. F. explains this effect by the relaxation of the abdominal ring caused by the æther, and by the low temperature produced, causing a reduction in the size of the bowel and inducing strong peristaltic motions.—*Centralbl. f. Chir.—South California Practitioner.*

[Compare this with the method of Karl Nicolaus, of Baden, appearing in this number.]
A. H. P. L.

Hernia Treatment.

LAWSON TAIT in the *British Medical Journal* gives his method for the radical cure of umbilical hernia by abdominal section, and considers it applicable to all other forms of hernia. He opens the sac, frees all adhesions, cuts off omentum that may be in the way, pares the edges of the ring, and stitches up the wound with continuous silk thread, which he leaves permanently. The results have been exceedingly satisfactory.—*Can. Lancet.—New England Medical Monthly.*

Passage of a Knife Swallowed, from Intestinal Canal.

Passage of an open knife along the intestinal canal is reported by Dr. C. B. HUTCHINGS, in the *Pacific Medical Journal*. After swallowing the knife he was fed on solid food. In six days afterwards the knife came away with "an immense" evacuation of the bowels. The knife, with open blade, measured $3\frac{1}{2}$ inches.—*St. Louis Medical and Surgical Journal.*

Blotting-Paper as an Antiseptic Dressing.

DR. BEDOIN, in a recent paper on antiseptic dressing suitable for military purposes, said that the requisites were that any dressing to be used on the field of battle must be simple, occupying but

small space, inexpensive, and capable of being used for all surgical necessities. He believes that he has found a substance which combines in itself all these requisite qualities—blotting or filtering-paper. Before being used for surgical purposes, it should be disinfected by a lengthened exposure to a heat of 120° Cent., and by immersion in an antiseptic solution, and afterwards dried. Wounds are dressed by the application of seven or eight layers of this paper, the whole being covered with gutta-percha tissue, and a bandage applied. The dressing weighs only about 40 grammes, so that each soldier can carry one. In the ambulance, this dressing can be applied by the surgeon with any others that it is thought well to employ.—*British Medical Journal.—Medical Record.*

Hypnone as an Adjuvant to Chloroform.

M. DUBOIS (*Revue Médicale Française et Etrangère*), states that, when a hypodermic injection of a sixth of a grain of hypnone has been given to a dog, the animal can be anæsthetized by making it breathe air containing four per cent. of chloroform, a mixture which, as M. Paul Bert has shown, never produces anæsthesia under ordinary circumstances. The anæsthesia ceases in about an hour, although the dog may continue to breathe the mixed gases. The same result may be produced by giving twice the amount of hypnone by the mouth. The practical value of these facts lies in the probable diminution that can be made in the amount of chloroform required for anæsthetization.—*New York Medical Journal.*

Should Old Ulcers Be Cured.

This question, which is often asked, is thus answered by DR. W. E. C. NOURSE, in the *British Medical Journal*.

He has treated above nine hundred cases. Of these nine hundred cases, a few were of more than twelve years' standing; several were of ten years'; a considerable number between two and ten years'; the rest, under two years'. Fully half the cases were dressed by me, the rest under my supervision. In treating them, I always bore this question in mind, and was on the watch for any sign of mischief produced by healing the ulcers. No harm was ever observed, though some of the patients were old, infirm, insufficiently fed, or otherwise in bad health. Patients with large chronic ulcers, discharging profusely, found that their health improved as the ulcers healed. Whatever medicine was seen to be required was given, but that was very little. Almost all the ulcers healed, some thoroughly, some in a less satisfactory manner. In very few instances did they refuse to heal. I regret not having followed some short, easy plan of taking notes, so as to be able to give exact numbers. My treatment comprised careful bandaging; strapping, whenever practicable; sometimes zinc or chalk ointment, lead lotion, or black wash; avoiding poultices, caustics, incisions, the administration of mercury or other strong purgatives, and confinement to bed, in almost every instance; and renewing the dressings not oftener than every three or six days; the precise materials employed being of less importance than the right and persevering use of them. The patients mostly went about as usual during treatment, following their ordinary avocations. The treatment may by some be considered old fashioned, as including neither skin-grafting, India-rubber bandages, nor antiseptics; but it was very successful, and was a great contrast to what was done in my student days, when patients with bad legs were con-

finied to bed, the sores poulticed or dressed with unguentum resinæ, disturbed every day for fresh dressings, and the patients dosed with mercury, repeated purgation, or opiates to lull pain. On the whole, I think that, with proper attention to the state of the patient, there is nothing unsafe in healing old ulcers. The closing of an ulcer under means used by a careful surgeon, is widely different from the spontaneous healing of an ulcer suddenly in the course of acute or serious disease. Here the ulcer is healed, not by outward means, but by an inward condition. In a case of acute spinal meningitis (recorded by me in the *Lancet* for 1859), an ulcer of the leg of some years' standing healed spontaneously at the commencement of the illness, which was severe. It was easily reopened by the application of poultices, and was thus kept discharging until the patient's recovery.—*Medical and Surgical Reporter*.

An Ointment for Bruises.

DR. S. M. FRENCH, of Philadelphia, writes us that he has found the following ointment to act like magic in controlling the pain and inflammation dependent upon severe bruises; its anæsthetic properties are truly wonderful: ℞. Ext. belladonæ, glycerine, āā equal parts.—*Ibid*.

Contact and Air Infection in Practical Surgery.

By DR. H. KUMMEL (*Annals of Surgery*), Hamburg. In consideration of the favorable results achieved of late years by operative surgery with the greatest variety of strong and weak disinfectants and even without them at all, K. asks and attempts to answer the following questions:

Do we really need at the same time

toxic antiseptics for securing perfect disinfection?

Are antiseptics really the active factors in the results of surgery?

Is there any quick and surely effective antiseptic?

What significance has the air in wound-infection?

As K. puts it, wound infection may occur in two ways, either by the hands, instruments, sponges, etc., touching the wound (contact-infection), or by atmospheric germs falling on the wound (air-infection). K. endeavors to approach the subject by experimenting under conditions similar to those in practice. He therefore gave less attention to particular micro-organisms from pure cultures than to the ordinary mixture of many kinds as they surround us.

His experiments were so arranged that the separate articles to be examined—hands, instruments, sponges, bits of soft parts from wounds, air and liquid—were brought into relation with Koch's culture material and the development of germs awaited.

An antiseptic or any specified method of disinfection was only considered successful where no bacteria colony of any kind—neither the common mould fungi and putrefaction germs, nor the so-called pathogenic forms—developed.

Experiments with polished instruments taken from the case showed that placing them for 2 minutes in 5% carbolic acid did not stop the development of fungi and bacteria, that even previous brushing with 5% carbolic and remaining 6 minutes in the solution did not in all cases secure perfect disinfection. Similar experiments with 3% carbolic yielded still less favorable results. Subjecting the instruments for 10 minutes to 5% or 3% carbolic regularly, produced complete disinfection. Subjecting them 6 minutes or even 10 minutes to

1-10% sublimate did not in most cases prevent the development of a number of colonies; solutions of peppermint, turpentine, white pine or mustard oil 1:500; peroxide of hydrogen or 5% potash soap sufficed in only a few instances to disinfect instruments lying in them 10 to 15 minutes.

Used but carefully cleaned instruments, not exactly polished ones, were still less readily disinfected. After 15 minutes long subjection to 5% carbolic or 1-10% sublimate, instruments used in dissecting lead to the development of abundant fungi and bacteria colonies.

According to K.'s investigations the more or less rapidly achievable disinfection of an instrument depends, next to the polished character of its surface, on its form. Ribbed forceps, four-pronged hooks are e. g. much harder to free of germs than smooth knife blades. A series of experiments carried out on such easily disinfected instruments—scalpels from an etuis—yielded the following results: A scalpel left for 15 or 5 minutes in 3% carbolic was free from all organisms, not so if left only 3 minutes. A 5% carbolic sufficed in 15, 5 or 3 minutes. A 1-10% thymol sufficed in 15 minutes, but was entirely inefficient in 3 or 5 minutes. Chlorine water for 15, 5 or 3 minutes was effectual, after only 1 minute, however, a mould fungus developed. Sublimate 1-10% did not stop all organisms in 2, or 15 minutes.

For quick and certain disinfection of instruments, K. finds it best to scrub them with warm water and soft soap, and then place them in an antiseptic solution. The latter is not essential under favorable conditions and in a well arranged operating room—otherwise it is necessary.

Dissecting instruments after the above preparations could be completely disinfected by 1 minute subjection to

carbolic, sublimate or chlorine water. Other disinfectants are not as sure. A current of steam sufficed in 5 to 10 minutes, according to the character of the instruments.

As to sponges he concludes that even when soaked with stinking, putrid material they can be disinfected in 3-4 minutes. Sponges saturated with blood or cadaverous filth, or used in operations on phlegmonic or diphtheritic patients, could not be freed from bacteria by half an hour's subjection to carbolic or sublimate, nor by a much longer subjection to other disinfectants. On the other hand, thorough washing with warm water and potash soap and subsequent subjection for one to two minutes in 5 per cent. carbolic, chlorine water or 1-10 per cent. sublimate, always sufficed.

Lint and compresses, after previous treatment with warm water and soap, could be perfectly disinfected by dipping in any of the customary antiseptic solutions. Thoroughly washed and dried compresses kept in clean boxes have but to be wrung out in carbolic, sublimate or chlorine. Likewise good absorbent cotton.

Sublimated cotton, gauze and sacks of moss, especially after lying a long time, occasionally produced fungi and bacteria in culture-gelatine.

Raw catgut, even the heavier sorts, if not in too thick layers, is complete after one hour in 1-10 per cent. sublimate. To be doubly sure, K. suggests six hours for the lighter and twelve for the heavier strands, and preservation in pure alcohol with a little glycerine.

Silk he sterilizes by preserving in 1-10 per cent. sublimate. The hands are the most difficult to disinfect. He seems to prefer, after cleansing with the soap and water, 5 per cent. carbolic or possibly chlorine water.

Bits of muscle, fat and connective tissue from fresh wounds—the wound having been washed or irrigated during the operation with sublimated solutions—developed bacteria in culture-gelatine or agar-agar. In one out of three cases where only sterilized water was used the same experiment produced no organisms, in the other two it did.

As to atmospheric infection, he separates the respiratory from the surrounding air. Experiments with five persons—forced expiration through properly closed flasks containing sterilized gelatine—developed no organisms. Another series of experiments with inverted tubes and glasses showed that even coughing and forced expiratory efforts likewise gave negative results—except where particles of saliva were carried along. He, therefore, excludes wound-infection by respired air.

With regard to the surrounding air he concludes that it is practically impossible to make any atmosphere perfectly germ-free. Some very interesting experimental attempts in this direction are described. A room, all parts of which have been cleaned with soap and water, was found to contain fewest micro-organisms. K. has had the walls of his operating room polished smooth and coated waterproof; corners were rounded; cracks and irregularities so far as possible avoided. The continuity of the walls is only broken by two bronzed iron holders for irrigating fluid. Wood is almost excluded. All necessary objects are of glass, porcelain or marble with wrought iron. The instrument case, made wholly of glass plates, is sunk deep into the wall and tightly closed by iron doors. Floor of polished material. Before each operation the room is soaped and washed with a sponge on a pole. The stove ought to be replaced by some smooth-surfaced

heater.—Rept. of Germ. Surg. Cong. in *Centbl. f. Chirg.*—*Annals of Surgery*.

Contributions to Practical Surgery.

From the *Edinburgh Medical Journal* we learn that PROF. JOHN CHIENE, in an admirable series of practical notes on every-day surgery, makes, *inter alia*, the following suggestions :

In wounds of the face, the best stitch to use is horse-hair. Unless the wound is of considerable size, no form of drainage is necessary. The best dressing is a pad salicylic cotton-wool, or corrosive wool, fixed in position with flexible collodion.

The introduction of the sharp spoon into surgical practice has greatly simplified the treatment of lupus. In the use of the sharp spoon, special care must be taken to scrape away the raised edges of the lupoid ulcer, as it is here that the pathological change is advancing. This is best done by scraping from the sound skin toward the centre of the ulcer. After the new formation is completely removed, the best application is a powder which has been introduced into surgical practice by Dr. Lucas Championnière, of Paris. It consists of (1) light carbonate of magnesia, which has been impregnated with the vapor of eucalyptus, (2) powdered benzoine, and (3) iodoform, in equal quantities.

In persistent hemorrhage from the nasal cavity, plugging of the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot, which forms at the rupture in the blood-

vessel, is displaced by the air being drawn forcibly through the cavity in the attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position, and the hemorrhage is checked.

In a reduction of a dislocation of the lower jaw, the patient should be seated on a low stool before the surgeon. In this way the surgeon gets a sufficient leverage, standing above the patient, and the reduction of the dislocation is simplified.

In the division of a tight frænum of the tongue, when a child is tongue-tied, care must be taken not to use the scissors too freely. All that is necessary is, standing behind the patient, to nick the anterior edge of the frænum with the scissors, and to tear with the finger-nail the remainder of the band. In this way hemorrhage, which is apt to be troublesome, is prevented.

In the removal of an elongated uvula, after you have grasped the apex of the uvula, it is to be drawn forward and rendered tense before division. If it is simply grasped, and an attempt made to divide it in its normal position, it is not always an easy matter to effect the object desired. When it is rendered tense, the operation is a very simple one.—*Medical and Surgical Reporter*.

Principles of Cerebral Surgery.

My creed, if I may use the term, is as follows :

I. The complexus of symptoms, called "compression of the brain," is due not so much to displacing pressure exerted on the brain substance as it is to some form or degree of intracranial inflammation.

II. The conversion of a closed (simple) fracture of the cranium into an

open (compound) fracture by incision of the scalp is, with the improved methods of treating wounds, attended with very little increased risk to life.

III. The removal of portions of the cranium by the trephine or other cutting instrument is, if properly done, attended with but little more risk to life than amputation of a finger through the metacarpal bone.

IV. In the majority of cranial fractures the inner table is more extensively shattered and splintered than the outer table.

V. Perforation of the cranium is to be adopted as an exploratory measure almost as often as it is demanded for therapeutic reasons.

VI. Drainage is more essential in wounds of the brain than in wounds of the structures.

VII. Many regions of the cerebral hemispheres of man may be incised and excised with comparative impunity.

VIII.--Accidental or operative injuries to the cerebral membranes, meningeal arteries or venous sinuses should be treated as are similar lesions of similar structures in other localities.

IX. The results of the study of cerebral localization are more necessary to the conscientious surgeon than to the neurologist.

From the "Operative Surgery of the Brain," Dr. John B. Roberts.

The Relief of Pyloric Stenosis.

Until within the past six years the above condition was regarded as beyond the domain of surgical interference, and with the diagnosis, stenosis of the pylorus, the fate of the patient was irrevocably sealed. Internal medicine offers absolutely no hope to the unfortunate sufferer from pyloric stenosis, until Péan, in 1879, performed pylorotomy for the

relief of pyloric disease, and ushered in a new era in abdominal surgery. Dr. RANDOLPH WINSLOW, of Baltimore, in *The American Journal of the Medical Sciences* for April, 1885, has collected and analyzed all the recorded cases, eighty-five in number, of operative interference for the relief of pyloric disease. He presents the following valuable deductions: 1. In cancer of stomach, not producing stenosis, anodynes should be given in quantities sufficient to relieve distress, and no operation should be performed. 2. Pylorotomy for carcinoma is followed by seventy-six per cent. mortality, hence it should only be very exceptionally performed in those cases where, with marked stenosis, the pylorus is not adherent to the neighboring organs, and the patient is young and fairly strong. 3. In other cases of carcinomatous stenosis, as only very temporary benefit can be obtained, gastro-enterostomy should be performed. 4. In cicatricial stenosis digital divulsion should be performed, but if this is impossible, owing to great thickening of the walls, resection in those who are well nourished, and gastro-enterostomy in the debilitated will both be followed by good results. 5. Hemorrhage or perforation from ulcer or other cause than stenosis does not present indications for pylorotomy. 6. Duodenostomy, gastrostomy for the passage of a tube, and complete gastrectomy should all be replaced by gastro-enterostomy. In the same journal Dr. J. M. Spear, of Cumberland, Md., reports a case of partial pylorotomy in a blacksmith, aged forty, who suffered from cicatricial stenosis of the pylorus. The operation was a modification of Billroth's and required one hour and a half for its performance. The tumor was not adherent. Death ensued in two and a half hours, from collapse. In the opinion of Dr. Spear

the case was an eminently proper one for operation, but it should have been performed at an earlier period in its history.—*Medical Record*.

The Thermo-Cautery in Enlargement of the Thyroid Body.

The method of Dr. WEISS consists in touching the skin over the tumor with a small Paquelin's cautery, held like a pen. Touches with this instrument are made in horizontal rows, the rows being about one centimetre apart, and the touches in each row being close together. If the cautery be at a white heat, the procedure causes very little pain. Anæsthesia, general or local, is quite superfluous, and so is all after-treatment, but a little cotton-wool may be laid upon the site to prevent friction by the clothes. A thin dry scab falls from each spot after about six days. After seven or eight days the procedure may be repeated, and so on for six, eight or a dozen times, according to the extent of the original enlargement. It is most valuable in the purely hypertrophic variety, but in the cystic also is of great advantage if the cysts be punctured with a Pravaz's syringe. In obstinate cases, the above method is rendered somewhat more severe by applying vaseline directly after the use of the cautery. The effect is to cause the premature separation of the small scabs, which is followed by a slight suppuration for a few days. The explanation of the good effects of Paquelin's cautery, so applied, is presumably this: Weiss believes that the irritation brought to bear on the nerve-endings in the skin causes constriction, more or less persistent, of the arterial muscular coats, which induces defective nutrition of the hypertrophic gland-substance and its gradual disappearance.—*Berliner klinische Wochenschrift*.—*Ibid*.

VENEREAL DISEASES.

Contra-Indications to Mercury in Syphilis.

At the recent meeting of the British Medical Association, A. COOPER, F.R.C.S., read a paper on syphilis (*New York Medical Record*). After pointing out the great value of mercury in the treatment of the disease, and the necessity for prolonged courses of the drug, he draws attention to the contra-indications, which many physicians are apt to overlook or to neglect. Mercury should not be given to phthisical subjects, unless the chest affection is slight and the patient's health is good in other respects. When albuminuria exists mercury must, of course, be withheld, unless there is reason to believe that the renal affection is due to syphilis. When syphilis exists in scrofulous subjects, if the symptoms of scrofula are not very severe, mercury may be given with care in small doses. Mercury is contra-indicated in profound anemia, when non-specific. The least symptom of sloughing or phagedena should prevent any thought of administering mercury. If any of these complications set in during a course of the medicine, it should be at once discontinued. Alcohol and tobacco should be avoided or used sparingly during a course of mercury. Exercise and fresh air tend to prevent salivation, and the skin should be kept perfectly clean. Confinement to the house is desirable when any eruption appears.

DISEASES OF THE SKIN.

Milium.

This disease, also known as grutum, acne albida, is a disorder of the sebaceous glands which is not of unusual occurrence. It is characterized by the presence of small whitish or yellowish-

white elevations of about the size of a millet seed or somewhat larger. They have, most ordinarily, a shape somewhat similar to a flax-seed, being somewhat longer than they are broad, or they may be rounded.

These white papules occur for the most part upon the face and are distributed over the cheeks, on the forehead and upon the eyelids. It is in this last locality that it is most often that we find milium thus giving rise to a rather unsightly appearance, more especially in the case of young women. There are no subjective symptoms accompanying this disorder, unless it be pain in those rare instances where an inflammatory action takes place in the papules.

It is said to occur most often in old people, but I have found it to occur about as frequently in young persons and about as often in one sex as in the other.

The papules which are non-inflammatory and which are either rounded or acuminated, sometimes undergo calcareous degenerations, or, at least, their contents do, giving rise to a curious condition—dermatoliths or cutaneous calculi. These small concretions consist chiefly of phosphate of lime and may act as irritants and ulcerate through. As a rule, they are quiescent.

This trouble is one limited to the sebaceous gland and consists essentially of a small retention cyst. If examined closely it will be found that it is covered by the upper layers of the epidermis only and that the duct of the gland has been obliterated. It will also be found that the accumulation of sebum is limited in extent and does not tend to increase. The general causes which may lead to this condition are about the same as those given in the case of comedo and are to be treated by the same general means.

The local treatment is very simple and yet care should be taken, especially in the case of young ladies, to leave no disfiguring scars, if possible; or, at least to leave small ones in order that the results may not be noticeable.

It is a very easy matter to empty the small cyst, but it is also necessary to destroy its lining or the disease will recur. To accomplish this destruction three principal methods are employed.

In the first place, the papule is cut open with a milium needle, preferably, and the cyst walls are scraped with a small sharp spoon. In this manner an artificial inflammation is provoked which produces agglutination of the walls and completely obliterates the cavity. If the scraping is not very carefully done, comparatively large cicatrices may form. Another method consists in opening the papule, as in the first method mentioned, then introducing a very small quantity of some irritating fluid. For this last purpose tincture of iodine, nitrate of silver, caustic potassa, or some similar means may be resorted to. Great caution must be exercised to use the smallest possible amount of the liquid which will produce the desired effect.

The third method, which is one to be preferred to the others, consists in the use of electrolysis. The *modus operandi* is about as follows:

A fine cambric needle or an iridoplatinum one is carefully introduced into the little tumor and gradually pressed down until it touches the opposite wall of the cyst. It is then connected with the negative pole of a galvanic battery and the circuit closed by attaching to the positive pole a large sponge electrode and applying it to some different part of the patient's body. The action of the current is quite prompt and effective and leaves a scarcely perceptible scar.

The diagnosis of milium is not a difficult matter and yet it is somewhat of importance to the physician. I have seen cases where either the physician did not recognize the disease or was unacquainted with its pathology and was rather surprised at having resorted to the treatment he did when acquainted with the nature of the trouble. Lotions, washes, ointments and plasters are absolutely useless in treating milium, the only efficacious means being surgical. When properly performed there are no relapses and the results are good. If improperly done a return may eventuate in a sebaceous cyst which may prove a little more troublesome to handle.—*St. Louis Medical and Surgical Journal.*

Lupus Vulgaris.

Dr. HENRY J. REYNOLDS gives the following differential diagnosis in *St. Louis Medical and Surgical Journal.*

LUPUS VULGARIS.	SYPHILIS.
Almost invariably first manifests itself in childhood.	Usually in adult life.
Is not hereditary.	May be.
Never occurs in infancy.	It may.
Rare in this country.	More common.
Papules small, soft, deep, not elevated, and may reappear in the scar.	Larger, harder, elevated, and never reappears in the scar.
If female, not necessarily any previous history of abortions.	If female, may have previous history of abortions.
Generally local.	Liable to be a tendency to general distribution.
Progresses very slowly.	More rapid.
Margin ill-defined and uneven.	Well defined.
Never affects the bone.	It may.
No syphilitic history.	Almost invariably a history of primary and secondary syphilis in adults.

THE ULCER.

Generally begins from an aggregation of points or papules.	Generally from single point.
Is shallow, with red granulating base.	Deep.

Margin not abrupt, elevated nor undermined.	Margin, abrupt, elevated and undermined.
Secretion scanty.	More profuse.
Odorless.	Fetid.
Little crusting.	More crusting.
Resulting scar always white.	Often pigmented.
LUPUS VULGARIS.	SUPERFICIAL EPITHELIOMA.
Generally begins in childhood.	Usually found in old age.
Starts in multiple discrete papules which may each form an ulcer.	Starts within from one or an aggregation of papules which ultimately form only one ulcer.
Not painful.	More or less painful.
Progresses very slowly.	Progresses more rapidly.
Becomes irregularly nodular.	Does not become nodular.
Becomes diffuse and ill-defined.	Does not become diffuse and is well defined.

THE ULCER.

Generally multiple.	Usually single.
Shallow, with red granulating base which bleeds easily.	Deep, with hard indurated, uneven base.
Edges ill-defined and neither elevated, everted, nor undermined.	Edges clean-cut, abrupt, indurated, and everted.
Ill defined, red, unhealthy skin outside the margin of the ulcer, due to the more diffuse nature of the disease.	Surrounded by healthy skin.
Moderate amount of secretion.	Secretion more scanty and liable to be tinged with blood.
Secretion inodorous.	Secretion fetid.
Presence of the characteristic non-ulcerative papules found in the scar and healthy skin.	No elementary papules found at same time as ulcer.

DISEASES OF THE EYE AND EAR.

The Inflation of the Eustachian Tube in Aural Catarrh of Young Children.

DR. LAURENCE TURNBULL writes to the *Medical and Surgical Reporter* as follows:

In reply to a letter desiring to be informed as to the mode of use of a tube to inflate the Eustachian tube by the mother, I must first state that her phy-

sician must be sure that the cause of deafness is an exudation of pus, mucus, or serum into the middle ear. If the child has had an earache, and there has been a perforation of the membrana tympani shown by a discharge, in this case the simple act of blowing the nose will open the tube; this act should always be taught the child.

If the child is too young to perform his, the nose must be cleansed several times a day with a soft camel's-hair brush, or small syringe and warm water, with a few grains of bicarbonate of soda, that will assist in opening the tube. If, however, there has been inflammation of the middle ear of the child, the result of a cold from a nasopharyngeal catarrh, acute exanthema, or pneumonia, attended with pain in the ear, or if the acute symptoms have been relieved by leeching, hot water applications, chloroform vapor, etc., the child recovers without perforation, but is deaf. This deafness is apt to be overlooked in the beginning, even by the parents, and the child is sent to school, where even a very moderate degree of deafness is very soon detected, and the child is stated to be absent-minded, or has the bad habit of asking twice the same thing.

This inattention is very often due to an abundant secretion behind the drum membrane and the closure of the tube. There may be no very decided pain in the ear, but only a heavy feeling in the region of the ear or in the head in general.

This secretion is usually liquid or semi-solid, and, if it has remained for a long time, becomes dry. We must provide an outlet for it, and one of the quickest is paracentesis of the drum-membrane; but this is only necessary in severe scarlet fever or diphtheria and in older children.

We have in Politzer's inflation a valuable means of diagnosis and treatment, by which we can determine if there is fluid in the middle ear, by placing the diagnostic tube in the child's ear, while we inflate through the nose and listen for the thud or normal or abnormal moist sounds; this latter will make the diagnosis certain. This operation of Politzer's consists in a condensation of the air in the naso-pharynx, by a strong inflation into the cavity, while the nostrils are closed with the fingers. In the case of adults, it is necessary that they should at the same time swallow, in order that the raised palate may close the naso-pharynx behind, and also because the act of swallowing opens the Eustachian tube, and thus furnishes a passage of air into the middle ear. In children, however, this swallowing is not absolutely necessary, because the naso-pharynx is so small that the condensation of the air is greater than in adults, and because also the tubes are in children relatively wider than in adults, and the action of the compressed air can therefore more readily reach the ear.

Children in whom this method of inflation is employed, as a rule, contract the muscles, and so unconsciously raise the palate. Instead of the rubber bag for the air, as is generally used, with hard long nozzle to be inserted back into the nose, a short rubber tube is what I use, the two ends of which are furnished with a quill, bone, or ivory termination, one for the mouth of the physician, nurse, or mother, the other for the nose of the patient. After cleansing the nose by gently blowing, washing, or wiping it out, the end is inserted and kept in place with the finger and thumb, and with the other end a blast of warm air is blown into the middle ear.

DISEASES OF WOMEN.

A Case of Double Uterus and Vagina.

DR. S. W. KELLEY reports to the *St. Louis Medical and Surgical Journal* the following case :

Miss H. E., aged 20, American of Irish parentage; dark brunette, short in stature but apparently quite handsomely formed, and ruddy with health. She has never been sick in her life. Has menstruated normally since her fifteenth year, though scantily during the past year. She feared she had been injured a few days previously by the overturning of a chair upon which she was standing, as she had since felt pain and uneasiness in the lower pelvic and pubic region, for which she sought advice.

Upon examination I found no injury worthy of record, but the malformation here described.

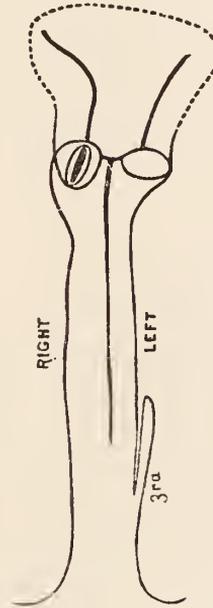
The external genitalia are well developed. No hymen nor any remains of one. I have no reason to doubt her virginity. An inch within the introitus vaginae the finger met a narrowing into which only its tip would pass. Searching to the left another smaller opening was discovered, the two being separated by a strong membrane. Returning to the right or larger passage, was able by careful dilatation for ten or fifteen minutes to insert three-fourths of the length of the index finger and encounter another narrowing, which being patiently overcome, the first joint of the finger found more room and examined uterine cervix and the external os, which is linear antero posteriorly. The neck projects about half an inch into the vagina. The lips are thin, of normal density. Withdrawing the finger and finding the smaller opening, could succeed in penetrating only about an inch. Observed a third, smallest opening in

the left vaginal wall, between the ostium vaginae and the second opening described.

The patient would consent to no interference that could possibly cause even temporary disability for daily housework and care of an invalid mother, but agreed to return daily for a few days. After dilating without anaesthesia fifteen to twenty minutes daily for four days, could pass two fingers or a Fergusson speculum one and one-eighth inches into the right passage, and could pass one finger readily, or speculum seven-eighths of an inch in diameter, into the left passage. The septum between the two passages is placed antero posteriorly. It is about an eighth of an inch thick, and has the appearance of any other portion of the vaginal wall. It begins an inch within the introitus, and extends to the uterus, making a right and left vagina of normal length.

The third, smallest passage, admits a sound and extends upward an inch in the left lateral vaginal wall and ends in a blind extremity.

The right vagina discloses an uterine os three-eighths inch in length antero posteriorly, the anterior end of the slit inclined toward the median line. The sound passes readily a distance of one and three-eighths inches, entering in a direction upward and inward half that length, and then turning upward and outward. The sound moves freely in the cavity, and the lining membrane



evidently contains folds. Secretion of the cervix free.

On the left side the os uteri is smaller, the opening not exceeding a quarter inch, the length being laterally. The lips are in a pouting shape, the anterior, especially, having quite a fold above it. The sound enters freely nearly an inch in a direction upward, outward and slightly backward; lining membrane apparently folded. Very little secretion. By introducing two fingers of the left hand, palm upward, the index into the right vagina and the second finger into the left, the two uterine mouths can be examined simultaneously, and this gives a very vivid impression of the condition. As to the shape of the whole uterus very little can be determined by bimanual examination, the vaginal walls being so tense and abdominal thick. By the rectum the uterus can be felt flat and wide, but no bilobing is apparent.

The young lady could not be persuaded to permit an examination during menstruation to determine whether the flow took place on both sides.

Permanganate of Potassium in the Treatment of Amenorrhœa.

We publish a portion of an article by Dr. FORDYCE BARKER, which appeared recently in the *New York Medical Journal*.

In order more clearly to illustrate my views, I will divide the cases which I have treated with this remedy into three groups, mentioning them in the order of their frequency:

Young ladies between the ages of fourteen and nineteen, who come from the country "to finish their education." Home-sickness, entire change of their habits of life and associations, over-tax of their brain-power, from their own or their teachers' ambition to accomplish

more in a given time than they ought to attempt, not infrequently lead to an arrest of menstruation. I see at least ten or fifteen such patients every winter.

Ladies, both young and married, who suffer severely from seasickness, that have left some European port within a few days of the menstrual period. With such, amenorrhœa, of longer or shorter duration, is almost sure to follow. I am consulted by at least eight or ten such every year.

Ladies between thirty and forty, generally married, some of whom have borne children, who rapidly begin to gain flesh, grow stout, while at the same time menstruation decreases in both duration and quantity, until at last it is only a mere pretense. This is generally attended with annoying nerve-disturbances, pelvic weight, sometimes hæmorrhoids, and often mental depression from the apprehension of growing old prematurely.

Now, it requires some moral courage on my part for me to boldly avow that never, where in either of these classes of cases I have prescribed the permanganate of potassium, have I *known* it to fail.

But this assertion requires explanation. The patients of this kind for whom I have prescribed have, with but two exceptions, not been those met with in my family practice or that of Dr. A. A. Smith, but have come to me for the special treatment of amenorrhœa, many of them from out of the city, and from other parts of the country.

In all prescriptions for the permanganate, I write to the apothecary, "Return the prescription," and direct the patients to continue the use of the medicine, if necessary, for at least three months, and especially urge them to report to me, either personally or by letter, if the end is not accomplished.

Many such have reported that all was right; many others from out of town I have not heard from, and perhaps I am wrong in believing that the treatment was successful. I must add that, with this specific treatment, I endeavored not to neglect any other measures necessary to keep up a healthy and regular action of other functions.

I will add, in regard to the third class in my group, that every patient was a resident of this city. I presume that every medical man who has been long in practice has met with some such. In all these I have known the result from personal interviews—that there has been a satisfactory return of menstruation, although in two cases the use of the remedy was continued for five months. In all there has been entire relief of the cerebral and pelvic, and in some of the thoracic, nerve-disturbances, cardiac and pulmonary. One patient was quite cured of a periodical asthma from which she had suffered monthly for three years.

Of course, I never prescribe this agent in cases where the amenorrhœa is due to some grave constitutional disease, nor do I rely on it for the relief of sudden suppression, due to cold, moral shock, or an acute disease. In this class I think the pulsatilla, opiates, and local agents, such as fomentations and large hot rectal enemas, are generally successful.

In my early experience I found great difficulty in getting the permanganate put up by apothecaries in such a way that patients could take it without great repugnance, and it often produced severe gastric pain, from its rapid decomposition. Mr. Angelo for a time put it up for me in a peculiar capsule, which did better than anything else, so far as the taste was concerned, and the pain was prevented by swallow-

ing immediately a half-tumblerful of water, not cold. Latterly I have found two-grain tablets do quite as well, if the same quantity of water is swallowed at once. Frazer & Co. have recently prepared it in grain pills, but I have not yet had the opportunity of trying them.

That all may judge how much weight should be attached to my clinical experience, I will add that I find by the stubs of my office prescription-book that I have prescribed the permanganate of potassium forty-three times since November 17, 1881, which exactly represents the number of cases of amenorrhœa, of the groups mentioned before, as in this time I can not recall an instance where I have made a domicile visit for this disease.

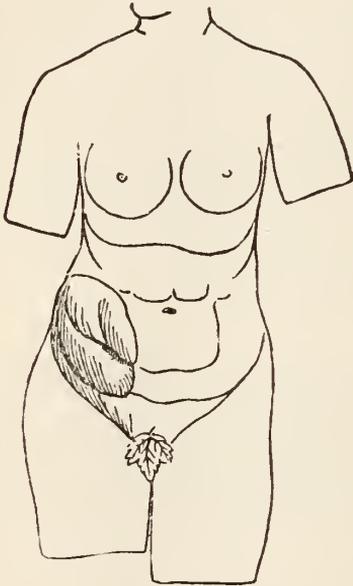
Cases of Phantom Abdominal Tumors.

DR. HAL C. WYMAN reports the following cases in the *American Lancet* :

Case of Mrs. W., who has a phantom tumor of right ovary. She has endocervical catarrh. Has never been impregnated, but is quite ambitious to become a mother.

When she is tired or ill from any cause, the tumor is more clearly defined. She has been examined by surgeons who proposed to remove the tumor by abdominal section. Dr. Ed. W. Jenks was the first to discover the real nature of the tumor and show the folly of undertaking its extirpation. Her general health was poor when she came under my care. A course of tonics, with change of diet has improved her condition. The tumor now appears only at or about the time of the menses. She understands fully its real nature, so far as I have been able to explain it to her. The subjoined diagram describes the appearance of the tumor. Its solidity

and firmness I thought due to spasm of the oblique and transverse muscles of the abdomen. This spasm was of a kind to give an irregular and nodular feeling to the tumor. It was drum like on percussion, and would roll under manipulation in a way different from anything I have ever seen in genuine tumors.



Mrs. F., wife of Dr. F., is aged 63 years. Three years ago she had the notion that she was pregnant. Her abdomen enlarged gradually like that of a pregnant woman, but was tympanitic. I found the womb empty and natural. She made little clothes, etc. Motion and enlargement vanished after a year given to improving the general health.

The abdomen is now sensitive and protrudes when touched. She says her sexual appetite is stronger now than before. She would stand in a way to make her tumor very prominent. The muscles were trained to make the abdomen as prominent as possible. Some surgeons thought she might have ovarian tumor because of the enlargement

and firmness of the abdomen. It was often dull on percussion of the apex, and behaved in a way to make the presence of ovarian tumor appear probable.

She was quite given up to the idea that she was pregnant, and only after several futile parturient efforts did she have any belief in the idea of real tumor



in the abdomen. During my examinations I would try to divert her attention in the belief that some part of the tumor would give way or relax, but never did it entirely collapse until I had put her under the influence of chloroform. It was to me remarkable the way in which other and remote muscles would take part in the unusual phenomena, and throw the abdomen forward. The deep muscles of the back shortened the lumbar curve so that the front wall of the abdomen was thrown forward in large convexity. I examined this patient often and with great care, and I do not think the annexed diagram exaggerates the tumor or lumbar curve.

DISEASES OF CHILDREN.

The Action of Antipyrine upon the Croupous Pneumonia of Children.

Accurate observations upon the value of this drug were recently made upon five children ranging between the ages of four and eight years, who were suffering from croupous pneumonia. It was administered in the form of powder dissolved in water, and was received by the children without repugnance, also being well tolerated. In twenty-five doses in which it was given, vomiting was excited only twice; in a few other cases there was slight nausea. About three hours after its administration, the temperature had in most cases declined two degrees. In some cases it went below the normal, but never with any symptoms of collapse. The pulse usually became stronger, but its abnormal frequency did not diminish at the same rate with the temperature. As compared with kairine, it was observed that antipyrine produced a more gradual declination of temperature. The scale of dosage which was adopted was the following: To children from six months to a year old, every three hours until three doses had been given, were administered two-tenths of a gram. From one to three years, every two or three hours, three-tenths of a gram. From four to five years, every two hours, three tenths to four-tenths of a gram. From six to eight years, every two hours, five-tenths to six-tenths of a gram. From ten to twelve years, every hour, from six-tenths to seventy-five hundredths of a gram. In no case should more than three doses per day be given. The same drug was also given to four healthy children, the result being that the average decline of the normal temperature was from one to one and a half degrees, and the great-

est variations from the normal always took place during the hours of the night.—*Deutsche Med. Zeitung.*—*Archives of Pediatrics.*

Discoloration of the Skin in Children after the Prolonged Use of Arsenic.

The *Journal de Med. et de Chir. Prat.* reports from the German that in fourteen children placed upon Fowler's solution for about four or five months, Guailo has observed a bronzed appearance similar to that observed in Addison's disease. It begins on the neck, extends to the chest, then to the abdomen and the hands. At times it is seen on the back and legs. It has appeared most often during the fifth month of treatment; sometimes it has shown itself two weeks or a month after the suspension of the drug. The discoloration disappears, by desquamation, in about four weeks. All the children observed belonged to the well-to-do class and were aged from two to ten years. This is a certainly a rarity, although it faintly suggests an erythema of a rather severe character accompanied by slight pigmentation.

Morphine in Infantile Eclampsia.

DR. LEVANTINER, of Constantinople, details in the *Centralblatt für klinische Medicin* a case of infantile convulsions which had resisted hot baths, cold compresses, chloral, chloroform, etc., and had continued with increasing frequency and strength for many hours, but which yielded promptly and completely to hypodermic injections of morphine. The child was four months old and the amount of morphine injected at one time was about one-twentieth of a grain. Four injections in all were given, no other medication being resorted to.—*St. Louis Medical Journal.*

OBSTETRICS.

The Production and Prevention of Perineal Lacerations During Labor, with Description of an Unrecognized Form.

DR. HENRY T. BYFORD.

In labor, when the occiput presses against the perineal body, so as to put the muscles and fascia slightly upon the stretch, we can, by hooking the finger over the fourchette into the fossa navicularis, and pulling outward just as a pain is ceasing, and the head commencing to recede, demonstrate two perineal rings. The external or vulval ring, formed by the edges of the labia majora and fourchette, is elastic, of a well-defined oval shape, and attached to the pubic bone above the clitoris. The internal, or vaginal ring corresponds with the labia minora and edge of the external perineal muscles and fascia. It feels like a whip-cord stretched from the clitoris down through one of the labia minora, across the lower edge of the vaginal orifice, up through the other to its starting point. In figure 1 these

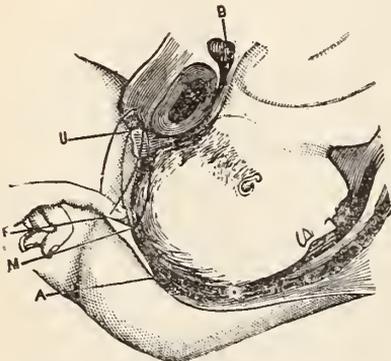


FIGURE 1.—A, anus; B, bladder; F, fourchette; M, muscular edge; U, urethra.

rings are represented as separated below by the finger over the fourchette, as already indicated. (The vulval and vaginal tissues about the rings are not drawn.)

When the head recedes so as no longer to put the vaginal orifice on the stretch, the external ring collapses and the internal ring disappears. Later, when the parts bulge and become distended, the internal ring, especially the

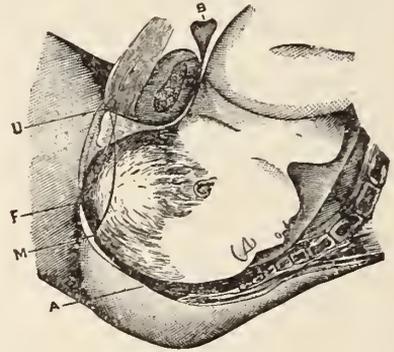


FIGURE 2.—A, anus; B, bladder; F, fourchette; M, muscular edge; U, urethra. (After Schroder.)

lower edge, is lost in the flattened or quasi-membranous body of the perineum, as in figure 2. But of course it has a definite place, viz., the beginning of the muscular tissue; and extends as far below the fourchette as the length of the antero-posterior diameter of the somewhat stretched fossa navicularis, which connects them internally. Above

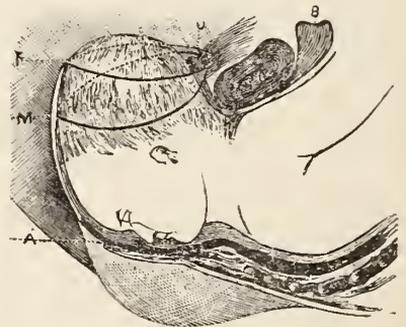


FIGURE 3.—A, anus; B, bladder; F, fourchette; M, muscular edge; U, urethra. (After Schroder.)

Or external to this vaginal, or internal, ring there is, practically speaking, no muscular tissue, but only skin, mucous membrane, loose connective tissue, fat, vessels, etc.

When the perineum becomes stretched four to five inches antero-posteriorly, the lower edges of the rings become still farther separated, and more than an inch of the upper edge of this quasi-membrane is devoid of muscular struct-

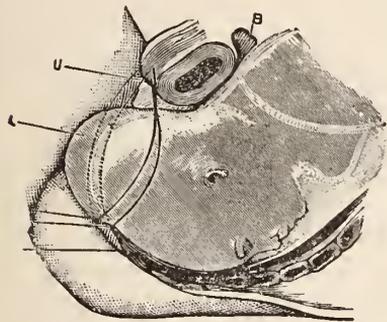


FIGURE 4.—A, anus; B, bladder; F, fourchette; L, liq. amnii; M, muscular tissue; U, urethra.

ure, or firm fascia, as seen in figure 3. It will be noticed that the external ring remains the smaller of the two.

In determining how the perineum will be affected in labor, we must take into consideration its advance over the pelvic floor, where its direct descent is arrested. If the progress of labor at this stage be slow, the liquor amnii, pressing under the chin of the fœtus, will have time to extend the head before the propelling force will have driven the occiput forwards, so as to put the perineum very much upon the stretch. When this submental pressure has produced extension as far as it is capable, if the orifice of the parturient canal be sufficiently relaxed or dilated for the apex to engage in it, then the head will easily pass through it (figure 4). If, however, this orifice be not so relaxed or dilated, then the advancing fœtal head will stretch the perineum from four to five inches antero-posteriorly, push the fourchette upwards instead of downwards, and drive the perineal rings before it, instead of dilating them and passing through them;

and will cover itself with the flattened perineum, in which the muscular fibres are separated, and the fascia stretched to their limit of resistance. (Compare figures 2 and 3 with figure 4.) As the forehead passes beyond the coccyx and ligaments, the propelling force acts against this quasi-membrane somewhere near the region of the anus, for there is now no directing force left except these attenuated muscles and fascia of the perineum.

Now if the pains still be moderate and the tissues unusually strong and elastic, they will finally work up the occiput and draw the edges of the vulvar opening over the head. But the difficulty is this: If the pains be moderate, their pressure being against the neighborhood of the perineal centre of resistance, is counteracted by the almost direct counter-pressure from that centre, and the retractibility of the over-stretched and flattened tissues being but feeble, the head remains almost stationary until, as Barnes expresses it, "the circulation becomes impeded, and after a time, the tissue half necrosed, becomes as brittle as wet brown paper, yielding under the slightest force." ("Obstetric Medicine and Surgery.") Rupture is thus almost certain to result. If, on the other hand, the pains be very strong, the resistance at the perineal centre is not powerful enough, and a rupture must occur. The lost link in the delivery of the head is thus seen to be the absence of an efficient directing force towards the vulval outlet. Or, to express it differently, the head has got beyond the reach of its efficient directing forces, before it is delivered. This great mistake of nature, as it thus appears, has led to the invention of numerous devices for supporting, or, more properly speaking, managing the perineum.

There are five methods of doing this:

1. Supplying the directing force, by pressing up the head so as to hold the sub-occiput under and against the pubic arch.

2. Supplementing the resisting force of the perineal centre by pressing against the advancing head, and thus gaining time for relaxation above.

3. Goodell's manœuvre of pulling forward the deeper portions of the perineum, and so diminishing the tension.

4. Artificial dilatation.

5. A combination or modification of some of these four methods for the purpose of securing the delivery of the head between pains.

Almost all lacerations that occur may be described under three heads: Lacerations of the vulval perineum; of the vaginal perineum; and compound lacerations, or those which involve both of the structures.

Laceration of the Vulval or External Perineum.—We may have a rupture of the perineum, extending from the external to the internal perineal rings, viz., through the mucous membrane of the fossa navicularis down to the edge of the muscles (from F to M, figure 3), and through a corresponding amount of skin externally.

The simplest and most rational way of preventing this form of laceration is to stretch the external, or vulval, ring until its lower edge corresponds to the lower edge of the internal, or vaginal, ring, and keep it there. Both rings being practically of the same size, will then slip over the head together, and the external perineum be protected behind the internal.

Laceration of the Vaginal Perineum.—We may have lacerations of the vaginal perineum involving the vaginal mucous membrane only, or the submucous tissues only, or both together.

Laceration of the vaginal perineum is prevented by securing a slow advance of the head over the deeper and posterior portions, and by directing the occiput upwards, under the pubic arch. The proper way to secure this directing force is to dilate the vulval and vaginal rings, so that the occiput will engage in them before the forehead has got beyond the ligamentous perineum. Then the lower edges of the two rings become a directing power and lift the occiput up under the symphysis through the already dilated outlet. This descent of the lower edge of the rings brings the tissues together in a solid mass near the anus, and renders them capable of meeting any ordinary propelling force without danger of rupturing. The meddlesome and unnatural practice of using hot vaginal douches, for relaxing the perineum before delivery, cannot be too strongly condemned. They wash out the natural secretions and leave a comparatively dry and irritable mucous membrane, thus increasing friction and danger; they either contract the tissues or lessen their tonicity, seldom relaxing without weakening, as does a normal advance and recession of the ovum; they can with difficulty be used without increasing the discomfort and anxiety of the patient; they are less efficient for the relief of irritability of the parts than hot applications to the abdomen and external perineum, or hot hip baths.

Compound Lacerations.—Of the remaining class of perineal lacerations, or those in which both the vulval and vaginal portions are concerned, the simplest form is that in which the superficial muscular fibres give way in the median line along with the fourchette. This occurs with a rapid delivery of the head, as in forcep cases; and especially during great bulging of the perineum, when the posterior portions have been

dilated, and the last few insufficiently dilated fibres about the vaginal ring unable to stand the stress of a strong pain. The advancing forehead may extend the laceration down to or through the sphincter ani. Emmett's T-shaped laceration may result from this kind of strain, and then involve the vulval portions. Or the laceration may commence in the vagina, below the vaginal orifice, and then be completed externally by the advancing head or shoulders. Or if pains be strong, and particularly if the sacrum and coccyx be insufficiently curved, the head may push on through the perineum at the sphincter of the anus, and leave an upper portion intact. Or the head may rapidly distend the perineum above the anal sphincter until a central rupture will occur, and then be made to pass through the vulval orifice without doing any further injury. But the head and body of a child can hardly pass through a central median rupture without involving either the sphincter below or the septum above. Finally, we may have a diffuse submucous laceration, becoming complicated, later, with other varieties.

These, though by no means all, may, I think, be taken as a representation of the usual forms, and methods of occurrence, of perineal lacerations. Prevention, applied to them as a class, would, according to the observations presented, involve two principles :

1. To make the advance of the head slow enough to allow the parts to dilate to their utmost without tearing.

2. To secure sufficient dilatation or relaxation of the vulval and vaginal orifices to bring their axes to correspond with the axis of the parturient canal, so as to enable the head, as it gets beyond the influence of uterine and pelvic directing forces (the amniotic fluid, the pubes, sacrum, coccyx, ligamentous peri-

neum, etc.), to find a directing force in the vulval and vaginal orifices or rings.

In endeavoring to diminish the rapidity of the progress of the head, it is well to take two points into consideration :

1. That uterine action becomes more efficient, as labor advances, on account of the increased length and frequency, rather than the increased force, of the contractions (Schatz).
2. That when the head is capped by the membranous perineum, and therefore is not delivered until it has passed entirely beyond the bony pelvis (figure 3), the uterine contractions have at last almost no direct effect upon its advance, and the abdominal pressure or straining of the mother becomes the chief propelling force (Schröder).

Hence, if we wish to diminish the propelling power during the passage of the head through the pelvis, we may often with advantage give remedies which will act between the pains to diminish their frequency, such as opium, chloral, etc., yet without very much affecting their force. Chloroform, given only during pains, diminishes their force without much affecting their frequency. Later, when the abdominal muscles are the prime forces, we may regulate the advance of the head by controlling them.

The prevalent practice of accelerating the progress of labor until the head greatly distends the perineum, and then using counter-pressure to keep the vulva from being lacerated, is to deliberately injure the pelvic floor, and then court rupture of the uterus.

Perhaps the best means of securing a normally slow advance of the head is to preserve the pouch of membranes. This may be done by keeping the patient quiet, discouraging all violent bearing down efforts, making but few digital examinations between, and none at all during pains.

A comparison of figures 3 and 4 will show that when the bag of waters persists, the perineal rings are better prepared for the delivery of the head while the forehead is still on the sacrum, than they are after the chin has passed the coccyx, in those cases where the membranes have been ruptured at the end of the first stage. Besides this, the head has a third less distance to travel during the second stage until born, and thus takes a third less time at a given rate of advance.

In thus advocating a bringing down of the fourchette, I only seek for an imitation, in all cases, of the mechanism that sometimes occurs in young primiparæ, and often in multiparæ, where the vulval and vaginal outlets are normally, and therefore greatly, relaxed; and where neither pouch presents nor fingers interfere. There is much less work either for the pouch, if left alone, or the fingers, if *properly* used, than is generally supposed. But that little work is often of prime importance. — *Journal American Medical Association.*

The Management of Placenta Previa.

In an excellent paper having this title (*American Journal of Obstetrics*), the author, DR. MALCOLM MCLEAN, of New York City, sums up as follows :

1. In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put into a state of absolute rest—body and mind—and a mild opiate is often desirable at this stage to quiet irritation.

2. Inasmuch as the dangers from *hemorrhage* are greater than all else to both mother and child, at the earliest moment preparation should be made to *induce* premature labor, and labor being

once started, the case should be closely watched to its termination by the accoucheur.

3. In primiparæ, and in mothers with rigid tissues, the *vagina* should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

4. In the *majority* of cases generally, and in all cases especially where there is reason to believe that rapid delivery may be required, it is more safe to rely upon the *thorough, continuous* hydrostatic pressure of a Barnes' dilator than on pressure by the fetal parts.

5. Where the implantation is only lateral or partial, and where there is no object of hurrying labor, bipolar version, drawing down a foot, and leaving one thigh to occlude and dilate the os, may be practised according to the method of Braxton Hicks, except in cases where the head presents well at the os, when

6. The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

7. In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

8. In some cases, in the absence of sufficient assistance, or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions, and the voluntary efforts of the mother. In case of favorable presentation—occiput or breech—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and child will be expelled rapidly and safely without artificial assistance.

9. The dangers of septic infection by means of the tampon, or India rubber

dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

10. Whenever it is possible, dilatation and delivery ought to be *deliberately* accomplished, in order to avoid maternal laceration.

Finally.—As cases of placenta previa offer special dangers from post partum hemorrhages, septicemia, etc., the greatest care should be exercised in every detail of operation and nursing to avoid conveying septic material to the system of the mother.—*Maryland Medical Journal.*

[Valuable as are these rules in the main, we must take exception to the fact that so little stress is laid upon podalic version. Version we are disposed to regard as the main dependence in placenta previa. A foot once in the vagina, the hemorrhage is under control. Should rapid delivery become necessary in course of the labor, podalic extraction is better than the forceps, particularly if the cervix be not fully dilated. In all but the simplest cases of placenta previa, podalic version should be done at the beginning of the labor. Resort may be had to the bipolar method of Braxton Hicks, as soon as one or two fingers can be passed through the cervix and by the edge of the placenta, or the external method may be practised even earlier.] J.

The Treatment of Tardy First Stage of Labor.

After the reading of an excellent paper on this subject, before the Obstetrical Society of Philadelphia, by Dr. Elliott Richardson, at a recent meeting, PROFESSOR PARVIN, of Jefferson Medical College, made the following interesting remarks:—

The subject of Dr. Richardson's

paper is one of great practical importance, and his presentation of it has been very interesting. Coming to its ultimate analysis, a case of labor tedious in either the first or in the second stage shows a want of proper relation between power and resistance; the former for an unusually long time is unable to overcome the latter. Manifestly, if this be so, we have naturally suggested to us two plans of treatment; either increase the power or lessen the resistance. These principles are plain, but the selection and the application often present serious difficulties. Severe suffering in the first stage of labor certainly should be relieved, for this suffering exhausts, and it does not follow that the power of pain is to be measured by the intensity of suffering it produces, and therefore "painful" pains are an undoubted evil. As to the means for their relief when they are associated, as they usually are, with very slow dilatation, many would prefer chloral injected into the rectum to morphia internally, or anæsthetic inhalation.

In regard to the process of dilatation of the os, it is possible Dr. Richardson has attached too much importance to the bag of waters as a dilatating means; that is the mere passive process, but there is an active process, that by which the circular fibres of the uterus are, by the action of the longitudinal fibres, retracted over the bag of waters, or the presenting part, if the former be ruptured; it is not so much descent of the presenting part which occurs as it is the ascent of the expanded cervix, for in primiparæ, at least, the head is usually, at the beginning of labor, in the pelvic cavity, and it can go no further until the dilated os has passed more or less completely above it. It may be that resistance being lessened by chloral, or opium, the power is sufficient to over-

come it, but if it be not, probably the continuous current of electricity will be the most efficient means to increase the uterine force. In this connection I may refer to the statements of Bayer in his recent elaborate monograph entitled, *Morphologie der Gebärmutter*. In many cases of labor where delay occurs in the first stage, it is not the os uteri that is at fault; the obstacle is higher up, and according to Bayer, the anatomical condition of this "*Stricturirung*" is the deficient unfolding of the cervix. In such condition there may be a spastic ring-like stricture or a spastic partial stricture. The first form is especially liable to occur in a narrow pelvis. Bayer recommends warm fomentations, warm vaginal irrigations, a whole bath, eventually narcotics, especially opium by rectal injection; but he strongly insists upon the continuous current as the true natural method of treatment, on the one hand relieving cramp and on the other exciting labor activity, thus removing the primary failure, the deficient unfolding of the cervix.

One word as to the occurrence of malarial poisoning in the puerperal woman. I think it comparatively very rare. Certainly this is the conclusion which I must draw from my own experience in private and in hospital practice. In two terms of service at the Philadelphia Hospital I have seen probably forty cases of puerperal septicaemia, and only one case of malarial fever. When one sees a febrile attack in a woman after labor, he is disposed to take the most favorable view of the case, and may attribute, at first at least, the disease to malaria, when really it is caused by septicaemia, losing precious time, and may be led to give a favorable, when a doubtful prognosis should be indicated. *Coll. & Clin. Record*.

[The fault in tardy first stage, so far

as the uterus is concerned, is a physiological rather than a mechanical one. The delay is more properly ascribed to lack of well regulated pains than to undue resistance in the cervix. Rigidity of the cervix, if its tissues be healthy will rarely persist in the presence of a normal action of the uterine muscles.

The treatment recommended by Dr. Parvin accords with this theory of the difficulty. Opium, Chloral and galvanism probably act by regulating the pains rather than by any direct effect in relaxing the cervix. Heat, too, which is just now a popular oxytocic in this class of cases, and in our experience a good one, no doubt acts in a similar manner.

In a considerable proportion of cases, however the physiological fault (the cramp-like action of the uterine muscles) is secondary to a mechanical one, as hydramnios, undue uterine obliquity, dry labor or some obstruction, and the treatment must then comprise measures addressed to the mechanical cause of the difficulty.

These remarks do not of course apply to slow first stage from mere inertia uteri.] J.

Prevention of Laceration of the Perinæum in Primiparæ.

PROF. TEMPLE, of Trinity Medical School, Toronto, says in the *British Medical Journal*:

For many years I have been greatly disappointed with the means recommended for prevention of laceration of the perinæum; and, after most careful study of the subject, I came to the conclusion that the only method of any value was to prevent extension of the head from occurring, and to compel it to be born in a state of forced flexion.

In primiparæ, the vulval orifice is small and resisting, and the occiput in

its descent does not reach the pubic arch (as it does in *multiparæ*) before extension commences; as a result of this extension, the long occipito-frontal diameter, which measures about four inches and a half, is obliged to traverse the perinæum, to be followed by the fronto-mental, which measures about three inches and a half, making in all part of a circle about eight or nine inches in length. This naturally stretches the perinæum and vulval orifice to its utmost capacity, and it is during this time that rupture is apt to occur.

To guard against the overdistension of cases where I fear laceration, after the head has reached the floor of the pelvis, and just previous to extension, I have been in the habit of applying the short forceps, and then, by carrying the handles backwards, I flex the chin on the chest, while, at the same time, gentle traction is made downwards and backwards. In this way, I deliver the occiput first, keeping the chin close to the chest; this brings the cervico-bregmatic diameter, which is but three inches and a half, through the vaginal orifice. This plan saves the perinæum one inch or more of distension. I have had the best results from this practice, and have taught it to my class of students for the past three years.

The practice as taught by Dr. Gausen, I think somewhat difficult to carry out with the fingers, though he desires to obtain the same end as I here advocate. With the forceps, it is easy and safe.

I think this subject one of great importance, and worthy of a trial by any who may have any doubt as to its efficiency. In fact, I may say I am doubtful of the propriety of carrying the handles of the forceps forwards, as taught in the text-books, in any case.—*Northwestern Lancet.*

[The protection of the perinæum in a great measure depends on the right manipulation of the head, with a view to keep its smallest circumference in the grasp of the vulvar ring. This object, we believe, can be most simply, certainly and safely attained by the use of the hand,—or of both hands. No more complete control over the extension and extrusion of the head could be desired than is afforded by the manual method.]

J.

A Case of Cæsarean Section.

DR. E. MILLER publishes in the *Atlanta Medical and Surgical Journal*, the history of the following interesting case:

CASE.—The subject of my operation was a deformed and dwarfed mulatto, primipara, in her twentieth year, who had been confined to bed for fourteen years, during which period she had not been able to walk; she would probably have measured about four feet or four feet two inches. She had been the subject of double coxalgia, and both joints were ankylosed, giving rise to a pelvic deformity, by which the superior strait was contracted in its conjugate to perhaps two and a half inches. Both of the lower extremities were flexed upon the body, and the right one so much so that it rested obliquely upon the abdomen and indented it by pressure. They were much emaciated, were œdematous, and broken out with small sores and a scaly eruption; there was also a deep-ragged ulcer midway between the vulva and anus, which presented the characteristic marks of syphilis. The woman lived in poverty, and weighed but sixty pounds; she also presented in her legs some evidence of having been rickety in early childhood.

When taken in labor under the care of Dr. Jarrot, of Florence, she in time

was seized with convulsions, for which he gave her two grains of sulphate of morphia, which, not relieving her, he called upon me, and at my suggestion administered two more grains hypodermically, after which the convulsive movements ceased. I saw her for the first time on the morning of February 20th, 1885, and found her breathing heavily. Her abdomen was tympanitic above the uterus, and there were no uterine contractions, these having ceased suddenly, giving rise to the belief that she may have ruptured her uterus. The os uteri was found of the size of a twenty-five cent piece, and the tissues relaxed;

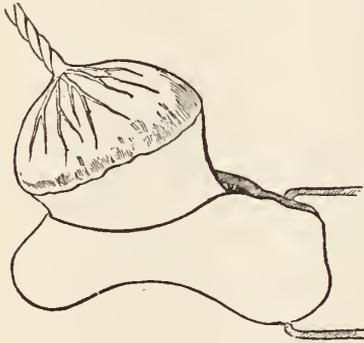


FIG. 1.

there was but little hemorrhage. We decided, under all the difficulties of the case, to deliver by Cæsarean section. (Fig. 1.)

At the time of the operation the woman had been more or less in labor for thirty hours, and twenty-two hours had passed since she had taken any morphia. She had a feeble pulse of 118, a respiration of 20, and her extremities were cold; being unconscious, no anæsthetic was used. An incision six inches long was made in the median line, and nearer to the umbilicus than the symphysis pubis, the flexure and ankylosis of the lower extremities making this necessary. The distended intestines were with much difficulty

kept back, and were punctured in several places with a hypodermic needle to evacuate the gas. The incision of the uterus led into a rupture of the lower part of the body and cervix, opening the organ to the extent of about eleven inches, six inches of which were by incision. Although laceration was believed to have taken place, it had not been positively located until cut into by the knife. After the uterus was opened the fœtus was seized by the left arm and delivered, and the cord cut and tied. The uterus, in its contrac-

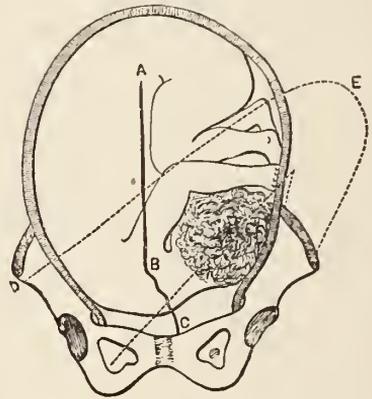


FIG. 2.

tions, now presented under the eye the curious phenomenon of inversion, the right antero-lateral portion, to which the placenta was attached, being driven through the uterine wound with the disk firmly adherent. (Fig. 2.) Although an effort was made to detach the placenta, it seemed only to become more firmly fixed as the convexity outward increased and the parts became consolidated by contraction. Finding the placenta immovable, I with my two thumbs placed on either side of the cord at its origin, and my fingers spread out over the back of the uterus to antagonize them, readily indented the protruding portion, which, being started, became restored by a spontane-

ous movement. The uterus now contracted normally, and the placenta was gradually separated, the mouths of the blood-vessels being closed so perfectly that it was difficult to distinguish its former site.

The uterine wound was closed by thirteen silk sutures, but a portion of the rent in the neck was not sewed up, it being inaccessible because of its position under the right thigh; after the organ had fully contracted, the laceration was not distinguishable.

The patient lost but little blood from the operation, but when the abdomen was opened it was found to contain a considerable quantity mixed with amniotic fluid. The fœtus was not weighed, but was above the average size. After the uterine wound was closed, I cleansed the abdominal cavity thoroughly and closed the wound with ten sutures. When half had been passed, the patient exhibited very unfavorable symptoms, and ether was administered hypodermically; an order was given to place bottles of hot water around her, but, regardless of instructions given prior to the operation, they had not been provided. As the last abdominal suture were being passed she died. There were no symptoms indicative of opium poisoning, but the shock and depression resulting from the rupture of the uterus (which was the main reason for the operation) were so great that we believed from the first that the chances for recovery were as ten to one against her.

Death from Entrance of Air into the Uterine Veins.

Recent observations have demonstrated anew the possibility of the entrance of air through the veins of the uterus from mechanical causes. Ols-hausen has reported a case in which the

uterine douche was employed to bring on labor in a case of twin pregnancy. During the injection, the woman complained of inability to breathe, rose up in bed and fell back dead. Post-mortem examination revealed the presence of air in the coronary arteries of the heart, as well as in the uterine vessels. Another case has been recorded by Litzmann, in which an endeavor was made to induce labor by means of intra-uterine injections of warm water. The douche was employed several times, and, at the fourth, although every precaution was used, the woman suddenly began to breathe with difficulty, the face became cyanosed and death speedily occurred. Here also the autopsy showed that air had entered the uterine veins. On examination of the apparatus employed to make the injections, it was found that the piston did not fit exactly into the cylinder. A third case, related by S. Braun (*Schmid's Jahrbücher*, No. 2, 1885), shows that air may enter the uterine veins, even when there is no external mechanical cause acting. A woman, 25 years of age, healthy and strong, pregnant for second time, was delivered of a healthy infant. Labor was normal, and the presentation was by the occiput. The woman, who had been delivered on the side, was now placed on the back, and the placenta was delivered by expression. Immediately afterward the woman's face became cyanosed, she vomited, had a convulsion and lost consciousness. The uterus was flaccid, and a little dark blood was flowing from the vagina, but in insufficient quantity to account for the collapse. Death speedily supervened. Post-mortem examination revealed the presence of air bubbles in the vessels of the neck, of the heart and of the uterus. Braun explains this occurrence by supposing that, after the placenta was detached, air entered the

cavity of the flaccid uterus, and then, some obstruction existing, the pressure of the hand of the midwife forced it into the uterine sinuses. The writer thinks that this may be the cause of the collapse, with or without a fatal issue, sometimes observed after delivery.—*Medical Record*.

Expression of Placenta.

The comparative results of expectant treatment of the third stage of labor and manual expression of the placenta are given in the following table by Weis of Copenhagen.

CASES TREATED.	EXPECTANT	EXPRES'N.
	Per cent.	Per cent
Post-partum hemorrhage,	5.78	2.3
Manual removal of placenta,	1.33	0.64
Retention of membranes,	1.75	2.3
Secondary hemorrhage,	0.77	0.32

—*New England Medical Monthly*.

Faradism in Rigid Os Uteri During Labor.

In the *American Journal of Obstetrics*, Jan., 1886, DR. MARY PUTNAM JACOBI relates an interesting case of labor in which a rigid cervix relaxed promptly under the influence of the Faradic current. One electrode was applied at the os externum, and the other was held in the hand of the patient. The application was continued for fifteen minutes.

Expulsion of the Fœtus in Arm Presentations.

DR. HERBERT THOMPSON was called to Mrs. N., in labor. The water had broken three days previously. On examination, he was unable to decide the nature of the presentation. On exam-

ination again, he found the arm hanging out of the vagina up to the shoulder, with very strong expulsive pains. He tried to introduce his hand to reach the feet, but the expulsive efforts were so great that he was obliged to desist. He sent for chloroform, but the messenger had scarcely left the room when the patient said the child was coming. On looking, he saw to his surprise the nates coming down by the side of the arm. Another expulsive pain, and the legs appeared, the case being now resolved into one of ordinary breech presentation.—*British Medical Journal—Medical and Surgical Reporter*.

Condition of the Inner Surface of the Womb After Labor.

DR. BRAXTON HICKS, at a meeting of the British Medical Society, called attention to a peculiar condition of the lining membrane of the womb after delivery.

When the womb contracts, this membrane is thrown into folds, and sometimes so loosely attached to the muscular portion of the uterus as to be freely moveable. If the membrane be thick and contain inflammatory nodules, it may easily be mistaken for an adherent placenta. Dr. Hicks made such a mistake once but discovered the error before any harm was done. After reaching the placenta and making sure of it, in order to find its border, he penetrated its amnial surface with his finger, and worked outward to the edge. He considers the possibility of tearing off a portion of the lining membrane of the uterus in such cases as considerable, especially as the detachment of an adherent placenta is usually attended with considerable excitement and hurry.—*Weekly Medical Reporter*.

CONSTITUTIONAL DISEASES.

Phenic Acid in Intermittent Fever.

DR. NARICH'S communication to the *Progrès Médical*, on the curative power of phenic acid cannot fail to invite universal attention.

Though no physician would venture to question the miraculous and truly specific influence which the Peruvian bark and its numerous alkaloids exert over the malarial intoxication, it is nevertheless an incontestable fact that occasionally patients are encountered who declare that quinine or any other form of cinchonization has utterly failed to relieve them. And if the physician then, remembering the instructions of his clinical teachers, or those of his text-books, exhibits arsenic, and finds that even this drug does not check the dreaded paroxysms, and that his patient rapidly approaches the limits of exhaustion and nutritive failure, he is truly in no enviable dilemma. Such a patient presented herself for treatment to Dr. Narich, of Smyrna, in Asia Minor, and asked to be treated by a new remedy, as the standard treatment did not benefit her. The patient, who was an intelligent lady of about 35 years, had suffered for the last year of quotidian marsh fever, and had consulted both the Arabian and European physicians of her country. Quinine and bromides were prescribed together, and given for seven days, morning and night, without producing any results. Arsenic was tried, and failed likewise. Having once heard of the advantages of phenic acid in refractory cases of malaria, Dr. Narich resolved to try this drug hypodermically. He dissolved seven grains of the crystals in two fluid ounces of water, and injected a small quantity in the right arm. There appeared redness, with elevation, and a somewhat erysipe-

latus appearance round the point of injection, but disappeared soon after. A second injection was followed by a rather painful induration which lasted four days. His mode of injection was as follows: On the first day he injected one syringeful. On the four succeeding days six syringes daily,—three in the morning and three at night. All in all, thirty-three injections were made. On the fifth day the patient complained of malaise, which increased on the following day, and forced the physician to discontinue the injections on the seventh day. Since the twentieth injection, however, up to date of the publication, for an interval of nine months, the patient has had no more paroxysms.

Although the successful employment in a single case of a certain drug does not suffice to establish its virtues, the phenic acid injections should be borne in mind by those practitioners who have to deal with some very refractory cases of malaria, in which the usual medication has failed.—*Therapeutic Gazette.*

On the Treatment of Chronic Malarial Disorders.

S. S. COHEN, recently read before the Philadelphia County Medical Society, a paper on the management of obstinate intermittents, from which we copy (*Poly-clinic*) the following :

In my own experience, the most effective salt of quinine is the so-called bimuriate of quinia and urea, used hypodermically in doses of fifteen grains. It is perfectly soluble in its own weight of water, and hence adapted for use hypodermically. The objection to it is, that unless extreme care is taken not to allow a drop of the liquid to touch the skin, and, sometimes, in spite of every precaution, an abscess may result. I paint the arm around the point of puncture with a tincture of iodine in order to prevent this.

1. That quinine salts are of greatest value in those cases of chronic malaria showing a distinct periodicity, and especially if there be a febrile paroxysm ; and that in such cases their chief value is prophylactic, rather than curative. That the administration of quinine until relief is manifested, and then the withdrawal of the drug, will sometimes bring out a periodicity otherwise masked. The bimuriate of quinia and urea, hypodermically, is the preferable salt in acute or subacute exacerbations occurring in the subjects of malarial cachexia.

2. That in cases where the patient is much run down and exposed to unsanitary conditions, iron should be a part of the medicinal treatment.

3. That where the most prominent symptoms are connected with the nervous system, including apparent pulmonary, cardiac, intestinal or gastric troubles, arsenic is indicated.

4. That where the most prominent symptoms are rheumatoid or myalgic in character, salicin, or some of its derivatives or compounds, is of advantage ; cinchonidine salicylate, by preference, in order to obtain the anti-malarial virtues of the cinchona alkaloid. Cinchonidine salicylate is also of use in maintaining an effect produced by quinine, after the withdrawal of that drug, and is superior to quinine where the paroxysmal manifestations are vague and irregular.

5. That iodine is of some benefit when administered alone, and of decided benefit when combined with other remedies.—*American Practitioner and News.*

An Improved Clinical Thermometer.

The *New York Medical Journal* contains the following :

The accompanying illustration represents Immich's metallic thermometer, the cut being of the actual size of the

instrument. Its shape and size permit of its being readily carried in the manner of a watch, while its construction of metal, the covering of the dial only being of glass, does away with the liability of breakage—the great objection to the ordinary glass clinical thermometer.



The action of the instrument depends upon the expansion or contraction of a metallic tube which is filled with a highly expansive liquid, and it is exceedingly sensitive, as can be demonstrated by the movement of the indicator under the influence of the slightest degree of warmth. The instrument is practically self-registering, as several seconds elapse before the indicator moves backward after a temperature has been taken. No shaking down is necessary, as it accommodates itself readily to an altered temperature. The figures on the dial represent both the Fahrenheit and Centigrade scales.

Hydrophobia Treated by Oxygen Inhalation.

Dr. B. KOSTYLEFF, of Iver (quoted in *London Medical Record*), furnishes details of an interesting case of hydrophobia in a railway guard, aged 63, of drinking habits, who had been bitten by a suspicious dog about four weeks before admission. The wound having rapidly healed, the patient remained well until August 5th, when there appeared extraordinary sexual excitement (which remained up to his death), headache, general malaise, anorexia, thirst, and, two days later, hydrophobia, with pain in the throat. When brought to the Zemsky Hospital, on August 8th, the patient suffered greatly from respiratory and pharyngeal spasms, which occurred

almost every minute. He spat out frothy saliva, with admixture of blood, and labored under intense general excitement, with delirium of persecution. Following the instance of Professor Lashkevitch, Dr. Kostyleff gave trial to the oxygen treatment. The effect was most striking. After the first few inhalations, the respiratory spasms and salivation disappeared, the lips, which had been cyanotic, turned rosy, the patient became calm, and soon desired to eat, drink and smoke. Being extremely gratified with the results, the patient did not for a moment part with the inhalatory tube, and during the first day inhaled about twelve cubic feet of gas. He slept quietly for one hour and a half in the night, but then a severe paroxysm of dyspnœa supervened, which was cut short by resuming the inhalations. After a chloral enema he fell asleep again for several hours, and afterward was able to swallow two or three glassfuls of tea and milk. He was able to drink often during the next day, but intense delirium set in, the patient ceasing to recognize the surroundings, and stubbornly refusing to inhale oxygen. Still he inhaled by snatches, about five cubic feet of the gas. On the third day he was steadily sinking from exhaustion, and on the fourth day he died from failure of the heart and respiration, remaining unconscious and delirious up to the end. On analyzing the case, Dr. Kostyleff states that, while not believing in the curability of hydrophobia by oxygen (or by anything), he will still pursue the same treatment in similar cases, as it rapidly and permanently relieves the patient's sufferings.

The Disinfection of Sleeping Apartments.

PROFESSOR KOENIG of Göttingen, in an article on this subject in the *Centralblatt für Chirurgie*, says that at one time,

while he was practising medicine in Hanau, he suddenly discovered that his bedroom was thickly inhabited by bugs. A friend assured him that he could speedily rid him of the pests, and proceeded to fumigate the apartment with corrosive sublimate. The success of this measure was most gratifying; and when the room was opened, the dead bodies of various kinds of insects were seen strewn about the floor. This incident led the writer to hope that the same means would be effectual in destroying the infectious elements of contagious diseases; and a trial in private houses after scarlet fever or measles, and in hospitals after erysipelas or pyæmia, gave most satisfactory results. Since adopting this method, he has never seen a second case of a contagious disease which could be attributed to infection remaining in the room in which the patient had been confined. The mode of procedure is very simple. From one and one-half to two ounces of corrosive sublimate are put on a plate over a chafing-dish, and then the windows and doors are closed. At the expiration of three or four hours the windows are opened, and the apartment is thoroughly aired. The person entering the room should take the precaution to hold a sponge or cloth over the mouth and nose, in order not to inhale the vapor. The following day the windows are again closed, and some sulphur is burned in order to neutralize any of the mercurial fumes which may still linger about the furniture and other articles. The room is to be again aired and cleaned, and will then be ready for occupancy.

It should be distinctly understood that this method of disinfection is wholly unsuited for domestic purposes, and should not be employed by persons unaccustomed to chemical manipulations. Corrosive sublimate is a dan-

gerous poison, which it is not prudent to have about the house; and its use in the way here described is safe only in the hands of a professional "expert."
—*Popular Science News.*

A Recent Study of Nux Vomica.

The *Therapeutic Gazette* (*Medical News*) reports: At a late meeting of the Philadelphia County Medical Society, Dr. JOHN H. MUSSEY presented a paper "On the Influence of Age on the Dosage of Nux Vomica, with some Remarks on its Therapeutics" in which he says:

Going over the note of some fifty cases, I find that at from 15 to 40 years of age 45 drops or more of the tincture were almost invariably well borne. After 40 years it was the exception to be able to increase the dose over 35 drops, without causing disagreeable symptoms.

One of the patients, aged 24, took 200 drops three times daily with most decided benefit. To another, aged 16, 125 drops were exhibited without experiencing any bad effects. On the other hand, a male, aged 60, could take but 20 drops, and not one over 50 could get beyond 35. Patients aged 16, 24, 28, 35 and 40, took 40, 55, 30, 45 and 45 drops respectively before any therapeutic benefit could be seen.

Two effects of large doses of the drug were observed, that, under certain circumstances, would be disadvantageous—the production of diarrhœa and of frequent seminal emissions. Small doses of laudanum would readily control the former, although it is rare that the case would demand such very large doses. The latter symptom could not well be remedied.

In mental and psychical depression due to prolonged excitement this drug is of value. One of my students took

from 600 to 800 drops of the tincture daily, and thereby successfully tided himself over a period of great strain. In fact, he studied harder and kept later hours than at any other examination period, and with less detriment to his health. He is myopic and astigmatic, and this was the first time he came out of his studies without suffering from eye-strain. The doctor writes me that he has used the drug since, in practice, under similar circumstances. For instance, he helped along well a young society girl, who was unusually busy with engagements, until the rush was over. These uses of the drug are as dangerous, however, as those of any stimulant, and it should be given only on extraordinary occasions for the purposes indicated. Its use as above serves to show its power as a nerve stimulant.

It has recently been the custom of students of medicine to take caffeine to keep them awake for study. My observation of the students who had taken one of these drugs was favorable to the use of nux vomica. The ones who took it came off with much better health and less nervousness than the caffeine-eaters.

The following are some of the conclusions which may be drawn from the above statements:

1. The effects of nux vomica are in inverse proportions to the age of the patient, the susceptibility increasing with the age.

The usual doses of the tincture indicated in the text-books are inadequate for many practical purposes, and do not represent the usual dose of strychnine.

3. It is a powerful and rather transient stimulant.

4. The best therapeutical effects can be secured in many cases only by pushing the drug almost to the physiological dose.

5. The system soon becomes accustomed to its use, and the dose must be increased.

6. The good effects in dyspepsia are largely due to its power to heighten reflex excitability.

[The editorial published in this journal will be read with interest in connection with this article.] ED.

Useful Formulæ.

DR. G. H. KIRWIN, writing to *Medical and Surgical Reporter*, says :

The following formulæ have been used by me for the past three years with uniformly successful results. In the chlorosis of young girls, in all forms of simple anæmia, in amenorrhœa due to anæmia, and in the nervous debility and neuralgias dependent on an anæmic condition, I have never seen a drug, or combination of drugs or chemicals, equal to those given below for rapidly increasing the number of red blood-globules, and bringing the roses to the cheeks of the pale and chlorotic: \mathcal{R} Strychniæ sulphas, gr. i. sodæ arseniat. grs. v.; hydrarg. bichloridi. grs. viij.; potassæ carb., ferri sulph., ãã 3 ij. Fiat pil, No. cxx. One pill for a dose 3 or 4 times a day after food.

Where the patient has an aversion for pills, as many have, particularly in such a quantity and for such a length of time, I prescribe as a substitute the following mixture: \mathcal{R} . Hydrarg. bichloridi, grs. $1\frac{1}{2}$; sodæ arseniat., grs. iij.; strychniæ sulph., gr. j.; vini ferri amara, $f\text{z}$ xvj. Take small tablespoonful in water after each meal.

Of course, existing errors of digestion must first be corrected, in order that the remedies may be assimilated, after which I can vouch for their efficacy. It will be observed that the pill formula is a modification of the justly celebrated

Blaud's pill, but the additional ingredients certainly greatly improve on it. The mixture formula is modified from one in use containing liquor potassii arsenitis, and tincture of nux vomica, but on account of the varying strength and unreliability of these two preparations, the sulphate of strychnia and arseniate of soda were substituted with advantage. The bichloride of mercury in both formulæ, aside from its recognized efficiency in the conditions indicated, is valuable in counteracting the constipation produced by prolonged use of iron.

Fats and Water.

The following is from the *Bulletin Gén. de Thérapeutique*:

- 100 parts of vaseline absorb 4 of water.
- 100 parts of lard absorb 15 of water.
- 100 parts of mixture of 7 parts almond oil, with 3 yellow wax, absorb 23 of water.
- 100 parts of like mixture, made with white wax, absorb 31 of water.
- 100 parts of mixture of 7 parts of linseed oil, and 3 of white wax absorb $48\frac{1}{2}$ of water.
- 100 parts of mixture 7 parts oleic acid and 3 of white wax absorb 60 of water.
- 100 parts of lanolin absorb 105 of water.—*St. Louis Courier of Medicine.*

To Disguise the Taste of Quinine.

DR. LINE recommends the following formula:— \mathcal{R} .—Ext. yerba santa fld., z j.; syr. simple, z iij.; quinia sulph., gr. xxx. M.—Dose, a teaspoonful.

The Treatment of Sunstroke.

During the hot weather of July and August of last year, according to the report of DR. HORWITZ, a very large number of cases of sunstroke were treated at the Pennsylvania Hospi-

tal with remarkable success. The plan of treatment was almost uniform. It consists of putting the patient at once in the ice-water bath, administering digitalis and antipyrine, morphine, and, where convulsions occur, musk in ro-grain doses by the rectum every half-hour. The effect of the latter drug in subduing the convulsions is said to have been extremely pronounced. So far as our recollection serves, its employment is a novelty in thermic fever. The results of the use of antipyrine were also very satisfactory; in only one case where it was administered did it fail to keep back the rebound of the temperature which is so apt to follow the fall produced by the cold bath. The employment of antipyrine in sunstroke, we may say, is not altogether new, it having been reported upon favorably in New York.

There is one point in the treatment of sunstroke to which all hospital authorities should have their attention earnestly directed. Many years ago, Dr. H. C. Wood, in experimenting upon animals, found that if the dog or rabbit was immersed in the cold bath so soon as it became unconscious, it recovered; but, if it was allowed to lie for a few moments, the withdrawal of the heat almost always failed to bring about recovery. Often the animal would become conscious; but paraplegia and other paralytic symptoms would remain, and death soon come. Clinical experience abundantly affirms this. It is certain that minutes, even seconds, are in the cases of sunstroke of the utmost importance. With the ordinary covered ambulances that are now employed by our hospitals, there would be no difficulty in stripping the patient, at least to his underclothes and rubbing him with ice, administering antipyrine hypodermically, etc., etc., whilst *en route* for the hospital. During hot weather every ambulance sent out on

telegraphic summons from our hospitals should be provided with a resident physician, ice, and all necessary appliances. In this way we believe that many lives would be saved. In our opinion a case of sunstroke treated immediately would very rarely prove fatal.—*Therapeutic Gazette*.

Bacterio-therapy; a Novel Method of Treatment.

PROFESSOR ARNOLD CANTANI (*Brit. Med. Jour. ; The Practitioner*), has hit upon a somewhat novel method of treating phthisis by making one microbe destroy another. In the first case in which the experiment was tried the *Bacillus tuberculosis* was killed by causing the patient to inhale the *Bacterium termo*. The harmlessness of the latter to healthy animals was first ascertained by giving it in various ways—by inhalation, by injection, and by the stomach—to cats, dogs, and other animals. The case is briefly as follows: A woman, aged forty-two, with a large tuberculous cavity in the upper lobe of the left lung, was admitted to hospital on April 26th of the present year. Under quinine, cod-liver oil, and other restorative treatment, she was rapidly losing ground. The evening temperature was between 100° and 101°F. The expectoration was copious and purulent, and contained elastic fibers and abundance of tubercle bacilli. Animals inoculated with the sputum became tuberculous. The body-weight of the patient steadily fell. On May 4th all other treatment was stopped, and daily inhalations of the *Bacterium termo* were commenced; a rich cultivation in gelatin, diluted with meat-broth, being pulverized by means of an ordinary spray-producer. The expectoration diminished rapidly until it disappeared altogether. The tubercle bacilli became fewer by degrees, being replaced

by the *Bacterium termo*, and on June 1st the bacillus had entirely disappeared, and it did not again return. Animals inoculated with the sputum no longer became tuberculous. Meantime the patient was gaining flesh and improving in every way. Professor Cantani speculates on the possibility of finding for every pathogenic microbe a non-pathogenic hostile one.—*New York Medical Journal*.

Apone; A New Preparation of Capsicum.

This is a preparation that Dr. V. POULET describes in the *Bull. Gén. de Thérap.* (*N. Y. Med. Jour.*), and is prepared after the following formula: Capsicum, $6\frac{1}{2}\bar{3}$; ammonia water, $3\frac{1}{4}\bar{5}$; essence of thyme, $2\frac{1}{2}\bar{3}$; chloral hydrate, $2\frac{1}{2}\bar{3}$; alcohol, 60 per cent., 2 pints.

The capsicum is macerated for a month in the alcohol and ammonia. It is then expressed and the other ingredients added. The substance acts as anodyne revulsive. This is especially adapted for external use, and may be used pure or diluted with oil.

The dose internally is from ten to twenty drops in water. A draught of cold tea should follow.

The remedy is recommended for muscular rheumatism, certain neuralgias, hysteria, sea-sickness, etc.—*Weekly Medical Review*.

Extract of Wild Cherry Bark and Chloroform Inhalation in Strychnine Poisoning.

DR. GEORGE M. KOBER, U. S. A., reports a case of strychnine poisoning in a Chinaman. The symptoms were well pronounced, and after washing out the stomach he administered a tablespoonful of the extract of wild cherry bark, and repeated the dose in twenty minutes; the tetanic paroxysms diminished in frequency and force, and were

readily controlled by the inhalation of chloroform. The alarming symptoms in the case lasted, however, nearly two hours, yet there was evidence of progressive improvement, and the immediate effect of the wild cherry pointed to an antagonistic action. After the expiration of two hours, the only remaining symptoms observed were involuntary twitches and a feeling of stiffness in the muscles, for which potass. bromide and chloral were given with good effect: 15 grains of the former and 10 grains of the latter soon induced rest and sleep for a few hours. The patient recovered perfectly in two days, complaining only of being tired during this time.

His reason for not publishing the case before, was the insufficient evidence of the fact that the extract of wild cherry bark proved absolutely antagonistic to the action of strychnine. The stomach had been thoroughly evacuated, the quantity of the poison introduced was unknown, and the effects of chloroform inhalation cannot be overlooked.

He has seen in recent years no authority of weight for the use of hydrocyanic acid in strychnine poisoning, but the subject is sufficiently important to experiment on animals and thus determine whether the extract of wild cherry bark possesses advantages over prussic acid.—*Journal American Medical Association*.

Tincture of Cobweb.

DR. W. G. MACDONALD sends to the *Medical Record*, the following formula for the preparation of tincture of cobweb, as desired by a correspondent: "A bunch of spider web collected from a dark cellar, about the size of a large walnut, is put in about four ounces of whiskey and allowed to macerate forty-eight hours, and then filtered. A teaspoonful is taken about four hours

before the expected chill, and at hourly intervals, until four doses are taken, and then a dose before each meal and at bed-time, until all is taken." The web of a species of spider which inhabits dark places, is supposed to possess the best medicinal properties.

Therapeutic Notes.

Copsis teeta, a plant native of China, has been found to slow the pulsations of the heart similarly to digitalis, so that we have another addition to our cardiac sedatives.

Capparis Corriacea, a native of Peru, in the shape of an infusion, three drams of the powdered fruit infused in red wine being the dose, has been found useful in epileptic, hysterical and other similar disorders.

Salix nigra in fluid extract is much lauded as a sexual sedative, being used in ovarian irritation and in some cases of dysmenorrhœa, where there is sexual excitement.

Urtica urens, a decoction made from the common stinging nettle, is strongly recommended by Rothe as a local hæmostatic.

Parthenine, from the Cubar plant known as parthenium hysterophorus, comes forward as a new anti-periodic. It appears to have great power to reduce temperature in fever, in the maximum dose of thirty grains.

Peroxide of Hydrogen is reported to have produced excellent results in the treatment of diphtheria. It may be administered with glycerine.

Capsicum annuum will be found of great service in alcoholismus where there is great restlessness, burning in the stomach and coldness between the shoulders.

Phormium tenax, a botanical product of New Zealand, bids fair to prove a

valuable auxiliary to the surgeon, in producing healthy granulations in wounds.

Chromic acid, ʒi to aqua ʒi, applied locally at intervals of a week, is said to be an excellent remedy in endocervicitis.

Myrtle, an ounce of the leaves of the common variety, boiled in a litre of water, is said to be an excellent injection in the treatment of leucorrhœal discharges.

Antipyrine still holds its place as an antipyretic, and it has been successfully used in scarlatina in five grain doses every hour in children. Good results are said to follow its alternation with digitalis. Sweet spirits of nitre is incompatible to antipyrine, the combination forming a blue aniline.

Adonis vernalis is claimed to be superior to digitalis and to convallaria in many cases of cardiac disease. It is said to be powerfully diuretic and not cumulative in its action. It is used largely in chronic heart diseases.

Electricity is said to be a most reliable agent in increasing the secretion of milk. Both currents have been employed. The current is allowed to pass through the breast for fifteen minutes twice a day.

Kali chloricum is recommended by Dr Richard Hughes in simple stomatitis.

Stigmata maidis is extolled by Dr. Burt in angina pectoris, when the pain is increased by ascending steps.

Iodol is highly spoken of in syphilitic and other ulcerations where there is no gangrenous tendency. Buboës are injected with a solution of one part iodol to sixteen of alcohol and thirty-four of glycerine.

Aluminium acetico-tartaricum is claimed as a new specific in ozæna. The dose is one teaspoonful of a fifty per cent. solution in one-half to a pint of water, we presume applied locally.

Pichi (*fabiana imbricata*), native of Chili, is said to have a wonderful effect upon the formation and discharge of renal and vesical calculi. The profession will be glad to add to their armamentarium in this tedious affection.

Ichthyol in thirty per cent. solution is said to relieve the severe itching of senile prurigo and a ten per cent. solution relieves pruritus. Four tablespoonfuls a day of a one per cent. solution internally, has relieved the worst cases of gastritis.

Trypsin, (Fairchild's) is now offered as a solvent for diphtheritic membrane.

The well-known properties of this principle of the pancreatic juice, give the strongest grounds for anticipating success in its application for this important purpose.

Trypsin acts quickly and powerfully upon fibrin and fibrinous membrane. It is not dependent upon the interaction of acid, as is the case with pepsin. It is most active in a slightly alkaline media.

It may be applied by spray or brush. In practical use the results have been very encouraging.—*Medical Times*.

DISEASES OF THE NERVOUS SYSTEM.

Plantar Neuralgia.

We cannot read too much about neuralgia, for there is probably no disease, that is not fatal in its character, that is so obstinate and so resisting in treatment; hence we reproduce the following case which Dr. C. W. SUCKLING reports in the *London Med. Times*.

H. E., a single woman, aged 38, employed as a domestic servant, was admitted into the hospital, April 9, 1885, complaining of pain in the soles of the feet, and inability to walk or stand on account of the pain. Both her parents

had suffered from rheumatism, and two of her brothers have had rheumatic fever.

The patient had had jaundice twice, otherwise she had enjoyed good health, but was not robust. About four years ago, she had pains in both her feet, similar to the present illness, but soon recovered. Three weeks before admission she got her feet damp, and the next day they were very painful. There were shooting pains confined to the soles of the feet near the heel. The pain was much aggravated by walking or standing, and much relieved by lying down.

When examined on admission, there was considerable hyperæsthesia of the soles of both feet and tenderness. The hyperæsthetic area was close to the heel, and measured an inch and a half in length, and one inch in width on each foot. When the feet are allowed to hang down the painful areas become red and the veins stand out, and free perspiration follows. The same phenomena occurred after walking a few yards. There was a tender spot behind the internal malleolus and another over the heel. There was no special tenderness, no pain in the back, or any sign of disease of the spinal cord or its membranes. There was no pain in the joints, nor any heart murmur. The urine was normal.

The patient was kept in bed, and a blister applied behind the internal malleolus of each foot. Simple rest in bed relieved the pains, but she always suffered from them at night. Repeated blistering finally caused complete cessation of the pains.

At the time of reporting (May 9) hanging the feet out of bed does not cause them to become red or to perspire, and walking does not cause pain. For the time, at any rate, the patient is well.

This disease was first described by Weir Mitchell, and is said to be rare in women.

On the 20th of May the patient left the infirmary perfectly well.

On the 25th, the patient, after having tramped about and been much exposed, was re-admitted, the pains having returned, but in a less degree than when first admitted.—*Medical and Surgical Reporter*.

Parthenine in the Treatment of Facial Neuralgia.

TOVAR has experimented with this alkaloid in cases of facial neuralgia (*Gazz. med. Ital.-Lombard*). Giving a tenth of a grain every hour for four hours, and then decreasing the size and frequency of the dose, he cured rather a severe case in a week. Parthenine is obtained from *Parthenium hysterophorus*, an herb growing in Jamaica, where it is much used for cutaneous affections.—*New York Medical Journal*.

DISEASES OF THE URINARY ORGANS.

Rules for Examination and Use of the Urinometer.

Somewhat extended observation of the practice of others leads to the conclusion that the following paragraphs from PROF. DRAPER'S "Medical Physics" will not be without interest and value to a good many of our readers.

1 Do not purchase an instrument without examining it with water to see if the 0° of the scale is correct. If this is in error, it is evident that as so little pains has been taken to have the initial point exact, no reliance is to be placed on the rest of the graduation. It is true that the zero may be right, and yet the rest of the scale incorrect. Any error of that description can only be determined by comparison with a standard instru-

ment, the accuracy of which has been assured by the specific gravity bottle.

2. In pouring the liquid into the cylinder hold it obliquely, at an angle of about 45°. The fluid will then flow gently down the side of the cylinder without forming a foam. The presence of foam or of bubbles seriously interferes with the reading of the scale. It may be removed by a drop of ether, but it is better to avoid its formation.

3. Stand with the back to the window, or other source of light, that the scale may be as brightly illuminated as possible, and also that the eyes may be protected from the light.

4. The urinometer having been placed in the liquid, and there being sufficient fluid to float it freely, the cylinder is then to be held by the top between the thumb and index finger. It should be held loosely, that it may hang perpendicularly like a plummet. By this device the tendency of the urinometer to become attached to the sides of the vessel will be lessened, and greater facility for correct reading attained.

5. The level of the fluid in the cylinder must be brought to the same level as the eye. The horizontal line is easily obtained with sufficient accuracy by selecting some object or point on the opposite side of the room, at the same height as the eye of the reader. The level of the fluid is then brought to this line.

6. The fluid in the cylinder will be seen to rise as it approaches its sides. The liquid, therefore, has a curved instead of a plane surface. To avoid the error caused thereby, the reading should always be made where the lower convexity of the curve cuts the scale of the urinometer. It is also well to form the habit of counting backwards, that is, in reading a gravity of 1017°, for example, read from 1020° upwards, rather than

from 1015° downwards. The value of this device will be quickly seen in practical working.

7. There is always a tendency to error from the urinometer hugging the sides of the cylinder. To avoid this at least three readings should be made, the urinometer being gently touched at its top between each reading to make it vibrate and break up any adhesions it may have formed to the wall of the cylinder.

—*California Medical Journal.*

Bile in Urine.

The best test for bile in the urine that I know of, and one that I have seen no note of prior to one made by myself over a year ago in the *National Druggist*, is chloroform. It is ready, delicate and certain. All that is necessary is to agitate a few drops of it in a test tube along with the suspected urine. If bile be present the chloroform becomes turbid, and acquires a yellowish hue, the depth of which is in proportion to the amount of bile present in the urine. If no bile be present, the test fluid remains limpid. Very minute quantities of bile can thus be detected, especially if the urine be concentrated before applying the test.

DISEASES OF RESPIRATORY ORGANS.

Belladonna as a Remedy in Acute and Chronic Catarrh.

DR. E. E. ALLEN, of Hartford, Conn., kindly sends us the following notes :

The prevalence of catarrh in this climate, and the unsatisfactory results following the usual methods of treatment, prompted me, a few years ago, to experiment with other and less commonly used remedies. Basing my theory on the known physiological action of belladonna, I have used it extensively

in cases of acute and chronic catarrh of the naso-pharangeal mucous membrane, and in my hands it has yielded more satisfactory results than all other remedies. In a climate where "hard colds" are so frequently experienced, and so often lead to graver diseases, it appears to me as necessary to seek for satisfactory remedies in this as in typhoid or the major diseases.

I can positively affirm that in belladonna we have a drug more effectual in aborting or curing acute coryza, or catarrh, than any remedy it has been my good fortune to hear of. Taking the disease in the beginning, or before the discharge has reached the purulent stage, this remedy is capable of effecting a cure—"tuto cito et jucunde."

I find minute doses more satisfactory than larger ones, Dr. Bartholow to the contrary, notwithstanding, and my practice is to give only about two drops in the twenty-four hours, just enough to keep a *slight* feeling of dryness in the throat : two drops in an ordinary glass of water, and let the patient take teaspoonful doses every half hour, until a slight effect is produced, after which a teaspoonful every hour or so during the entire day, and (if possible) the night. Twenty-four hours usually suffice to so control the disease as to allow the patient to resume his ordinary occupations.

My theory of its curative action is based upon two well known physiological actions of this drug. 1st. Its primary power to produce contraction of capillaries. This lessening of the blood supply of the membrane, of course, tends to retard the inflammatory process. 2d. Its secondary action as an eliminating agent, increasing the products discharged by the cutaneous, renal and alimentary systems.

I must insist that the larger doses defeat these actions, and ends by paralyz-

ing the vaso-motor ganglia, and thus increasing the blood supply to the tissue diseased, to increase rather than diminish the inflammation.

In chronic catarrh I have not tested the action of belladonna to as great an extent as in the acute form—and, while I am not prepared yet to state it is a positive curative agent, I have this emphatic assurance from every patient to whom I have prescribed it—"It has given me great relief. I would not be without it, for it helped me more than anything else."

Here is a record of three of the worst cases treated, thus:

1st. T—, æt. about 30, male. Previous health miserable, though no evidence of any constitutional disease. He had suffered, before consulting me, for two years, with an almost continuous discharge from the naso-pharyngeal mucous membrane. This discharge, though usually of a mucous character, after exposure or a slight "cold," became mucopurulent, somewhat offensive and very abundant. Accompanying these exacerbations of the disease, were neuralgic seizures of great intensity, located in the head, but confined to no set of nerves. He had been treated by the usual methods of douching, inhalations, etc., etc., with no appreciable relief.

I gave him, at the first dose, *v gtt.*, of fl. ext. bel., with the effect of almost entirely relieving both the attack of neuralgia and the discharge from the head, in about three hours. I continued, with intermissions of a day or two, when he was feeling very well—to give small doses, from 1-16 to 1-8 of a drop, three times daily, all summer, during which time his general health, appetite, etc., improved, and the catarrh was almost in abeyance. During the following year he neglected to follow my direction, and only used the drug when,

having taken cold, the disease returned. At present, two years from beginning treatment, the disease is gradually but decidedly improving. This patient's business necessitates his traveling most of the time, so that it has been impossible to closely study the effect of the treatment.

2d case. K—, male, æt. about 50. Suffered for several years with a catarrh somewhat resembling the so-called "rose-colds," but though the disease was intensified by the vegetation in the summer months, it continued with exacerbations, on the slightest exposure, all the year. He experienced so great relief from my prescription, that under the impression that "if a little be good, a good deal is better," he insists upon taking doses of from one to two drops, *pro re nata*. During the twelve months he has been using this drug, he has experienced very decided relief from his catarrhal trouble. In this case, also, the gentleman's business is travelling, and thus he is greatly exposed, and it has again been out of my power to study his case as closely as is desirable.

3d case. X—, male, æt. about 25, clerk. Disease similar in all important particulars to the case above. Has enjoyed greater exemption from his disease than for many years previous. In none of the cases has an entire cure been attained, but I think, in the present epoch of unsatisfactory treatment of this obstinate malady, anything which affords as much relief as belladonna, is worth recording. Even in the limited number of cases I have given this drug, the beneficial results have been so uniform, that I can advise at least a trial of it, in any case where the usual remedies have failed or proved unsatisfactory.

[DR. N. E. DAVIES recently published an interesting article in the

British Medical Journal, on BELLADONNA INHALATION IN ACUTE BRONCHITIS, a portion of which we quote here as bearing directly on this article by DR. ALLEN :

"I believe the dyspnœa is caused more by the contraction of the muscular tissue of the air-cells, due to the irritation caused by the bronchial inflammation, than by the viscid mucus secreted ; and, acting on this belief in a case I had occasion to treat a few days ago, where the dyspnœa seemed likely to terminate life, I gave a grain of extract of belladonna in half an ounce of water, by means of a Dr. Siegel's inhaler. After the patient had inhaled this solution for a few minutes, the breathing became quiet and easy ; and before the half-ounce was exhausted, the patient was asleep. By repeating this remedy every few hours, with a stimulated system of treatment by the mouth, the patient, an old lady, aged 75, soon passed the dangerous state, and is now recovering. I have often used this method of treatment in asthma with magical effect, and can strongly recommend its trial in the early state of acute bronchitis, as I have found it marvellously successful."

We have also used the inhalation of belladonna in laryngismus stridulus, in about the proportion adopted by Dr. Davies, with the result of giving almost instant relief.] ED.

The Treatment of Asthma.

DR. PAUL RODET (*Buffalo Medical Journal*) :

I. TREATMENT OF THE ATTACK.—The principal indication is to relieve the dyspnœa. For this purpose, the following remedies may be employed, given in the order of their efficiency :

Injections of Morphine.—These rapid-

ly relieve the attack and produce a quiet sleep, but it is necessary to gradually increase the dose. It should be used with great caution, for fear of inducing morphinism.

Inhalation of Iodide of Ethyl.—Direct the patient to pour ten or twelve drops on a handkerchief and inhale slowly. This drug rapidly relieves an attack, sometimes instantaneously. These inhalations are much to be preferred to those of ether or chloroform, which usually fail.

Ammoniacal Vapor.—This produces a sedative effect by exciting an excessive secretion in the nose and throat. Many patients are relieved in this way.

It has also been proposed to touch the pharynx with a strong solution of ammonia. A certain amount of inflammation with an abundant secretion is thus produced. This method of treatment sometimes affords excellent results.

The Inhalation of Medicated Fumigations.—These act upon the bronchial mucous membrane. Nitre papers burned in a saucer near the patient, are much employed. The leaves of acrid narcotic plants, such as stramonium, belladonna, may be smoked in cigarettes alone, or with a small quantity of nitre. Cigarettes made of belladonna leaves, containing arsenic, are also prescribed. These means are beneficial only for a limited time.

2. TREATMENT OF THE DISEASE.—Seek out the causes which produce the attack, with a view to changing the occupation or surroundings of the patient, if necessary. The medical treatment will vary, according to the variety of asthma.

Catarrhal Asthma.—Avoid cold ; treat the laryngitis and bronchitis by ordinary methods, emollient drinks, ipecac and opium, and cutaneous revulsion. If the asthma is not of long standing, Hardy

recommends the application, on the chest and arms, of a vesicatory or a rubefacient. Tincture of lobelia, thirty to sixty drops a day, is considered an excellent remedy by the Germans.

The waters of Royat or Cauterets and a winter residence in the South, at the seaside, may be tried.

Nervous Asthma.—Bromide and, above all, iodide of potassium, produce excellent effects, although we do not know the rationale of this treatment.

Unroasted coffee, a tablespoonful to be infused in a cup of water over night, and taken at one dose in the morning for several months, may be tried.

Compressed air is an excellent remedy. The same results may sometimes be obtained by playing the cornet or blowing a trumpet, thus producing a distension of the bronchia. Gymnastic exercise of the upper extremities should be ordered for those of sedentary habits. Hydropathic treatment may be employed with patients who do not cough.

Herpetic Asthma.—That is, cases in which the asthma alternates with attacks of skin disease. Employ the hygienic and therapeutic remedies mentioned above, and, in addition to these, arsenic. Counter-irritants, where the eczema has disappeared. Mont Dore water to be preferred to those of Bourboule, which are better for the scrofulous.

Meningitis as a Complication of Pneumonia.

In an article published in *Journal of American Medical Association*, the following statements are made in conclusion :—

The latest contribution to this subject comes from Warsaw and is by PROFESSOR POPOFF. In 90 cases of lobar pneumonia he has had three complicated by meningitis. Two of the three died and

were examined *post mortem*. The pneumonia was in the stage of red and grey hepatization and the meningitis was suppurative, being in one cerebro-spinal and in the other confined to the convexity. In all three cases the pneumonia was protracted and the meningitis occurred from the twelfth to the fourteenth day, and in all the symptoms due to the complication were marked, such as headache, stiffness of the neck, delirium, etc. In the final stages loss of sensibility to pain, inability of the pupils to react to light were noted. All set in with chills and headache. In all the spleen was enlarged and the urine was found to contain albumen. There was also paralysis of the lower extremities for the time in the one which recovered. Popoff has collected 34 published cases of this complication, which together with his 3 make 37 in all. He finds that 27 were examples of the inflammation limited to the convexity; while in 10 there was also spinal meningitis. This fact speaks against the theory of Verneuil and Surugue, since, if the anatomico-physiological proximity of the parts was responsible for the complication, the meningitis should in the majority of instances be cerebro-spinal and not alone cerebral.

Popoff believes also that were Nauwerck's supposition tenable, meningeal inflammation in connection with other affections would be more common; whereas it is well known that emboli find their way more frequently into the substance of the cerebrum than its membranes. Renal disease and alcoholism he regards as predisposing factors. Popoff attributes the complication to the presence of micro-organisms, viz., the pneumonia coccus of Friedländer. He assumes that in the stage of resolution these organisms are taken up into the general circulation and de-

posited in distant parts, there to excite inflammation. In support of this explanation he cites the fact that their presence has been demonstrated microscopically in the meninges as well as in other organs. Bright's disease and other *cachexia* may be of influence in rendering the meninges particularly sensitive to the deleterious influence of the pneumonic poison. Popoff distinguishes three types of this disease: First, the epidemic variety, which, however, has nothing in common with the pneumonia; second, that in which the meningitis is an accidental complication of the pulmonary affection and is due to embolism or otitis interna, etc.; thirdly, the metastatic form, which is caused by the same etiological factor as is the pneumonia. He groups his own cases among this last variety.

Popoff's conclusions are interesting and, if one be inclined to endorse unreservedly the germ theory, it is satisfactory.

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DIGESTIVE TRACT.

The Diagnosis and Treatment of Diseases of the Stomach.

In a former report we gave an abstract from Professor EWALD and Dr. BOAS's article on the physiology and pathology of digestion, and mentioned that the authors were still engaged in their investigations, the further results of which they promised to make known at an early date, particularly those relating to the diagnosis and treatment of gastric complaints. These were embodied in a paper read by Professor Ewald before the Berlin Medical Society, January 6th, 1886 (*Berl. klin. Woch.*, Nos. 3 and 4, 1886.) In diagnosing diseases of the stomach, Ewald considers it essential to examine the stomach contents. His method of

carrying this out is as follows: The patient is allowed for his breakfast two small French rolls and a cup of tea, without milk or sugar. An hour afterward the contents of the stomach are withdrawn by introducing into the stomach a simple rubber tube of sufficient length to project four to five inches beyond the mouth. The contents usually flow out by simply lowering the external end of the rubber tube; should this not occur, however, mere pressure upon the abdomen, while the patient is told to talk in a few deep breaths, nearly always succeeds in emptying the stomach. The author looks upon the introduction of the tube as an easy matter, which is not attended with any more inconvenience to the patient than the employment of the laryngeal mirror. In every case, however, he first auscultates the heart to ascertain if an aneurysm of the aorta exists, having in view the case reported by Frerichs, in which the passage of an œsophageal sound produced rupture of an aortic aneurysm. From the examination of several healthy individuals, who might be counted by hundreds, the following results may be said to be established: That, after partaking of the above mentioned diet, the digestive act is divided into three stages; the first (occupying thirty minutes), in which lactic and hydrochloric acids are present; the third (sixty to ninety minutes), in which hydrochloric acid is alone present. But, when a pathological condition of the stomach exists, these stages occupy a longer time, so that an hour after the food is taken lactic acid is still to be found. The results of the chemical examination of the stomach contents are given, in tabular form, of seven cases of carcinoma, five of ulcer, five of dilatation, eighteen of chronic catarrh (a), nine of chronic catarrh (b), fourteen of

neuropathic dyspepsia (a), and six of neuropathic dyspepsia (a). Not one of the cases of cancer was attended with swelling of the glands, nor could a tumor be made out, so that the diagnosis of cancer had to be based on the chemical examination of the stomach contents, together with the other recognized symptoms of carcinoma, such as age, cachexia, etc. In all these cases, with only one exception, hydrochloric acid was absent, and in all lactic acid was found in abundance. The author does not attach too much importance to the absence of hydrochloric acid, but thinks it serves as a valuable aid in diagnosis. In a suspicious case we should not rest satisfied with one examination; several should be made before arriving at a decision. An instructive case is related in which all the symptoms of carcinoma obtained, but in which a chemical examination of the stomach contents showed the presence of hydrochloric acid. The patient was cured in four months under suitable treatment. For the differential diagnosis of ulcer of the stomach a chemical examination is not of so much value, for the gastric secretion may be quite normal in the presence of a small ulcer. In the third group, that of gastric dilatation, the chemical examination was negative. Here the deficiency lies in the motor apparatus, while the secretory functions may be quite normal. The diagnosis of this affection is not an easy one. The normal size of the stomach varies, within great limits, in different persons, and the size of the organ bears no proportion to the size of the individual. These statements were based on the measurements of the stomach in a great number of bodies in the post-mortem room. An illustration is given of a classical case that presented all the symptoms of dilatation, and in which, at the autopsy, was found a small con-

tracted stomach with a cancerous growth at the pylorus. The treatment which the author recommends in these cases consists of a dry diet, with the allowance of as little fluid as possible, and the application of electricity. The latter, to be effectual, must be applied by passing one electrode within the stomach. The cases of chronic catarrh (a) are those in which the continuance of lactic acid extended beyond its normal stages, and the appearance of hydrochloric acid was delayed. In the second group, that of chronic catarrh (b), the cause of the indigestion must be sought in the inefficiency of the motor apparatus and, perhaps, in the absorption power of the stomach. The administration of hydrochloric acid in these cases, to be of any service, must be after meals, in greater quantities than it hitherto has been given. The author recommends three fifteen drop doses of the acid at intervals of fifteen minutes. Or the same quantity of the acid may be given in a pill form, each containing three drops. Very little is said of neuropathic dyspepsia. Two forms are recognized in which the chemical changes present the same features as in the two catarrhal forms. An interesting case is reported in which the diagnosis of neuropathic dyspepsia had been made, but close examination showed the disturbances of digestion to be due to a movable kidney. The patient experienced marked improvement by rest in bed, and a more liberal diet than she had been previously given. In conclusion, the author holds up the following benefits from his investigations: (1) A deeper insight into the chemical changes of digestion, and, in consequence of that, a more accurate basis for diagnosis and therapeutics of diseases of the stomach; (2) the possibility of watching the results of treatment and regulating it as may be found necessary.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Surgical Infection and the Value of Antisepticism.

DR. A. H. P. LEUF, in a paper recently read before the Brooklyn Pathological Society, and which will later fully appear in the *New York Medical Journal*, draws the following conclusions, based upon a thorough study of the whole subject and a number of confirmatory experiences :

1. There are essentially but two kinds of Union—primary and secondary.

2. All living tissues have common and special powers of reaction.

3. The common reactions are those of mere vitality, and the special reactions are the result of the performance of duties not necessary to life.

4. It is by their common reactions that all tissues overcome disturbances.

5. Repair in all structures is essentially the same, and only the manifestations are different.

6. Connection and support is the special duty of the connective tissue cell, and it is its sole and special duty to repair all breaches of continuity, and it does this without the aid of other cells.

7. Of all structures involved in the inflammatory process, the lower tissues, embraced by the term connective tissue group, undergo additional growth and development, while the higher tissues, embracing all that do not belong to the preceding group, become atrophied or are destroyed.

8. The repair of an open wound may be divided into three stages, extending in regular order up to the glazing of the surface, the formation of granulations and pus, and the end of repair.

9. There is transudation of blood, plasma and serum until glazing is complete, and of pus from the time granulations are formed until the end of repair.

10. There is no transudation from the wound from the time glazing is completed till granulations and pus are formed, but the wound's surface is protected with a coagulated albuminous layer.

11. So long as there is transudation from a wound, there is no danger of absorption by that wound.

12. The possibility of absorption during the intermediate stage just mentioned, may be called an open question.

13. I do not believe absorption takes place, as a rule, even at this stage, if the albuminous envelope, the glazing, is perfect.

14. This intermediate stage lasts three or four days.

15. Admitting that absorption is possible at this time, and that antiseptics should be employed, they would only be indicated three or four days.

17. Sealed dressings to remain so for weeks, are not required for antiseptic purposes, and do good almost entirely by insuring greater rest to the injured part.

18. I believe that primary union is prevented by local and constitutional causes, and not by pathogenic microorganisms.

19. Anæsthesia retards glazing and indirectly prevents primary union, because of the premature coaptation of the surfaces of the wound.

20. A local traumatic peritonitis has no tendency to spread, unless it is preceded by the extension of some irritant matter from the original site of inflammation, and then the inflammatory process will follow this cause and only become general, if preceded by it.

21. Surgical infection is a term too carelessly employed, and in most instances a misnomer.

22. Most often the symptoms ascribed to surgical infection are due to re-

actions of the whole system, and of the wound, against new conditions and irritations.

23. These reactions depend upon the predisposition of the patient, altered environment, and other defective conditions of life, for their characteristic manifestations.

24. The causes of most so-called infectious disorders are intrinsic and not extrinsic.

25. The absence of predisposition may here be said to constitute immunity.

26. Predisposition may be hereditary or acquired.

27. It may be gradually or quickly acquired.

28. It is not always evident nor always possible of detection.

29. Hyper-pyrexia is as normal in some pathological conditions, as is the standard in health.

30. Excessive reaction is followed by temperature elevation.

31. Various affections have thermic elevations, peculiar and normal to themselves.

32. If germs have any causative relation to surgical complications, they are impotent on a wound's surface, unless the patient is predisposed.

33. Hyper-pyrexia is produced by long continued excessive action of any organ of the body or a part of the body.

34. Local irritations, if long continued, if sufficiently strong, as if effecting a sufficiently sensitive structure, also cause a rise of body heat, and this whether or not, the irritation is appreciated by the mind, although its recognition by the brain increases the effect.

35. Those tissues which have the richest nerve supply and the densest consistence, as a rule, give rise to the most marked constitutional disturbances when congested or inflamed.

36. The more perfect, absolute and continuous the rest of an injured part, the more favorable are the conditions of repair, and the greater certainty is there of complete, rapid and satisfactory recovery.

37. Conjoined with this, the most nourishing and most easily assimilable food, sustaining medication, with good hygiene and agreeable environments, constitute the best treatment of surgical cases.

38. Antisepsis is the prevention of contact between open tissues and living disease germs.

39. In a question of this kind, one negative experience, if without errors, is logically as effective a refutation of a theory as are thousands.

40. One such negative experience has occurred in our midst in Dr. Jewett's case of diphtheritic cast of the vagina, and this is by no means a lone instance, as there are many others equally as conclusive.

41. Antisepticism as above defined, is demonstrated to be a fallacy, and therefore, can have no rational existence.

42. As good results are obtained by careful surgeons, who do not employ antiseptics, as is obtained by those who do.

43. I deny the causative relation of most so-called pathogenic microbes, because they are the results or concomitants, and not the causes of the disease with which they are identified.

44. Lawson Taite, without the use of antiseptics, has exceeded all preceding records of success.

45. The greater success in the treatment of private patients, or patients in special hospitals, over those in general hospitals, is not due to superior antiseptic facilities, but principally to greater attention on the part of the surgeon, healthier and pleasanter en-

vironments, and a superior and constantly appropriate diet.

46. Practical antisepticism, or Listerism, has its advantages and its disadvantages.

47. It does good, by having revived and improved upon well recognized, and highly valued older methods.

48. It has unconsciously furnished a means of overcoming the local tonicity of wounds, and it did so at a most opportune time.

49. This is accomplished by the stimulating effect upon the tissues of the so-called antiseptic preparations in moderate strength and for a limited time.

50. It has done good by instigating daring surgery, and leading to the achievement of the most brilliant, undreamt of, and un hoped for, results.

51. It is seductive and causes men to adopt and follow it, who would be neither clean, gentle, nor careful without it.

52. Listerism may be designated a "God-send," to patients who have to put themselves under the surgical care of a large proportion of our fellow practitioners, both in the city and country.

53. This is because it controls them as religion controls the masses.

54. It has done harm by instituting new and pernicious methods, often at the expense of those that were older and beneficial.

55. It has poisoned many patients.

56. It has killed many other patients, by increasing inflammatory action, especially of the peritoneum.

57. Its almost indiscriminate advocacy of sealed dressings is, and has, in innumerable instances, proven to be a source of interference with proper healing, and even an element of danger in preventing the early detection of deviations from the normal process of repair.

58. It also delays the recognition of recurring and secondary hæmorrhage.

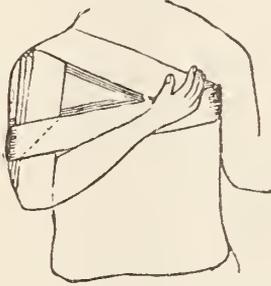
59. Its good is done under a cloak of irrationality, because its good affects are claimed to be due to the killing or inhibition of germs, whereas its benefits are wholly and unqualifiedly due to the rigid enforcement of the best surgical principles, fully recognized before the advent of the fallacy of antisepticism.

A New Bandage for Fixation of the Humerus and Shoulder Girdle.

DR. DULLES, of Philadelphia, in the *Medical News*, gives the following:—This form of bandage requires, for an adult, a roller about three and a half inches wide, and about ten or twelve yards long. It is applied as follows: The arm of the injured side should be placed against the chest-wall, almost in the perpendicular line, but with the elbow a little in advance, and the forearm flexed at a right angle and laid across the lower part of the chest. A large piece of lint, or a soft towel, or a piece of old muslin, should now be interposed between the arm and the body, going well up into the axilla, so as to prevent the excoriation which usually results from the apposition of two skin surfaces.

Then the surgeon, standing behind the patient, and a little toward the injured side, should apply the initial end of the roller to the axilla of the sound side, and carry the bandage diagonally across the back to the top of the shoulder on the injured side; then straight down the front of the arm to the point of the elbow; then under this to the back of the arm; then up behind the arm to the shoulder, where the preceding turn crossed it. At this point a firm pull should be made on the bandage, to draw the humerus well up against the glenoid cavity. In cases of fracture of the clavi-

cle or scapula, this piece can easily be regulated so as, with the aid of a little manipulation, to place and keep the ends of the bone in position. Then the bandage is to be carried diagonally across the front of the chest to the axilla of the sound side; then through this axilla to the back; then horizontally across the back to the lower third of the arm of the injured side, and round this to the front of the arm; then across the front of the chest to the axilla of the sound side, leaving the forearm out; then through this axilla to the back near the point of starting. The appearance of the bandage is shown in the figure. The band-



age is completed by repetition of these turns till the roller is used up, advancing with each turn a little way up the shoulder, and a little way up on the arm. If one roller does not suffice to give the support desired, of course a second one must be added.

After the bandage is in place, a few large pins should be inserted at each crossing, and the hand and forearm should be supported by a sling. In addition to the pins, the bandage may be stitched so as to make a firm case; or a few strips of adhesive plaster may be applied along and across it in different places, which will give the greatest possible security. It is a good plan to attach a strip of adhesive plaster, an inch and a half wide, from just below the shoulder, over the outer side of the arm and round the point of the elbow, to

about the middle of the forearm. This will prevent the bandage from slipping off the elbow. In certain cases it is advisable to include the forearm in the bandage, so as to bind it firmly to the chest-wall. But one of the special advantages of this method, in my opinion, depends upon the fact that it can usually be employed without including the forearm.

This form of bandage accomplishes the following results: It fixes the scapula and the outer end of the clavicle holds the head of the humerus well up against the glenoid cavity, and fixes the whole bone against its natural splint, the chest wall. Among its advantages, the most important, in my opinion, depends upon the exactness with which, by drawing up the humerus in the line of its axis, the bone and the shoulder-girdle can be held in a position in which there is the least muscular interference with the proper position of the fragments in a fracture of the scapula or clavicle, or of the different bones in a luxation at the shoulder-joint. I find, that with a little manipulation with my free hand, and careful regulation of the upward pull upon the humerus and the downward pressure upon the scapula or clavicle, by means of the bandage as it goes along, I can get all that I can ask for in the way of correct anatomical relation of parts. The position of the humerus, which I have indicated, is also, I believe, a better one than that which is maintained by the bandage most frequently employed—I mean the Velpeau bandage. The comparative lightness of this dressing is also an advantage, as well as the fact that it leaves the upper and lower ends of the arm uncovered, so that they may be examined at any time, or have applications made to them. The freedom of the forearm I have already alluded to as an advantage whenever it is

admissible. There is no danger of the bandage slipping, if it be snugly and firmly applied, and if it be wide enough. It is easy to make it fit nicely at the elbow, so as to hold up this in a sort of cup made by the slight elasticity of the material. It is also easy, by varying the position of the turns, to make the bandage cover any particular point in the scapula, or in the outer end of the clavicle, or in the humerus. In fracture of the clavicle, or scapula, a suitable compress may be placed over the seat of fracture; while, in any fracture of the humerus, to which such a dressing is suitable, the arm may be splinted against the chest-wall by carrying the horizontal turns high up. I will not attempt to speak of the conditions to which this form of bandage is applicable, but I think they are all those in which fixation of the arm and shoulder girdle is the important object. I am aware that it is somewhat dangerous to call anything new in these days, but I have so designated the bandage I have just described, because I have not met with any description which corresponds to it. If I am mistaken, I shall be happy to be corrected.

Treatment of Colles' Fracture by a New Method.

This consists in putting up the fracture with the hand extending nearly to a right angle with the arm, and supported by a wire splint. If the forearm is placed on a flat splint so that the fingers are flexed over the end, it will be noticed that the radius does not touch the splint at all, and the ulna only on its upper third. If, however, the hand is lifted until fully extended, the radius will touch the splint at its lower end, the thenar and hypothenar eminences of the hand being lifted out of the way. The flexors act at their

best advantage when the hand is thus extended, and regain flexibility and strength rapidly when the splint is removed. When the hand is clenched it moves quite perceptibly to the ulnar side of the arm. In the treatment of this fracture, the flexor muscles should be placed at their best advantage, the extensor muscles should be placed at their greatest disadvantage, and the end of the radius should be brought down upon the splint.

To accomplish these ends it is only necessary to bend a piece of ordinary telegraph wire, first into the shape of an ordinary hair-pin, then bent up sharply about two and a half inches of the closed end, flattening somewhat the top of the bend so that the fingers may rest easily upon it at their articulation with the hand. The ends of the wire are fastened with a strip of tin curved to fit the arm, and with a second strip under the end of the radius.

Dr. Keene reported three cases in which his splint fulfilled all the conditions of success, avoiding pain and swelling during treatment, and preventing subsequent deformity and impaired function of the hand and forearm.—*Boston Medical and Surgical Journal.*

[We cannot see any objection to this method, and in fact confess that it appears to be good, but yet it seems impossible to improve upon Moore's simple dressing, and particularly since it yields such very uniform and satisfactory results.]

A. H. P. L.

Spontaneous Fracture.

At a meeting of the Surgical Society of Paris (*Journal de Médecine et de Chirurgie Pratiques*), M. HUMBERT related the case of a young man, eighteen years of age, who had severe pain in the upper part of the thigh, accompanied

by a considerable swelling in that region, and shortly afterward presented all the symptoms of a fracture of the femur. There had been no traumatism. The diagnosis made at the time, by all who saw the patient, was that of osteosarcoma with spontaneous fracture. However, some time afterward the swelling began to diminish, union took place, and the patient was able to leave the hospital. M. Humbert then concluded that the case was not one of osteo-sarcoma, but of osteomyelitis. M. Verneuil suggested that there might have been an hydatid cyst of the bone, especially as the speaker had said that there was at one time a discharge of fluid from the swollen tissues. M. Duplay said that he had had a case in which spontaneous fracture occurred several times, and each time union took place. Finally the limb was amputated, and the femur was found to be considerably atrophied and to be the seat of numerous hydatid cysts.

Subspinous Dislocation of the Humerus.

MR. HASLAM reports the following case in the *Lancet* :

J. McC—, aged thirty-two, applied at the hospital, saying that he woke up in the middle of the night feeling pain in his right shoulder, and that this was due to some twist in bed. (It was afterwards ascertained that he had had a fit.) On examination there was found to be considerable pain about the shoulder on any attempt to move it; the arm was fixed, with the scapula flexed to an angle of 45° , slightly rotated inwards, and the axis of the bone was directed to a point just posterior to the glenoid fossa. On feeling for the head of the bone below the acromial end of the clavicle, a distinct depression was felt, with hollow tension of the anterior fibres of the deltoid. On inspection

posteriorly a slight swelling was noticed just below the junction of the spine of the scapula with the acromion process, and on manipulation this was found to be due to the upper end of the humerus resting on the dorsum of the bone. No reliable measurements could be taken, as he had sustained an injury to the elbow when a boy, which had totally disarranged the bony prominences. Reduction was easily effected under anæsthetics by a movement of abduction, extension, and rotation outwards. —*Medical and Surgical Reporter.*

The Treatment of Fracture of the Patella by the Metallic Suture.

DR. FREDERIC S. DENNIS concludes an article published in *New York Medical Journal* as follows :

The conclusions to which I have come, after a careful analysis and study of all the reported, and as many unreported cases as it has been my privilege to observe, are these :

1. In compound fractures of the patella there is not the slightest question as to the propriety of the operation of wiring the fragments. Fowler's cases, James's, and my own, bear undisputed testimony in corroboration of this statement.

2. In recent and old fractures, with the full permission of the patient and under the strictest antiseptic precautions, the operation, in the light of present statistics, is wholly justifiable.

3. In debilitated patients, and in those suffering from any organic disease, the operation should not be employed, and is, in fact, contra-indicated, as all other operations of expediency.

4. It is not an operation which can be indiscriminately performed, and never by an ordinary practitioner with little surgical experience and with little faith in the germ-theory of inflammation.

5. The success of this operation depends wholly upon conscientiously carrying out the smallest detail in aseptic surgery, and the surgeon who is not imbued with the true spirit of antiseptic surgery, is guilty of a criminal act toward humanity, if he attempts this operation.

6. While the number of cases yet operated upon is too limited to admit of deductions by means of which a final settlement of this question can be made in the minds of surgeons, the future practice of the surgery of America, the birthplace of this operation, and the practice of other countries, will soon enable us to condemn it as an unsafe and unjustifiable procedure, or else it will raise it to a pinnacle from which we can recognize one of the greatest triumphs of our art.

The Indications for Laparotomy in Penetrating Shot and Stab Wounds of the Abdomen.

DR. JOSEPH D. BRYANT makes the following deductions in a discussion before the surgical section of the New York Academy of Medicine :

Laparotomy should be performed in all cases immediately after the accident.

There is no proof of the fact, so far as I know, that the peritoneum of the male is not as tolerant of manipulations as that of the female.

The following are many of the practical elements that at the present time enter into a case of laparotomy for penetrating wounds that do not exert an equal force in laparotomy for other common causes :

1. A doubt whether the abdominal viscera be injured.
2. Existing shock.
3. Unfavorable surroundings of the patient.

4. Unskilled operators.

5. Greater exposure of the abdominal cavity and its contents.

6. Existence of hemorrhage.

7. Extravasation of intestinal contents.

8. The greater difficulty of cleansing the abdominal cavity.

In my opinion *laparotomy is a justifiable operation*, but it should not be attempted even in so-called favorable cases unless the operator can avail himself of many of the recognized means of procedure necessary to combat the shock of the operation, and is sufficiently familiar with its steps to work accurately and with dispatch.

The exploratory incision does not expose the patient to unusual danger.

[We would simply suggest that a too liberal use of irritant disinfectants or antiseptics, by no means tend to improve a patient's chance of recovery.]

A. H. P. L.

Adhesive Plaster.

According to *Technics*, Dr. H. R. KELLY says that lightly sponging the surface of adhesive plaster with a sponge saturated with strong ether will develop its adhesive properties without heat. Spirits of turpentine will have the same effect.—*St. Louis Medical and Surgical Journal*.

[Neither point is new, especially the latter, which is time-worn. Good things, however, cannot be repeated too often.]

A. H. P. L.

To Protect Surgical Instruments from Rust.

It is stated in the *Dental Eclectic* that a physician was called upon to perform an operation on a farmer who was injured while plowing in his field, and during the excitement of the occasion

mislaïd his case of instruments. Some months later they were found in the field. The case had become disjointed and all the instruments were rusty except an amputating knife, the handle of which was secured to the blade with zinc. The appearance of this knife suggested the possibility that galvanic action had prevented it from rusting.—*Technics.*

DR. W. H. MUSSEY, of Cincinnati, used to advise his students to have strips or sheets of zinc in their instrument cases in contact with steel instruments to protect the latter from rust.—*Ibid.*

[We have met with similar statements before and urge a trial and a report of results.]

A. H. P. L.

A Method for Disguising the Odor of Iodoform.

Was described by Dr. Shufelt, who had accidentally discovered it last summer. He had dissolved the iodoform in the volatile oil of camphor for inhalation in phthisis. He had subsequently used the combination in both an ointment and a paste. He did not think that any chemical action occurred between the two ingredients, as he had failed to detect free iodine in the combination.—*New York Medical Journal.*

Removal of Tumors on the Abdominal Wall with their Peritoneum.

DR. M. SANGER, of Leipzig, contributes to the *Archiv für Gynakologie* (Band xxiv., Heft 1), an interesting paper on this subject. It deals with the removal of tumors of the belly wall so closely and extensively applied to the peritoneum that this membrane can only be preserved uninjured by a difficult dissection, after which a large thin sheet of peritoneum, free from its main vas-

cular connections, will be left. In such circumstances, some operators have adopted the easier course of cutting away the tumor with its peritoneal covering, and taking great pains to bring together the edges of the peritoneal wound, leaving the skin which covered the tumor as a large loose bag over the stitched-up incision. Others have filled up the gap by stitching omentum into the wound, without great success. Sanger here publishes a case in which he simply stitched together the margins of the incision through the skin and muscles, leaving the large surface from which the tumor had been removed uncovered with peritoneum: so that after the closure of the wound, a great part of the anterior abdominal wall was left bare of peritoneum. Three similar cases have been published before, one by Esmarch, two by Sklifossowsky. All four were successful. In only one of them (Esmarch's) was drainage employed. In order to determine the behavior of the parts affected when this course had been adopted, Dr. Sanger has made experiments upon animals, and he finds that just as after a destruction of skin healing takes place and fresh epidermis is formed, so after a removal of part of the peritoneum new endothelium is produced. The paper concludes with a general survey of all the cases of tumor of the abdominal wall known to the author.—*London Medical Times—Medical Herald.*

An Unusual Cause of Burns of the Face.

DR. GEORGE T. BEATSON thus writes in the *Brit. Med. Jour.*—

I have thought it right to put on record the following case as it seems to me to be one of some rarity, and to have some importance from a medico-legal point of view. I cannot do better than

give the facts of the case in the words of the patient himself, who communicated them to me by letter. He writes as follows :

A rather strange thing happened to myself about a week ago. For a month or so I was troubled very much with foul eructations. I had no pain, but the smell of the gas which came from my stomach was disagreeable to myself and to all who happened to be in the room. About a week ago, as I said, I got up in the morning and lighted a match to see the time, and when I put the match near my mouth to blow it out, my breath caught fire, and gave a loud crack like the report of a pistol. It burnt my lips, and they are still a little sore. I got a terrible surprise, and so did my wife, for the report awakened her.

From the above occurrence, it would appear that the condition known as "halitosis," or diseased breath, is not only a source of misery to the sufferer and those compelled to associate with him, but may, under certain circumstances, become a condition of danger to the unfortunate possessor of it. In the present instance, the gaseous results of the imperfectly digested food had their atoms of carbon and hydrogen so arranged as to give rise to the presence of carburetted hydrogen, the inflammable and explosive qualities of which came into play when mixed with a due proportion of atmospheric air in presence of the unguarded light of the burning match. I may add, that the patient to whom this accident happened is a most intelligent and observant man, and that the diet I prescribed for the indigestion from which he suffers from time to time has alcohol excluded from it, and I know that my instructions in that respect are acted upon. — *Med. Medical Journal.*

Thoracic Aneurism Treated by the Introduction of Steel Wire Into the Sac.

At the meeting of the Royal Medical and Chirurgical Society, Dr. W. CAYLEY read the report of this case : The patient was a man aged forty-eight, who was admitted into the Middlesex Hospital on June 5, 1885. He had been suffering from symptoms of a thoracic aneurism, since November, 1884, but it was not till five days before his admission that a pulsating tumor made its appearance at the root of the neck, rising about three inches into the neck behind the right sterno-clavicular articulation. The patient was at first treated according to Tufnell's method, and given large doses of iodide of potassium. The tumor continued to increase in size, and it was evident that it must either soon burst externally, or extravasate among the tissues of the neck. On June 24, Mr. Hulke introduced into the sac, through a fine cannula, forty feet of steel wire. This caused no constitutional disturbance or local pain, and this portion of the aneurism became completely consolidated. Towards the Middle of August, signs of the extension of the intrathoracic portion of the aneurism—increasing dyspnoea, and severe paroxysmal cough—became more marked, and there was an increase of pulsation behind the sternum, and towards the left sterno-clavicular articulation. As it was evident that the aneurism must soon prove fatal from pressure on the trachea, it was determined to endeavor to consolidate the part of the sac producing this pressure. Accordingly, on September 10, Mr. Gould, in the absence of Mr. Hulke, introduced a cannula just above the left sterno-clavicular articulation, directing the instrument obliquely towards the middle line, and introduced thirty-four feet and nine inches of wire. No constitu-

tional disturbance followed, but no relief was given to the symptoms, and the patient died in a paroxysm of dyspnoea, on September 19. On *post mortem* examination, a large aneurism was found springing from the ascending part of the arch, and communicating with the vessel by a very large orifice; the whole of the upper portion was completely filled by a clot, imbedded in which was the wire. The wall of the aneurismal sac, where it projected into the neck, consisted only of a little condensed connective tissue. The lower portion of the sac, near its origin from the aorta, caused compression and flattening of trachea, just above its bifurcation. The first operation produced the desired result in preventing the imminent rupture of the aneurism. The size and connections of the sac rendered the second operation ineffectual.

[The case was discussed by the president, Mr. Barwell, Dr. Paul, Mr. Bryant, Mr. Holmes, and Mr. Hulke. The president objected that possibly the wire would set up a local irritation as it had in Moore's case; that embolism of the brain or kidneys might result; and that the end of the wire might cause ulceration of the sac. Mr. Barwell reviewed the literature on the subject and stated that eight cases had been reported. Moore's was the first, then followed Levis, Bryant, Rubio, Van der Menlen, and Loreta with one case each, and Bacelli with two (fifth and sixth cases). In two of these wire had been employed, in two others horse hair, and in one cat gut. He had not yet been tempted to adopt the measure. Dr. Paul had treated a threatening case of innominate aneurism by the introduction of fifteen feet of clean white horse hair. The patient died in a convulsion on the fourth day and no emboli were sought for. Mr. Bryant favored the

method and believed it applicable to a larger number of cases than generally supposed. He did not approve of wire and rather preferred horse-hair or fishing gut or catgut. The case he had reported was suffering with ulcerative endocarditis during the operation and it was the heart disease that killed the patient. Mr. Holmes disagreed with Mr. Barwell. The specimen from the cases of Bryant and Loreta showed conclusively that the treatment had effected a decided improvement in the aneurisms. Moore had used thirty-six yards of quite stiff wire in his case and it probably induced inflammation of the sac because of the large quantity and rigidity. He also preferred horse-hair or catgut to wire, and thought the first better than the second, because the latter would melt away in a comparatively short time. Mr. Hulke said that the wire he had used had been previously carefully coiled on a half-in. mandril, and he was sure it had again coiled itself in the sac. Horse-hair or catgut were not sure to coil up and might enter the aorta. Neither could they be made aseptic with certainty. Von Langenbeck's suggestion of ergotin injections in the vicinity of the sac, he thought worthless, and electrolysis had in his hands proved disastrous. He thought the introduction of wire the most promising treatment. Dr. Cayley concluded the debate and remarked that the risk of embolism was not great, as it had only happened in Moore's case and then was due to the ulcerative endocarditis. He could not agree with Mr. Hulke that wire is the best material for introduction within an aneurismal sac.—He only objected to horse-hair because it does not curl. This is easily overcome by drawing each hair, before its introduction into the sac, across the edge of a knife, when it will curl in proportion to the tension to

which it is subjected while being so drawn. This is not so readily done with catgut, which also is absorbed or melted, while the hair is not. So we feel compelled, in favoring this procedure, to side with Messrs. Bryant and Holmes.]

A. H. P. L.

Coffee as a Disinfectant.

During the last meeting of the Prussian army surgeons in Berlin, Medical Director Oppler reported that after extensive investigations, which he related in detail, he had discovered that we possess in coffee an antiseptic remedy of no mean value, but one which could well serve for the purposes of a first dressing of a wound received in a battle. If employed at once it totally prevented suppuration, but if used after pus has already accumulated in the wound, it leads to the formation of a scab, beneath which the wound heals with complete asepsis. The coffee should be employed in the form of powder, and as it might entail the loss of valuable time to have to grind first the roasted coffee bean, which in Prussia every soldier is bound to carry about him. O. recommends the use of coffee tablets, which have been recently discovered by a Hamburg firm, and which answer their purpose admirably well, as it is only necessary to rub these tablets a little, when they at once assume a powder form.

Dr. Oppler presented two cases at the meeting, where an injury of the head, accompanied by a great deal of laceration of the soft tissues, had been treated with powdered coffee alone, and when the wounds had healed as well and as quickly as under strict aseptic treatment. He applies the coffee in a similar manner as gypsum is used in bandaging, viz.: he takes a gauze-bandage and partly spreads the powdered coffee over it, partly presses it into the

bandage, with which the wound is to be covered.

He also made some experiments with urine, blood, glue and meat, which under the aseptic influence of coffee he managed to preserve for a long time in an unaltered condition. A colleague of his employed a salve, to which coffee had been added, in two cases of eczema, connected with a great deal of moisture, and in both cases a rapid cure resulted.

The aseptic action of coffee seems to be less due to the caffeine than to the aromatic constituents, which are set free when coffee is roasted. Considering the cheapness of coffee and its easy procurement, Oppler's discovery may yet prove of great value.

[Prof. Jarvis S. Wight, of Long Island Medical College uses iodoform and coffee in the proportion of one to four, as a dressing for wounds—the coffee effectually conceals the odor of the iodoform, and the combination acts equally as well, if not better than iodoform alone.]

J. C. L.

VENEREAL DISEASES.

Recent Progress in the Treatment of Chancroid.

Recently SILLMAN, of Nancy, has treated several cases of this variety by first scraping thoroughly with the sharp spoon or curette, excising the undermined edges with scissors, cauterising with the thermo-cautery, and dressing with diluted liquor of Van Swieten.

To abort soft chancres, Hebra advises as follows :

Thoroughly cleanse the sore, treat with a preparation of potash-soap and spirits, dry carefully, apply pure salicylic acid, and cover with a plaster.

An emollient ointment is now to be spread on lint, and applied. Under this the scab speedily separates, and the

wound heals without any bubo formation.

Iodoform is one of the most valuable applications in the slowly destructive forms of chancroid. Its use, however, in private practice is almost impossible, unless in some way the odor be destroyed or disguised.

Men object to it from reason of its *give-away* perfume, and public women will not submit to its application, as it keeps the men away from the house.

Only in the *virtuous*, therefore, can it be used pure without opposition. Iodoform has now so wide a range of application outside of venereal diseases, that it is to be hoped these prejudices will soon disappear. This may, perhaps, be accomplished by deodorizing the iodoform, various formulæ for which have been already published in the "Gazette."

Dr. Allen has recently called attention to the beneficial action of pyrogallic acid in the treatment of chancroids. This was first recommended by Vidal, of Paris, whose good results led others, among whom were Terillon and Mauriac, to make extended trial of the drug. Vidal recommended a powder composed one part of the acid and four of starch. Dr. Allen has used and recommended the application of the pure powder to be first applied and covered over with a layer of traumaticine, or a solution of pyrogallic acid in collodion.

Of all caustics, the hot iron or thermo-cautery, is probably the best for the majority of cases. With it we produce just the amount of cauterization we desire.

It can be used where other caustics would be dangerous, as in the vagina.

The pain produced, though severe, is of much shorter duration than that from chloride of zinc or nitrate of silver.

Since the introduction of cocaine into venereal surgery, the Paquelin cautery

has lost its terror for the patient. Bono (*Gaz. delle Cliniche*, ii., 1885) says, "In cauterization, cocaine showed every desirable analgesic property of a sufficiently long duration."

Latouche (*Rev. de Clinique Méd-Chirurg.*, January, 1885) strongly favors the thermo-cautery at a dull red heat, especially for chancroids of the vagina and neck of the uterus. He gives a number of cases in which the cure was complete in from eight to thirty-three days.

Dr. Aubert, of Lyons, has recommended prolonged hot baths as a means of treating chancroid.

Martineau and Lormand have carried out some experiments at the Louraine Hospital in Paris, on the effect of baths at about 104° F. on chancroids and buboes.

They found that in all the cases the virulence quickly disappeared, and that auto-inoculation gave negative results after one or more baths in all cases excepting one, where the chancroid was within the urethra.

They approve of the treatment for severe cases, finding it quite practical, and that it hastens the cure in all cases.

Wet compresses should be put upon the patient's head while in the bath, and an attendant be present for fear of syncope. It is not necessary to submerge the whole body.

Sponge-Grafting.—Dr. Pokrovsky applies fine slices of the best Turkish sponge, washed in a three per cent. solution of carbolic acid, to chancroids and chancroidal buboes, and finds that this treatment brings about rapid cleansing and healing in about ten days. In syphilitic cases, the sponge-dressing gives rise to rapid healing only after the virus has been mitigated by specific treatment; otherwise the application of sponge-grafting causes disintegration of the tissue.—*Therapeutic Gazette*.

Treatment of Chronic Gonorrhœa.

The cure of a chronic gonorrhœa is so difficult and rare that the affection is almost regarded as an opprobrium of the profession. An especial danger of the chronic gonorrhœa is its proneness to resume an acute nature. We agree with Dr. Caspar, of Berlin, in blaming not so much the lack of efficiency of the usually employed medication as its improper application. His essay on the subject, appearing in the *Berliner Klinische Wochen*, contains some instructive suggestions.

We find the male urethra to be a tube of fifteen to eighteen ctm. long, which is so materially different in its various portions that it is *a priori* improper to designate the affection of every portion collectively as gonorrhœa. The pars membrana and prostatica ought to be strictly separated. An inflammation of the pars spongiosa need not necessarily affect the membrana, and *vice versa*. Most chronic gonorrhœal affections are situated in the bulb, or in the border lines between the bulb and pars membrana. Of one hundred callous strictures about seventy occur in the stated regions, twenty in the fossa navicularis, and ten only on other localities of the pars spongiosa. These are the favorite seats of chronic gonorrhœa. We have, hence, to deal with a gonorrhœa which is either an anterior one, an anterior and posterior one, or a posterior one solely.

Most of the ordinarily employed therapeutic interferences in gonorrhœa are useless. This is especially true of the inevitable injection, which does not go beyond the musculus compressor unless an inordinate pressure is used. When the liquid impinges on this sensitive region, the musculus compressor closes the urethra by reflex action. The mere

manipulation of drawing the hand from the meatus to the musculus compressor upward, does not remove the spasm of the urethra.

It is most important to decide whether the gonorrhœa is an anterior or a posterior one. If the fluid flows out from the sides of the catheter, the point of the catheter rests in the posterior portion of the urethra. But if the fluid returns directly by the mouth of the catheter, its point rests in the bladder. This recognition is of the highest practical importance. We draw, hence, the following conclusions: Everything that collects in front of the musculus compressor, returns by the urethral orifice; everything that collects in the posterior urethra flows into the bladder, on account of the inferiority of the internal sphincter muscle regarding the musculus compressor. This will suffice to determine the differential diagnosis between an anterior and posterior gonorrhœa. If the lips of the urethral orifice are glued together, or a few drops are noted in front of it, or if the clothing shows pus spots, we can be reasonably certain that the affection is situated in front of the bulb. If these conditions are absent, the correct diagnosis is less easy. Often the patients complain of a certain prickling or burning sensation on a certain circumscribed region of the urethra, which, of course, is then to be regarded as the seat of the gonorrhœa. At other times we succeed by examining the urethra with the button sound, and marking the sensitive spot. If a frequent desire to urinate should be found to exist, we can conclude that we deal with a posterior gonorrhœa. If, alongside of this desire to urinate frequently, pus drops appear on the meatus, or its lips are glued together, or pus spots are found on the clothing, we probably have an anterior and posterior gonor-

rhœa combined, although the absence of the stated desire does not justify the assumption that there is no posterior gonorrhœa existing in a given case. In the acute posterior gonorrhœa we find invariably the desire to urinate frequently, while in the chronic form this symptom is often absent. The endoscope occasions, necessarily, so much pain, that its employment is not advisable.

The following method of arriving at the proper diagnosis, is preferable: the patient, after having not urinated for five or six hours, is asked to urinate into two glasses. If the first portion of the urine has a flocculent appearance, while the second remains clear, we have to deal with an anterior gonorrhœa; if, however, both portions are turbid, we have a posterior gonorrhœa. These symptoms, however, have a diagnostic value only in cases with a considerable secretion. In these cases we are, besides, certain to find the drop on the orifice, the glueing together of the lips of the meatus, and the pus spots on the clothing, if the gonorrhœa be an anterior one. Likewise would a considerable secretion in the posterior urethra, by flowing into the bladder and rendering all the urine turbid, make itself distinctly known.

If, however, the secretion is so small that it could not reach the meatus nor the bladder respectively, we would have the following results:

1. In both cases we would find no traces of the catarrh on the urethral orifice.

2. In both cases the first portion of the urine would be flocculent, as the secretions are rolled up, as it were, by the first portion of the urine, and driven out of the urethra, no matter in which section of the urethra these secretions are situated.

3. In both cases the second portion of the urine will be clear.

In most cases, however, the mentioned method suffices to arrive at the proper diagnosis.

The difference between a cystitis and a posterior gonorrhœa, is easy enough. In both affections both portions of the urine are turbid, but in posterior gonorrhœa, the first portion is necessarily more turbid than the second one, while in cystitis just the reverse condition takes place.

It is well known that the gonorrhœal inflammation, in contradistinction of a urethritis, does not limit itself to the mucous membrane of the urethra, but enters the submucous tissues, the corpora cavernosa, and muscles. The product of this inflammation is a cellular infiltration of the affected parts, which leads to cicatricial tissue, and forms a stricture. At the same time epithelial cells are being constantly formed on the mucous membrane, the death and exfoliation of which furnish the material for the secretion of the chronic gonorrhœa. The glands and lacunæ Morgagni, and even Littre's glands, participate in the morbid process. We thus gain the conviction that even in the absence of an actually existing stricture, the entire gonorrhœal process must be regarded as the forming stage of a stricture, or, as Otis calls it, a stricture of a wide calibre. At the same time we can now understand that astringent and antigonococcic medicines cannot cure a gonorrhœa.

A radical cure must combine means to eliminate the cellular infiltration and to heal the catarrh. Hence the so-called progressive sound-treatment proved successful in many cases, and Unna's method, to employ bougies invested with a soluble medical coating, initiated a new and thoroughly satisfactory era for the treatment of gonorrhœa.

The modification of Unna's bougies, introduced by Dr. Caspar, of Berlin, will be certain to prove a great improvement, and ought to receive a careful trial with us. Caspar constructed a sound of German silver, having numerous canals on its body. The sound is slightly conical, and twenty-five cc. long. It usually has about six of the stated canals, which are of a depth of one and a half mm., and flatten off toward their anterior portion, and are wholly absent at a distance of five cc. from the point of entrance. (The instrument is manufactured by M. Tasch, Berlin, Schlossfreiheit.) These sounds are invested with an ointment-mass, which, in a melted condition, is poured into the canals, where it soon grows solid.

As ointment-mass, the following recommends itself: Cacao, 100 parts; cer. flav., 2-5 parts; argent. nitr., 1 part; bals. peruv., 2 parts. A three per cent. resorcine-ointment might also be used, but it is in no way superior to the above mass. The *modus operandi* is as follows: Two teaspoonfuls of this mass are placed in an evaporating vessel having a mouth, and warmed over a flame slowly and carefully. The vessel ought not to attain a degree of warmth which prevents it from being touched by the hand. After the mass has melted the canals are filled with it and allowed to solidify. The instrument must be thoroughly round and smooth. The anterior smooth part is to be anointed with vaseline, in order to allow of a painless and easy entrance into the urethra. The instrument guarantees that the medicine reaches the exact locality on which it is needed. The sound passes beyond the stricture, and the ointment melts at the temperature of the urethra, in the course of a few minutes, and can thoroughly medicate the affected portion.

Ten to twenty applications are, according to Caspar's statement, usually sufficient to cure even an obstinate case of chronic gonorrhœa. Thirty of the most rebellious gonorrhœal affections were cured by him permanently, although fourteen of them had lasted over six months, and six over one year.—*Therapeutic Gazette*.

DISEASES OF THE SKIN.

Sulphide of Zinc and Steatite in the Treatment of Intertrigo.

In the same article, M. Vigier remarks concerning the three forms of native silicate of magnesium, namely, steatite (the granular silicate), talc (the lamellar silicate), and meerschaum, that the first-named of them ought to be introduced into therapeutics. It is called steatite because, when fresh from the quarry, it looks and feels like soap. In the Alps it is even more common than white talc, but it has only recently been in the market, having been used since 1872 for removing the incrustation from steam-heaters. In powder, it is somewhat grayish from containing a small proportion of black oxide of iron. It is pleasant to the touch, and has absorbent properties. As an application for the intertrigo of infants, the author recommends the following mixture, which he calls *stéatite sulfurée*: Powdered steatite 9 parts; sulphide of zinc, 1 part. This may be dusted on from a pepper-box or from a bottle having the mouth covered with perforated parchment. It is to be applied freely every time the napkin is changed.—*New York Medical Journal*.

Pyrogallic Acid in the Treatment of Skin Diseases.

The diseases in which it has been tried have been chiefly psoriasis, lupus, epithelioma, and chancre, but there

seems to be no doubt that it is against lupus that pyrogallic acid acts best. The method of using it here, as described by Schwimmer, is as follows:—Vaseline is first applied for several days, or as long as necessary, to remove all secondary morbid products, scales, secretions, and dirt, a ten per cent. pyrogallic ointment is then applied during from four to seven days, being renewed two or three times daily. Vaseline is now to be applied again for one day to remove all of the acid. The entire suppurating surface is now to be covered with mercurial plaster, under which healing takes place in from ten days to two weeks. This process may be gone through with several times until no more tubercles appear. Professor Schwimmer says the treatment of a case seldom exceeds three or four months. A speedier and much better resolution of the most advanced and wide-spreading lesions, is found to take place under this combined plan of treatment than could be accomplished by the combined treatment of scarification and the thermo-cautery.

Occasionally some toxic effects are observed from the use of pyrogallic acid, but this is rare and only occurs when it is very extensively applied. It has not supplanted the use of chrysophanic acid in the treatment of psoriasis.—*New York Medical Record.*

DISEASES OF THE EYE AND EAR.

Perfection of Ophthalmic Surgery.

DR. GALEZOWSKY (*Deutsch. Med. Zeit.*, January 4th, 1886) has discovered the last step necessary to make the operation for cataract really complete, and if the observations of others confirm his statements, his discovery can really be called a valuable and important one. The cause why in many cases where an incision had to be made into the eyeball,

the otherwise successful operation was not quite a success, or the result not quite as expected, has to be ascribed to the fact, that surgeons could not prevent the wound in the bulbus from coming in contact with the conjunctiva palpebrarum and the conjunctival secretion. Naturally, of the occlusion of the wound by a bandage, as usually practiced in surgery, nobody could think in case of the eyeball. Galezowsky conceived the idea to employ gelatine for this purpose, and after many unsuccessful trials he has at last succeeded in making a so-called gelatine-taffet, which while well borne by the eye, tightly adheres to the wound, is slowly dissolved and gradually absorbed. This taffet consists of very smooth and thin gelatine-plates, which are now manufactured by the apothecary M. Wurtz, in Paris. They contain some corrosive sublimate and some cocaine, which are both set free during the slow melting of the tablets, and exert, therefore, their special antiseptic and anæsthetic influence. Besides, one side of the tablet is covered with glue, which causes it to adhere tightly to the eye, and the glue is so prepared that, while containing nothing whatever irritating to the eyeball, it is dissolved much slower than the gelatine, and remains, therefore, to the last, and always a sufficiently long period to prevent any contact between the wound and the palpebral conjunctiva until after perfect closure of the incision.

According to Galezowsky's own statement, "the results cannot possibly be more satisfactory." In a case which was complicated with lachrymal blennorrhœa, complete re-establishment of normal vision occurred under this treatment—a result thus far never obtained so perfectly under the same circumstances.—*Maryland Medical Journal.*

DISEASES OF WOMEN.

Laparo-Hysterotomy in a Case of Supposed Extra-Uterine Pregnancy.

Among the recent remarkable chronicles of extra-uterine pregnancy, none have shown so reckless and appalling a disregard of the elements of diagnosis, as a report of a case in the *Medical Record* of May 8, 1886, entitled "A Case Simulating Abdominal Pregnancy," &c., purported to have been read before the American Surgical Association in session at Washington, D. C. The article states that, appended to the paper is a letter from Mr. Lawson Tait, "endorsing the performance of abdominal section in the above case," and suggesting the method of Porro, rather than that adopted. It is to be hoped, for the reputation of the writer of this paper as well as his endorser, that the report is incorrect and garbled.

The writer of the paper was called in consultation to see a patient believed to be the subject of ectopic gestation at the end of the period of pregnancy. "Vaginal examination showed the os protruding three inches beyond the labia. *The os was sufficiently patulous to permit the entrance of the index finger.* Rectal examination gave negative results. Palpation and auscultation showed the position of the fœtus to be dorso-anterior and obliquely transverse. Placental souffle could not be heard. *The abdomen was so large, and the fetal heart sound so distinct, that the writer also concluded that the case was one of extra-uterine pregnancy,* and the patient was examined by a number of surgeons, who agreed in the diagnosis. The history and symptoms indicated that the patient was at the full term of pregnancy, and it was decided that immediate surgical interference was imperative."

The abdominal cavity being opened by an incision six inches in length, it was seen that "the exposed tumor much resembled the pregnant uterus." The incision was extended above the umbilicus, and it was positively determined that the case was one of uterine pregnancy. The uterus was drawn forward and its anterior wall cut through. A vigorous female child, weighing seven or eight pounds, was removed. The incision in the uterus was closed with "deep and superficial catgut sutures." The patient lived four days, and the autopsy showed the wound (referring to the uterus) "gaping throughout."

The diagnosis of extra-uterine pregnancy is based on the existence of many of the symptoms of pregnancy, together with the recognition of a tumor connected with an *empty uterus*. If the symptoms in a given case point to the existence of ectopic gestation so as to warrant the consideration of a laparotomy, the uterine cavity should be thoroughly explored. If the child is in the uterus and the gestational period completed, this will do no harm; and if the uterus is empty, and it is done by aid of opium or a small amount of chloroform, this method is harmless. To proceed with a laparotomy without doing this is unwarrantable. The absence of rhythmic uterine contractions, a sign on which the endorser of this paper, Mr. Tait, relies so much, is said to be of some slight service in differentiating intra- from extra-uterine pregnancy. The signs obtained as above, and written in italics, would scarcely warrant a *suspicion* of the condition.

The importance of the shortest primary opening in an explorative incision is well exemplified in the present case. The first incision should be large enough to permit the introduction of two of the operator's fingers, and this

may be followed by an enlargement sufficient to admit easily his hand. The operator, in the present case, commenced with an incision of six inches, which will permit the introduction of any ordinary hand, and if he had made his diagnosis at this time, it would have facilitated a method which, we believe, under the circumstances, offered infinitely greater chances of life to the mother.

The incision was extended above the umbilicus, when it was discovered that there had been an error in diagnosis, and that the child was in the uterus. At this stage of the operation, we believe it would have been much better for the woman, after closing the abdominal walls with silk or wire and applying a binder—preferably a rubber bandage—to have secured dilatation, and delivered rapidly by version, if necessary. The use of chloroform or cocaine would have controlled the pain.

Another interesting point is the condition of the uterine wound which is found "gaping throughout" at the autopsy.

The writer last winter saw catgut sutures applied in a case of ruptured uterus, and before the last sutures were tightened those first placed had become loose, so that it was necessary to substitute silk, and I believe the general experience is opposed to the use of catgut sutures in uterine tissue.

Many cases of extra-uterine pregnancy will die without being afforded surgical relief, because the diagnosis is difficult at the early periods of gestation, but that grave operative procedures should take place without exhausting all known methods of diagnosis can scarcely be conceived.

A. H. BUCKMASTER.

The Importance of an Exploration of the Uterine Cavity in Cases of Severe, Persistent or Recurrent Uterine Hemorrhage.

In a recent discussion before the Baltimore Medical Association, the importance of exploring the uterine cavity, and of removing retained pieces of placenta after child-birth or abortion, was insisted upon as a necessary procedure. Attention was called to the fact that the risk involved in the curetting of the uterine cavity was less than the one to which the patient was exposed from the retained masses of placental tissue. It seems to us the fact asserted in this proposition is worthy of a more emphatic statement. It is well known that authorities disagree in regard to the importance of this procedure. It is quite easy to cite an array of opposing arguments, which would seem to confuse an intelligent judgment seeking a true solution of a question, which, in our opinion, admits of but one correct interpretation.

The fact that eminent controversialists find ground for argument upon theoretical points of practice, should not deter one from a practical and matter-of-fact rule of action. In theory we may find comfort for having fallen into a given line of treatment, but in practice we must be guided by facts capable of demonstration by their results. What then are the results of these two methods of dealing with the retained products of child-birth or abortion? Upon the one hand we have the risks of septicæmia, sub-involution and subsequent uterine hemorrhage, and, upon the other, the comparatively safe and harmless procedure of exploration and removal. Having adopted the former method of dealing with these retained products, it does not follow that the latter method of procedure may not be

required at a subsequent period, but this rule does not work conversely. The products once removed, the source of danger, or of annoyance, from septicæmia, arrested involution, or hemorrhage, is no longer a factor in the treatment of the case.

It seems to us that for every single argument which can be advanced in favor of the expectant method of dealing with retained secundines, ten facts can be adduced in support of the procedure of exploration and removal. Passing from the present condition to the remote results which may supervene from retained placental masses, we are likely to be brought face to face with some form of uterine hemorrhage which will demand earnest professional attention. It is true, we believe, that menorrhagia and metrorrhagia are more frequently due to the retained products of child-birth, or of abortion, than to all other known causes, unless we accept sub-mucous fibroids or polypi. When these hemorrhages exist the tendency is to treat them as special diseases rather than as symptoms of the conditions named. There can be only one safe method of dealing with uterine hemorrhage under these circumstances. A correct diagnosis of the underlying cause is the only road to successful treatment.

Having eliminated the many possible causes which may induce uterine hemorrhage independent of any condition of the uterus itself, a local investigation of this organ is demanded. No patient should be allowed to continue bleeding indefinitely without an attempt to ascertain the cause of the hemorrhage and an effort to remove the same. In many of these cases it is a waste of time and effort to employ drugs. Nothing short of an exploration of the uterine cavity, and a removal of the retained portions of placental tissue will effect a cure.

With the means of dilating the cervical canal, which are within the reach of every surgeon, the divulsion of the uterus is no longer as grave a surgical procedure as a few years back. The facility of exploration has been vastly simplified, and the operation of curetting is greatly facilitated thereby. It cannot, however, be claimed that divulsion or curetting are free from grave risks. They may be said to belong to the class of capital operations, and should, therefore, be executed under strict antiseptic precautions, and with those minute attentions to details which belong to all major surgical procedures. Anæsthesia, rest in the recumbent posture, attention to diet, hygiene, etc., are necessary accompaniments and should never be omitted.

By the substitution of an exact method of diagnosis and treatment of uterine hemorrhage for the method of uncertain causation and of indefinite therapeutics, the gynecologist of to-day is prepared to secure results which were not possible a few years ago. By promptly removing causes, symptoms, as well as their underlying diseases, are liberally discounted in advance, and much time and suffering incident to the expectant method of treatment, are consequently avoided.—*Editorial in Maryland Medical Journal.*

Amenorrhœa.

DR. SKENE, gynecologist to the Post Graduate School of New York, writes as follows on amenorrhœa in the *Medical News*: In organic diseases, especially those of the liver, heart, lungs or kidneys, in the advanced stages, we may look for derangements of menstruation. Amenorrhœa is naturally a consequence of hepatic or heart affections, but in renal disease the pathology is not as

easy of explanation, as it is perhaps less mechanical than the former. I presume in amenorrhœa occurring from renal disease, that it is due more to malnutrition, tissue deterioration, and anæmia. The point, however, to which I specially call attention is the necessity for us to look well to the general organization in obscure cases, and seek there the causes of amenorrhœa, rather than in the pelvic organs themselves.

I would next call your attention to the management of amenorrhœa in chlorotic patients. This condition, known as chlorosis, presents that peculiar form of organization in which we have a partial arrest of the development of the circulatory apparatus and sexual system.

The consequence arising from this insufficient development is that amenorrhœa is the rule, as is also anæmia. In chlorosis especially, the blood making organs are sluggish and defective, the heart action is feeble and easily gives out; they become tired easily on the least exertion. Such individuals cannot afford to menstruate, although they may do so under ordinary circumstances. But the moment you put a tax upon the system by which their vitality is used up in other channels, they become very anæmic and amenorrhœa follows.

You will also find that these patients do not respond well to restoratives and tonics, as will any well developed organization that is simply suffering from anæmia from the time being, because of this peculiarity of organization which I have just described. We give them iron and good nourishing diet, and they improve so slowly and fall back so often, that you will find the alterative tonics effect by far the most satisfactory results. You can, of course, never change the organization, or make a well-developed, ruddy, vigorous woman of such a

patient. In these cases you will find iodine, in the form of iodide of iron, answers well; this, however, is better in the strumous diathesis. In these cases of chlorosis we find that mercury in small doses is one of the best possible tonics. I know that if you give from one thirtieth to one fiftieth of a grain of the bichloride to a chlorotic patient three or four times daily, she will improve under the treatment, especially if you add the chloride of iron.

We must also remember that in the chlorotic girl, the nervous system is below par, which would indicate the administration of chloride of arsenic. Such patients are likely to be dyspeptic, indicating a lack of gastric juice or its properties; hence, we administer hydrochloric acid. These remedies are contained in the mixture called "the four chlorides," viz., chloride of iron, chloride of arsenic, bichloride of mercury, and hydrochloric acid. Under this treatment it is surprising how these pale, greenish-yellow looking girls will improve, but you must continue it for some time in order to obtain the best possible results.

Some may ask, "Are you not afraid to give one-fortieth of a grain of the bichloride of mercury for a long time?" I have given it for two months regularly, and then stopped for one or two weeks, and then again continued it for one month longer, without any bad effects whatever ensuing. I have also known it to be given for a longer period than that with most marked beneficial results.

The rule is that amenorrhœa appears in the advanced stage of phthisis pulmonalis; when patients are in the third stage of the disease the menses becomes scanty, and finally cease altogether. But there are exceptions, and this case now before you well illustrates such a one. Where amenorrhœa occurs in the first

stage of phthisis, it seems to come simultaneously with the lung trouble. In this case it is evidently conservative; a patient with marked degeneration of the lungs suffers from impairment from the whole nutritive system; she cannot afford to menstruate.

The cause here is organic disease of the respiratory organs, and until that is removed we can do nothing in the way of treatment for her amenorrhœa. I insist upon this, and cannot impress it upon you too strongly, as upon this subject the laity, you will find, will have a great deal to say. Again and again have I seen them insist that the amenorrhœa was the cause of the pulmonary difficulty; they would insist upon giving the patient hot foot-baths, hot drinks of all kinds, with decoctions of herb teas innumerable, in order, as they said, to establish menstruation.—*Weekly Medical Review*.

Senile Endometritis.

DR. B. F. BAER, in a clinical lecture, published in *Med. and Surg. Reporter*, said: The first patient whom I present to you this morning is Mrs. T. It is a case which I have shown before as an example of senile endometritis, which had resulted in hydrometra or retention of the serous fluid secreted by the utricular glands within the cavity of the uterus. This retention resulted from obstruction in the cervix. The menopause occurred ten months ago. When the patient first presented herself more than two years since, she had a bilateral laceration of the cervix. The whole fundus of the vagina was covered with granular tissue, and the surface was thickly studded with enlarged Nabothian glands or follicles. At that time she had a watery discharge from the vagina and pruritus vulvæ. She had also lost some flesh, and was consider-

ably reduced in strength, but there had been no hemorrhage. These symptoms led me to suspect the possibility of beginning carcinoma. Examination, however, did not reveal the characteristic appearance of epithelioma, but showed a granular condition, the result of inflammation from the traumatism.

After several months of preparatory treatment, I operated on the lacerated cervix eighteen months ago. The preparatory treatment in a case like this consists, first, in the repeated puncture of the Nabothian or retention cysts. The orifices of some of the Nabothian follicles had been closed by the inflammatory process, and the continuance of the secretion had resulted in their overdistention. All over the surface were shot-like projections which were the result of distention of these follicles. There was also hypertrophy of the papillæ or looped veins, as well as of the inter-vascular tissue. Repeated scarification of the surface, which includes puncture of the distended follicles, is absolutely necessary before operation should be attempted in a case of this kind. Churchill's tincture of iodine, which is a saturated tincture, was also applied to this surface at short intervals, and on a few occasions a weak solution of the nitrate of silver was applied. The application of nitrate of silver week after week is properly a plan of treatment not so frequently resorted to now as formerly. The nitrate of silver will undoubtedly cause cicatrization quicker than any other method of treatment, but cicatrization is not to be desired where it can be avoided, for this does not restore the tissues to their natural condition. One of the greatest advances which have been made in uterine therapeutics is that which secures the healing of these surfaces without causing cicatricial contraction.

In a case like the present, the application of remedies should not be limited to the cervix. The cavity of the womb was also in a granular condition and the canal patulous; under these circumstances the medication should be carried into the cavity of the uterus. This is to be done not only for its local effect upon the surface, but also for its stimulating effect on the uterine muscular fibre, just on the same principle that an application of vinegar or other stimulant is made to the cavity of the uterus for the purpose of checking post-partum hemorrhage by inducing uterine contraction. In subinvolution, especially of recent date, where the uterus is still soft, I am sure that the application of the remedy to the cavity of the uterus for the purpose of stimulating it to contract and force the effete matter out, and of stimulating the pelvic circulation, is founded on a correct principle.

After continuing this preparatory treatment until the surface had healed, and all the inflamed and distended follicles had been cured or destroyed, I operated on the cervix. It was necessary to dissect up some of the vaginal tissue to make a flap to cover the surface of the cervix, and to place fourteen sutures to secure proper coaptation of the parts. The result, so far as the cure of the laceration was concerned, was perfect. The cervix is now in a healthy condition, and yet the patient has not been entirely relieved of the distressing pain in the hypogastrium. As I have stated, the operation was performed eighteen months ago. She has been benefited, but the endometritis which existed previous to the operation has not been cured. She is now suffering with senile catarrh. This affects the utricular glands. The patient is 44 years of age, and ten months ago the menses were suppressed, and she thought that she

was probably pregnant. The abdominal cavity became distended, and she had some nausea.

The symptoms which she now presents are mainly hypogastric pain which radiates to the back, and slight watery leucorrhœa; such pain is nearly always the result of irritation of the cavity of the uterus from some cause. Here it is the result of senile endometritis.

The question of course presents itself in the consideration of this case, Did I operate too soon? Should I have waited until this catarrh had been cured? She had been under treatment five or six months, and the condition of the cervix had been decidedly improved. Should I have waited until the pain in the sacrum and hypogastrium had been entirely relieved? I think not. The congestion had been reduced, there was no exudation in the cellular tissue, and the uterus was movable. On the other hand, there were several reasons which I think rendered it advisable not to delay the operation. The patient was approaching that period of life at which cancer is most likely to develop; the cervix uteri was in a condition most favorable to the development of epithelioma; and she was losing flesh. There is no question that traumatic conditions such as this case presented predispose to carcinoma. I can not say that I have prevented the development of the disease in this case, but it certainly was acting on a correct principle, to restore as soon as possible this surface to a condition of health.

Introducing the speculum, you see that the mucous membrane covering the cervix is healthy. When, however, I pass the sound, I find the uterine cavity patulous, tender, and vascular, for the instrument produces slight bleeding. All the cicatricial tissue was not dissected out of the canal. If I were to again operate upon this patient, I should dis-

sect out all this tissue, disregarding the possibility of the two surfaces uniting. I have done this on several occasions since, and have never had the canal close up.

Two months ago I introduced the sound, and on withdrawing it about an ounce of serous fluid escaped. We had therefore hydrometra. I have injected carbolic acid into the cavity of this uterus, and on one occasion I injected ten drops of fuming nitric acid. She has not yet recovered, although she is always improved after an application. At the last visit, I dilated the contracted cervical canal, because it will not do to allow the os to close until the utricular glands have been made to undergo the senile involution natural to them, or have been destroyed. To-day the canal is quite patulous.

In a condition like this there is a possibility, indeed there is a probability, of doing too much in the way of treatment. We should give our remedies time to act. The object of treatment is to bring about senile involution, modify the secretion of the utricular glands, and remove the inflammatory process. Until that is accomplished, the patient will continue to have the symptoms which she has presented, viz, pain in the hypogastrium and back, and pruritus vulvæ.

Perforation of the Cervix Uteri by a Tent.

DR. C. C. LEE relates a case before the New York Obstetrical Society in which he suggested the advisability of caution in using laminaria tents for dilating the cervix uteri. The patient, a middle-aged single woman, entered his service at the Woman's Hospital with what was believed to be a submucons fibroid attached to the anterior wall of the uterus, a short distance above the internal os. The vagina was narrow and the

cervix long, making it difficult to outline the growth with the finger, and, as frequent hemorrhages pointed to the necessity of adopting some efficient mode of treatment, it was decided to dilate the cervical canal. Laminaria tents were introduced, carefully watched and changed sufficiently often. They were held in position by carefully adjusted vaginal tampons, which were never very tightly packed. The uterus was slightly anteverted. On the removal of the tents on the last occasion—they had not been put in by himself, but by a careful and experienced house surgeon—he was astonished to find a large perforation on the anterior service of the cervix at the internal os. It was evident that these tents, of which two were then in the canal, had, by their expansion and by the pressure of the tampon, perforated the anterior side of the cervix at the vaginal junction. This was the first time he had known the accident to occur, but, on inquiry among his friends, he had learned of two other similar cases, the tents used being of laminaria. In his case, instead of making the usual incision, he divided the cervix posteriorly up to the internal os, and anteriorly up to the perforation, and was then able to reach the greater portion of the tumor. Carbolized cotton was applied to the cervix and the patient, notwithstanding her reduced condition, recovered. The result of the granulating surfaces were such as to call for trachelorrhaphy, after which the cervix was left in a pretty fair condition.

Dr. Mundé had met with cases in which an ulcer in the wall of a long cervix had been formed by stem pessaries and tents which the physician had failed to introduce through the internal os. In some cases a little force was required to push the instrument through the internal os, and he had no doubt

that inexperienced or careless persons might make a mistake and cause an injury of the cervical wall. A laminaria tent would be more likely to cause ulceration than one of tupelo.

Dr. Lee remarked that it was possible the tent used in this case was tupelo instead of laminaria, but he thought it was the latter. The accident could not have arisen from the cause spoken of by Dr. Munde, because the internal os was well dilated when the last tent was removed. He could readily understand, however, that if a tent was not made to pass the internal os, it might press against the solid tissue of the wall and cause ulceration.—*Weekly Med. Rev.*

Multilocular Ovarian Cysts.

All multilocular ovarian cysts, according to MM. MALASSEZ and DE SINETY (*Lancet*) are myxoid epitheliomata. If relapses are not frequent after ablation of these tumors, M. Terrillon believes that the explanation lies in the thinness of the pedicle and the paucity of the lymphatics, conditions which imply a kind of isolation of the tumor. The recurrence may be ranged under two heads: first, those which recur in the cicatrix, pedicle, or peritoneum; and second, those which are found in distant organs. Histology explains the recurrences, by showing that these epitheliomata may undergo sarcomatous or carcinomatous transformation.—*Ibid.*

Anteflexion of the Uterus.

DR. G. G. ROY, in *Southern Medical Record*: I desire to call attention to the very excellent results in my hands in the use of seatangle (laminaria) tents in overcoming the atresia of the cervical canal, at and oftentimes anterior to the os internum as usually found in anteflexions in young women.

After the necessary depletion of the uterus by means of tampons of absorbent cotton, alterative application of iodoform, or tr. iodine, carbolic acid and glycerin, I begin dilatation of the cervical canal in the following manner:

If the canal will admit of the smallest sized tent, bent at the angle the flexion may have, I introduce it half an inch beyond the flexion (and that I have not found attended with much pain or inconvenience) and let it remain until *fully expanded*, and then withdraw it.

If the womb has not become too sensitive from this procedure, another tent a size larger is introduced and dealt with in the same way, and this is repeated until the canal is as large as desirable. When the seatangle tent is bent (and when of good quality and flexible texture, without blemishes, this may be done to almost an acute angle) and introduced, as it expands it straightens, and in doing so, diminishes the flexion to a certain degree also. When the womb is not held by adhesion or other causes, this gradual dilatation with the tents will often overcome the flexion entirely without the loss of blood, and with no more pain than attends the ordinary use of these tents.

Sometimes we meet with cases in which there is complete occlusion of the internal os, together with a considerable portion of the canal anterior to the os, the result of organized plastic exudation, and through which we can neither introduce the tents nor the dilators without using an unjustifiable degree of force. In such cases I have had excellent results in opening up a passage through the canal by using the seatangle tents in the following manner:

First, measure the length of the cervical canal, unobstructed, and cut the tent this length and introduce it well up

(firmly) against the lower point of obstruction and retain it there by compresses of absorbent cotton nicely and evenly adjusted, till the vagina is well filled and the womb is securely steadied. This tent is allowed to remain until it gives its utmost degree of expansion and then withdrawn. You will then discover that a perceptible degree of this obstruction has been overcome, and quite an increased length of the canal gained. Another tent of sufficient length to meet this gain is introduced and retained in the same way; and this plan is continued (using a longer tent each time) until the occlusion of the canal is overcome and the internal os is sufficiently open to admit a tent bent at the angle of flexion then remaining, and it will be discovered that a tent several sizes larger than the one used at the beginning of the treatment may now be passed. After this tent has served its purpose, it is withdrawn, and another, larger, and bent at a more obtuse angle, is introduced, and this plan is continued until full dilatation is effected, when the flexion will be found almost, if not entirely restored.—*Archives of Gynecology, Obstetrics and Pediatrics.*

[Whether this is a good way of treating flexion we are not prepared to say; but that of treating complete occlusion, given above, is certainly the best we have ever tried. Recently we treated a case of five years standing successfully by the above method.]

A. J. C. S.

Cocaine in the Treatment of Vaginismus.

DR. J. SCHRANK:—Vaginismus may be regarded as the analogue of anal fissure, both in its symptoms and in its mode of causation. The condition is usually associated with a narrow vagina and tough hymen, the rupture of which

latter during introitus vaginæ, extends further than is needful. After producing local anæsthesia by the application of a four per cent. solution of cocaine, he dilates the vagina with a rectal speculum, thereby preventing cicatricial contraction of the lacerated parts, with resultant disappearance of the vaginismus.—*Deutsche Med. Wochenschr.*—*Archives Gynecology, Obstetrics and Pediatrics.*

[A lady, who had been married two months, had so much tenderness of the vulva that coitus was impossible. I prescribed a two per cent. solution of cocaine, to be applied to the parts, and her husband reported a perfect success.]

A. J. C. S.

Cinnamon in Menorrhagia or Metrorrhagia.

Cinnamon has long been used as a stomach corrective, and as a stimulating adjuvant to the administration of iron and digitalis in chlorosis, anæmia, and heart disease. It has also been occasionally employed in uterine hemorrhages; but sufficient attention has not hitherto been paid to its properties in that direction. Dram or two-dram doses of the tincture produce a feeling of well-being and comfort in the stomach and an increase of force in the pulse, without acceleration of the movements of the heart. If this dose be much augmented, the agreeable warmth in the stomach is succeeded by an intense burning, with general nervous excitement, elevation of temperature, rapid pulse, diminution of urine, and sometimes profuse sweats. In the menorrhagias of chlorotic patients, and the metrorrhagias of lymphatic and debilitated women, cinnamon will often prove curative, when other means have failed, especially in cases of long standing. One or two grains of the powdered

cinnamon may be taken every hour in these cases, or a dram or more of the tincture three times a day.—*Medical World.—Ibid.*

Galvano-Puncture in Pelvic Hæmatocele.

The *Lancet* tells us that M. APOSTOLI strongly recommends the use of galvano-puncture in peri uterine hæmatocele. The instrument he uses is a trocar of medium size connected with the negative pole of a battery, the other electrode being of considerable size and applied to the back or thigh. Care must of course be taken to avoid wounding the uterus, intestine, or any important blood vessel. A large dose, even as much as 100 milliamperes, should be given, the resulted slough and fistula being proportional to the current employed. As to the duration of the galvano-puncture, five or six minutes is usually sufficient, but should be regulated by the loss of substance and chemical action which it seems desirable to produce. M. Apostoli thinks that all peri-uterine hæmatoceles should be treated in this way, and that the earlier the operation is performed the better. Antisepsis should be carried out as far as possible, first by heating the trocar prior to puncturing, and afterwards by carbolic acid injections into the sac twice a day.

Metrorrhagia.—Treatment.

In PROF. BARTHOLOW'S experience, metrorrhagia produced by fibroids or fungus granulations, is much more decidedly held in check by diluted sulphuric acid than by ergot; while menorrhagia dependent upon ovarian excitement is more quickly relieved by bromide of potassium.—*New England Medical Monthly.*

DISEASES OF CHILDREN.

Diabetes in Children.

DR. JULES SIMON reports several cases of glycosuria occurring in young children, among which is the following (*Revue Médicale*). A girl thirteen years of age, had been under treatment for several months for purpura. One day she reported herself as very much better, and little more would have been thought of the case had it not been that, the evening before, Dr. Simon had been reading of a case of diabetes in which the grave symptoms had been preceded for several months by purpura. He was thus led to examine the urine of this patient, and found it to contain sugar in small amount. The girl presented no other symptoms which would even faintly suggest diabetes, and it was only the chance of having read this case the previous evening that led the author to examine the condition of his patient's urine. He suggests that there may possibly be some connection between purpura and the profound alteration which finds expression in saccharine diabetes. The urine contained no albumen, and the blood on microscopical examination was found to be normal, at least there was no excess of leucocytes.—*Medical Record.*

The Treatment of Severe Whooping-cough.

M. H. ROGER (*Union Médicale*) advises that, when the seizures are of an exaggerated convulsive character, syrup of valerian be given in doses rapidly increased from 150 to 600 grains, or tincture of musk (from 5 to 10 drops for children under the age of two years, from 10 to 20 drops for those between two and five, and from 15 to 30 drops for those who are older). When the

laryngeal spasms are repeated, emollient or narcotic vapors should be generated about the patient; nitre-paper, or powdered belladonna, or stramonium should be burned near his nostrils and mouth. If the paroxysms are suffocative, he is to be made to inhale chloroform or ether, the bottle or the stopper being passed more or less rapidly under his nose. If the laryngeal spasm is prolonged, so that the child is threatened with respiratory or cardiac syncope, he is to be roused by making him take whiffs of ammonia or vinegar, by suddenly throwing cold water in his face, or by brisk frictions of the chest with the hand, especially over the region of the heart.—*New York Medical Journal.*

Anodyne for Children.

DR. R. ST. J. PERRY: The following "Baby R." is frequently used in the City Hospital, and has generally given much satisfaction: Take of sodii brom., 4 scruples; ol. anisi, 2 drops; tr. opii camph., 32 drops; aqua, q. s., ad., 2 ounces. M. Sig.—Teaspoonful every hour, as needed. Shake before using.—*Indiana Pharm.*

Disease of the Umbilicus in the New Born.

DR. LUDWIG FÜRTH had the opportunity to study a large number of cases of diseases of the umbilicus in the new born in the Vienna clinic. From his report, we translate the following: "Simple, but more successful than anything else, is the following cure of umbilical hernia, which has never been known to fail in the Vienna general clinic: Small square pieces of soft linen are put up in pyramidal shape over the hernia; in their centre a linen button (common button spun with linen, as generally met with in drawers for men) is so applied that the button—which

must be of the exact shape of the opening—just closes the opening, and finally the whole is fastened with a suitable linen abdominal bandage. Gradually, as the opening by contraction diminishes in size, a smaller button must be selected. If this procedure is faithfully carried out, the uniform result at the Vienna clinic is a proof of its success."

Excoriation, blennorrhœa, and ulcus umbilici, demand a treatment with astringents. The best method is first lightly to touch the affected part with the solid nitrate of silver; then a salve consisting of one ounce of benzoated zinc ointment, a dram of Peruvian balsam, and four grains of carbolic acid, is locally applied with patent lint, and when almost healed, but evincing great slowness towards the end, the part is washed twice daily with aromatic wine, and this application is then followed by the salve.

The real sarcomphalus, consisting in the formation of granulations, is thus treated: if they are large enough a ligature is applied, otherwise they are touched with nitrate of silver.

Inflammation of the umbilical artery is not rare. A development from it of erysipelas has never been observed in Vienna. Here, too, it is well occasionally to touch the inflamed part with nitrate of silver; in the interval, astringents and antiseptics should be applied.

Umbilical phlebitis is a dangerous disease. It mainly attacks debilitated infants, and is apt to give rise to erysipelas and phlegmonous abscesses, though we believe that the phlebitis itself is already caused by the infectious material causing the last named maladies. Our art is here powerless; when once developed, it generally ends fatally. We can only try to prevent infection by strict antiseptics.

Concerning bleeding from the umbil-

icus, it is rare, and generally happens between the fifth and tenth day. It is often accompanied by icterus, and if real hemorrhage, admits invariably only a doubtful diagnosis. The only good result W. has seen was from a ligature *en masse*.

Diagnostic Value of the White Streak in Scarlatina.

L'Union Méd. du Canada [*Abeille Méd.*]: This phenomenon, which can be produced by rubbing a soft body upon the skin which is affected with the scarlatinal eruption, is considered by the author an important diagnostic sign of scarlatina which has hitherto been overlooked. When, in the normal condition, one draws a line upon the skin with a smooth surface, as the rounded extremity of a pencil, and uses moderate pressure, there may be observed at the points touched a white line which lasts for some time. This paleness is due to the moderate excitation of the vasomotor nerves, and the contraction of the small vessels which follows it. If the pressure has been very strong, in place of a white line, a red line bordered by two white ones, is produced. The excitation in this case has paralyzed, temporarily, the small vessels, in place of contracting them, while in the area which is contiguous, where the pressure has been less strong, the excitation has led only to constriction of the vessels. In certain diseases the effects which are obtained by this procedure vary greatly. Trousseau, for example, has shown that in patients suffering from meningitis, a red line is produced by pressure with the greatest ease, and this has been called the meningitic line. It may also be produced in all the diseases which lead to perturbation of function in the nervous system. Thus, it may be produced in many cases of typhoid fever,

in erysipelas, variola, rubeola, and the diphtheritic eruptions. But it is not the same in appearance in scarlatina during the entire period of the eruption. In place of getting the red meningitic line, a pale, rather persistent line, is produced, which extends plainly to the bottom of the eruption. This fact was long ago noticed by Bouchut, and was considered a valuable sign as a means of diagnosis, both in children and in adults. It is not equally prominent and distinct at all periods of the eruption. Velpeau having observed that it is not produced when the efflorescence of scarlatina is at its highest degree of development. In the diphtheritic eruption which resembles that of scarlatina, accompanied with angina, the excitation of the skin produces a red line and not the white one of scarlatina. This sign is especially valuable in those cases of measles in which the eruption closely resembles that of scarlatina. The same is true in variola in which other differential signs are often absent. It must be borne in mind that the important feature in making this test is, that the white line appears upon the surface which is covered by the eruption.—*Archives Pediatrics.*

OBSTETRICS.

The Braxton Hicks Method of Treating Placenta Prævia.

The wonderful statistics of results obtained by the Braxton Hicks method of treating placenta prævia, collected and published by DR. LOMER, of Berlin, in the *American Journal of Obstetrics*, have attracted a great deal of notice among obstetricians. So remarkable are they, that published as they were in a special journal, we make no excuse for calling renewed attention to them.

The method, as practiced by its orig-

inator, and adopted and described by Dr. Lomer, consists simply in performing the bi-manual version, and bringing down a leg. After this the labor is allowed to pursue its own natural course, only helped by gentle traction, if there be too much delay. The points on which Lomer insists are, first, that the version should be at the *very earliest* moment possible, as soon as one or two fingers can be passed through the cervix. It is claimed that in this way the cotton tampon, an uncertain, dangerous (promoting sepsis) and painful appliance, is done away with, and a more certain and effectual tampon brought to bear.

The second point insisted on is, that after turning, the uterus should be left to expel the child with little or no outside aid, thus giving the os plenty of time to dilate, and avoiding laceration of the cervix, an accident particularly dangerous under these circumstances.

The matter of bimanual turning does not seem to be sufficiently understood and practiced among us, and yet Lusk declares it to be "one of the most important contributions to obstetric practice of the present century." The method of its performance is very simple. One hand is introduced wholly within the vagina and one or two fingers through the os. These fingers act on the lower segment of the foetal ovoid, while the hand outside acts in an opposite direction on the other end. In this way, the child can be readily and easily turned, especially when the liquor amnii is still present and the uterus relaxed. One reason for failure, when this occurs, we apprehend to be an omission to anæsthetize the patient. This is of the utmost importance, as complete relaxation of the abdominal walls and of the uterus is thus secured and the operation greatly facilitated. It will be at once seen that this method is particularly applicable to

the earlier stages of labor, and that the placenta being *prævia* is no insurmountable obstacle. Lomer advises that one edge should be sought and the amniotic sac entered on one side, or failing to find an edge, that the fingers should be passed directly through the placenta itself, a matter of no great difficulty.

Now as to results: They are simply astonishing. Of cases treated by this method alone, L. has been able to collect as follows: Hofmeir 37, with 1 death; Behm 40, no deaths; and his own, taken from Schröder's clinic, 101, with 7 deaths; total 178, with a mortality of 8 (4.5 per cent.) It may be objected that these were hospital cases under the care of experts with a large experience in this particular operation. B's and H's cases are open to this objection, but L's cases were under the care of nine different operators, many of them beginners. If we take the cases treated by Lomer personally (16), and add them to those already reported, we have a total of 95 with the almost incredible mortality of *one*. But take the worst results of all, the mortality (7 per cent.) in the cases collected by L. (101), and compare it with the mortality generally admitted in the text-books, from 25 to 40 per cent., and certainly there is a vast difference in favor of the new method, and one which should make it the duty of every one intending to practice obstetrics to familiarize himself with this resource.

Now, as to the method, is it really difficult? Does it need an expert? Lomer assures us that it is not difficult, and the condition under which his results were obtained would seem to bear out his statement. With an experience of two cases, both successful, treated in this way, and a still larger experience of the bimanual version in other classes of cases, we can confidently

confirm his statement. Even more, we can say that it is astonishingly easy, easier than the old method by internal version. In our last case, the time elapsing between the introduction of the hand into the vagina and the withdrawal of a foot, was certainly not more than two or three minutes, though it was a central implantation, and a head presentation. One finger only was passed through the placenta.

All the conditions, if the woman be chloroformed, for a favorable performance of the operation are present; no retraction of the uterus, and most of the liquor amnii present.

But what of the child? Are its chances better or worse? At first sight, they might seem to be worse; but Lomer shows, by a large number of statistics, that they are not materially worse than under the old method. In his 101 cases, fifty per cent. were saved, a rather better showing than is made by the majority of the older operators. If the placenta is pierced, of course the child is lost; but if a leg can be brought down beside it, and the delay is not too great, its chances are quite as good, or even better, than by tampon internal version and rapid delivery.

Lomer's claim that the tampon is entirely done away with is hardly just, as there may be cases when the os will not admit the passage of even one finger and yet the hemorrhage be very severe. Such cases are rare, and if the tampon be used it is only for a short time. Nor is the new method necessary or applicable to all cases. When only one margin of the placenta is over the os, simply rupturing the membranes and bringing the head down to press upon the placenta will generally be a safe and efficient plan, one which we have successfully performed several times. In case the head does not come down fast enough,

through inefficiency of the uterine pains, we may then apply the forceps.—*Medical Press.*

[This method of treating placenta prævia has, for several years, been taught in the Long Island College Hospital. In certain cases seen early, external version may be substituted to advantage, hemorrhage being controlled for a time by the tamponade.] J.

Hegar's Sign of Pregnancy.

An interesting article on Hegar's sign of pregnancy appears in the *New York Medical Record* of Feb. 27th, by DR. E. H. GRANDIN, of New-York.

Dr. Grandin says: Since my object is to call attention to this sign of Hégar's, and not to rehearse the signs which, in the early months of pregnancy, point to this condition, I proceed at once to its consideration; and, in order to make the sign clear, would call attention to the gross changes which take place in the uterus prior to the second month of uterine gestation; that is to say, before any classical physical sign—such as discoloration of the vaginal mucous membrane, softening of the cervix—have become at all marked. The early rational history I purposely leave out of the question, for such history our patients frequently falsify.

During the first six to eight weeks of pregnancy the changes in the uterus are practically limited to the body of the organ. The uterine body enlarges, especially in its transverse diameter (antero-posteriorly); the muscular substance becomes less dense. These changes are simply the result of the hyperæmic condition into which the corpus is thrown and kept by the engrafting of the impregnated ovum. As the result of such changes, the

uterine body loses its nulliparous pear-shape; its contour no longer gradually diminishes as it approaches the uterine neck; the body, on the contrary, bellies out (if I may use the term) over the cervix in all the transverse diameters, in particular, antero-posteriorly, and the organ, instead of being pear-shaped, resembles very much an old-fashioned, fat-bellied jug.

The above changes in the consistency and shape of the body of the uterus constitute Hégar's sign, and so far in at least a dozen cases, it has never failed me in early diagnosis. The obtaining of this sign requires of course, a certain expertness in the bi-manual palpation, and familiarity with the sensation communicated to the finger by the nulliparous uterus, and the uterus altered pathologically in one or another way. I have found, however, in my clinical teaching, but little difficulty in making even inexperienced fingers conscious of the change. In the vast majority of cases, owing to the normally slight anterior curvature of the uterus, the internal examining finger will note this sign to the best advantage in the anterior cul-de-sac. Here the finger, instead of following the line of the cervix in a gentle curve up on to the body, is at once conscious of the body swelling out to a greater or lesser degree, according to the date of impregnation, over the cervix, and at the same time, bi-manually, the body is faintly boggy, resilient, compressible. If such be the condition of affairs detected by the local examination, in the absence of rational history, in the absence of slight softening at the tip of the cervix (which may, if present, mean erosion), and of mammary signs and blue discoloration of the vagina (both of which, if present, may mean ovarian disease), I now unhesitatingly pronounce the patient pregnant.

Dr. Grandin points out the conditions which may possibly simulate Hégar's sign; first, a distended bladder, and, second, a uterus distended with menstrual blood. Neither of these conditions, however, he says, ought to give rise to error, for a necessary prelude is a careful bi-manual evacuation of the bladder by means of the catheter, and retained menstrual blood would necessarily be suggested by the history.

Hyperplasia of the corpus uterus, subinvolution and the varieties of displacement, he claims, may be determined by the compressibility, resiliency, and other changes in the uterus which are incident to these special conditions.

Dr. Grandin seems to have had remarkable success in testing this sign of Hégar. In eleven cases in which an early diagnosis was made by this sign, the correctness of the diagnosis was established by after observation. We regret to say, however, Dr. Grandin has not stated the fact as to whether he had met with a failure in any case in which the test was employed. He tells us very frankly—In order to settle the value of this sign positively, it is of course apparent that others must note the result of their experience. As the matter now stands, Hégar believes this sign to be of great value, Compes regards it as positive and I am inclined, from a limited experience, to consider it infallible.

[Substantially the same method as that of Hégar has been taught for several years in the Long Island College Hospital. The sign is of the greatest value and merits the attention of every practitioner of obstetrics. With a little experience a positive diagnosis is almost always possible at the second month, and frequently at the fifth, or even the fourth week.]

J.

Breech Presentation Complicated by a Large Scrotum.

TO THE BUFFALO OBSTETRICAL SOCIETY:

DR. THOMAS LOTHROP reported a case where he found some difficulty in differentiating the presentation. The examining finger first met quite a bag, though the bag of waters had previously broken; going a little higher it met on one side a hard bone, and, passing to the other side, another one. Soon it passed into what proved to be the anus, but there was no meconium. He finally decided that the bag was the scrotum, and very soon the penis came down, confirming that opinion. He mentioned the case as an example of some of the puzzling little features of obstetric cases.—*Maryland Medical Journal*.

[An abdominal examination would have easily dispelled the doctor's doubts about the presentation.] J.

Pruritus Vulvæ Medicine.

Dr. T. F. BULLOCK:—The wash described below has been useful to many of my patients, who have suffered from pruritus vulvæ. R. Aluminii nitras, gr, xxiv.; aquæ, ʒ iv. M. Wash the parts once or twice a day and use as a vaginal injection in the same way.

[The subnitrate of bismuth thickly dusted over the whole vagina and vulvæ, by means of a Sims' speculum and a suitable insufflator is the most satisfactory treatment we have used for most forms of pruritus vulvæ. The application may be repeated daily for several days.] J.

The Ergot Question.

Professor RUDOLF KOBERT contributes another paper, (*The Practitioner*), on the active ingredients of ergot of rye. Experiments with

ergotinic acid, internally and hypodermically, on pregnant bitches, rabbits, cats and sheep, show it to possess no ecboic power whatever. Hence all aqueous extracts (as water dissolves only the ergotinic acid) are worthless. The extractum secalis cornuti of the German Pharmacopœia is an aqueous extract, and consequently is inert. Cornutine, which is not to be confounded with the ergotinine of Taret, as the latter is quite inert, produces uterine contractions, both in animals that are pregnant and in those that are not. Sphacelinic acid is insoluble in water, and must be given as an emulsion. In cats and dogs it evoked powerful labor-pains, followed rapidly by the birth of the fœtus. From the foregoing it is seen that in the ecboic action caused by ergot, both cornutine and sphacelinic acid take part. The latter acts directly on the uterus, while the former influences directly the centre for the uterine contractions situated in the spinal cord. Professor Kobert had, therefore, requested Gehe & Co., of Dresden, to prepare an extract that contained both these active principles, which figures under the rather long title "extractum secalis cornuti cornutinosphacelicum Kobert." Seeing that it was obtained by evaporating an alcoholic solution, it is difficult to determine why the author had not simply named it an alcoholic extract of the *Secala cornutum*. It does not keep well for longer than six months, but Professor Kobert italicizes the statement that neither ergot itself, nor any of the numerous commercial European and American preparations that he has examined, retains their therapeutic powers for more than twelve months.—*New York Medical Journal*.

CONSTITUTIONAL DISEASES.

The Causation of Pleurisy.

The *Boston M. and S. Jour.* says that Germain Sée in his most recent work on "Simple Diseases of the Lungs," arranges the numerous varieties of pleurisy into two great categories: (1) Pleurisies by propagation; (2) Pleurisies by infection. The group of pleurisies from cold (pleurisy *d frigore*, or idiopathic pleurisy) he divides up, apportioning a part to the first category and a part to the second. He denies that cold is, properly speaking, a cause of pleurisy, and thinks that it can only favor the development of pleural inflammation by permitting the real cause to act more rapidly or more efficaciously.

Pleurisies by propagation take their origin from lesions of the thoracic walls, thoracic organs, or neighboring viscera. Among the parietal lesions are osteoperiostitis, costal caries, parietal phlegmon, and even cancer of the mamma. Other propagating lesions are bronchopulmonary inflammations (pleurisy is a constant accompaniment of acute fibrinous pneumonia); pericarditis (especially when the latter is due to rheumatism); hepatic affections, such as acute hepatitis, hydatid cysts of the convex surface of the liver, atrophic or hypertrophic cirrhosis: here the pleurisy is generally right sided and the propagation takes place by the lymphatics.

Among the pleurisies by infection, first in the order of importance and frequency is tuberculous pleurisy. Tuberculosis is a very common etiological condition of pleurisy, being the determining cause in three-fourths of the cases, according to Professor Sée. Fiedler's statistics in this regard are very instructive; out of 112 cases of pleurisy treated by thoracentesis, only 21 recovered—of the 91 other patients, 25 died

of phthisis at the hospital or at their homes, 66 got well of their pleurisy but were found to be victims of confirmed phthisis or other tubercular affections. Pleurisy has also been known to supervene in the course of diseases unquestionably rheumatic, and hence in these cases might properly be ascribed to the rheumatic virus, which Sée considers of an infectious (microbiotic) nature. Lastly, all the infectious diseases properly so called—scarlet fever, measles, surgical or puerperal pyæmia, typhoid fever, small pox, blenorragia, etc., may be attended with pleurisy as a part of their manifestations.

As for the pleurisy which so often accompanies chronic Bright's disease, two explanations may be given. Either the pleurisy is the result of the pulmonary lesions which are so frequently a concomitant with Bright's disease, or else it develops in consequence of the general hæmic alterations of that disease, which provoke pleurisy as they do inflammations of other serous membranes. If the latter explanation be the correct one, the pleural inflammation would belong to Sée's second category.

The views of the French professor will not probably be generally accepted, as there doubtless do occur cases of simple acute pleurisy which are more easily referred for their origin to exposure, to cold than to any other cause. Yet it is quite possible that such cases are fewer than one would suppose, and that pleurisy in this respect resembles peritonitis, which is rarely idiopathic, and rarely *d frigore*.—*Medical and Surgical Reporter*.

Diphtheria Not a Sewer-Gas Disease.

DR. ERWIN F. SMITH, in an elaborate paper on the "Influence of Sewerage and Water-supply on the Death-rate in

Cities," (Report of Michigan State Board of Health, 1885), claims to establish the three following propositions:—

1. Typhoid fever and cholera decrease in proportion as a city is well sewered.

2. There is no direct relation between diphtheria and sewers.

3. The general death-rate falls after the sewerage of a city, and, other things being equal, never again reaches the maximum of its anti-sewered condition.

4. The cost of sanitation is incomparably less than that in sickness and death resulting from neglect of sanitation.

Dr. Smith's statements with regard to diphtheria and sewerage are:

1. Diphtheria is as frequent in the country as in the city, *i. e.*, in non-sewered as in sewered districts.

2. Diphtheria has been more frequent and fatal in certain rural districts than in any city whatsoever.

3. Diphtheria is not more frequent or fatal in sewered cities than in unsewered ones.

4. Of two given cities, equally well, or ill-sewered, diphtheria, during a long series of years, may be widely prevalent in the one and rare in the other.

5. Certain sewered cities have never suffered seriously from diphtheria, while others have been afflicted very much worse in recent years (*i. e.*, since the houses have been protected from sewer-air), than formerly, when with the same sewers, but much less perfect plumbing, flushing, and ventilation, the sewer-air found its way into a majority of the houses.

6. When an epidemic of diphtheria appears in a city the sewered and unsewered portions generally suffer alike.

7. No relation of interdependence can be traced between diphtheria and the sanitary state of a city, such, for ex-

ample, as enables us to predict with almost absolute certainty the typhoid fever mortality of a city from a knowledge of its sanitary condition, or conversely, the sanitary condition from its typhoid mortality.

8. The annual mortality from diphtheria fluctuates greatly, and this, too, in cities where the sanitary conditions are very nearly constant.

9. Diphtheria is a disease of cold weather, being most active when putrefactive decomposition in sewers is presumably least so.

10. Diphtheria is a contagious disease, transmissible from person to person and place to place, like small-pox and scarlet fever.

11. The closing of schools and other places of public gathering checks an epidemic; and the isolation of the sick from the well, with the subsequent proper disinfection of the sick-room and its contents, extinguishes it.

12. The data relied upon to prove a connection between sewerage and diphtheria either cover too short a period to be trustworthy, or are drawn from single cities having incomplete and defective sewerage.

If these propositions be true, it follows as a necessary corollary that there is no direct relation between sewers and diphtheria.—*Medical Record*.

Paraldehyde, $C_6H_{12}O_3$, 132.

The following is an abstract of an article on Paraldehyde, by DR. R. G. ECCLES, published in June, 1886, No. of Transactions of N. Y. S. P.:

A clear, colorless liquid produced by the catalytic action of a small quantity of a mineral acid, zinc chloride, or carbonyl chloride, on ethyl aldehyde. It burns with a blue, smokeless flame, and leaves no residue, possesses an ethereal

odor and a characteristic taste, with an after sensation resembling that from peppermint, gives a neutral reaction with immersed test paper, but changes the blue litmus to red on a brief exposure to the air, and promptly gives an acid reaction when wet or damp test paper is used. It has a specific gravity of 0.9936 at 15.5°C. (60° F.), boils at 118.3° C. (245° F.), and congeals into needle like crystals at 9.4° C. (49° F.). These crystals slowly melt at 10° C. (50° F.) and gives off bubbles of gas. It is soluble in all proportions of alcohol, ether, fixed oils and essential oils, and in from twelve to fifteen parts of water at the ordinary temperatures. In very cold water it is soluble in ten parts. Potassium melts in it, giving off bubbles of hydrogen that do not take fire spontaneously. It readily dissolves antipyrine, camphor, phosphorus and chloral hydrate. In alcoholic solutions it gives a brown precipitate with caramel, after standing a few hours. It bleaches butter of antimony to a light straw color. Paraldehyde should not darken or become colored with liquor potassa (absence of aldehydes). Its solution in olive or sweet almond oil, should be free from milkiness (absence of alcohol). It should give no precipitate with test solutions of nitrate of silver (absence of chlorides), nor chloride of barium (absence of sulphates). It should not bleach a drop of test solution of indigo (absence of nitrates), nor produce a purple precipitate with ferrocyanide of potassium (absence of sulphurous acid.) * * * * All the usual vehicles for administering medicines fail with paraldehyde. * * * * The fixed oils were found to answer every requirement. Expressed oil of sweet almonds being among the most bland of its kind was accordingly chosen as the ideal vehicle, and a test trial made. * *

* * Since then I have prescribed the remedy in this form eight times, and always with the most marked benefit. It seems, when thus given, to actually allay instead of induce nausea. * * * * The following is the formula that has so far given the best results. If properly dispensed it will be perfectly transparent: ℞. Ol. amygd. dulc.; paraldehyde, aa ʒ ii; chloroformi, gtt., xii; ol. cinnam. gtt., iii. M. Sig. One-half at bedtime, the rest during the night if required. * * * * A valuable remedy in mania, melancholia, nervous affections generally and in the insomnia of bronchial catarrh, lobar pneumonia and heart diseases. In physiological action it is analogous to chloral, but differs from that drug in that it strengthens the heart's action and diminishes its frequency. * * * * It never, if pure, gives rise to digestive troubles, headache or any of the usual after symptoms of articles of a kindred quality. * * * * A dose of three grams usually gives a refreshing sleep of from three to seven hours.

Antidote to Cocaine Poisoning.

According to DR. F. SCHILLING, in the *London Medical Record*, of March, 1886, inhalation of the nitrite of amyl promptly counteracts the effects of a dangerous dose of cocaine. The remedy was applied in a dentist's office. Two drops of a 20 per cent. solution was injected. The patient shortly after became unconscious, with open eyes and insensitive conjunctivæ. The first whiff of the nitrite of amyl partly restored consciousness.

[It seems to us doubtful, whether this condition was due to the cocaine, as the quantity injected was so small and the woman pregnant. Her condition may have been hystero-cataleptical, and due

to the effects of the dental operation. The nitrite is, however, easily employed and we would suggest to our readers that they give it a trial on the first favorable opportunity and report results.]

A. H. P. L.

Sparteïn.

LABORDE AND GERMAIN SÉE find that Sparteïn in doses of 0.05 grm. to 0.07 grm. subcutaneously administered, is followed by increased frequency of pulse and respiration. In doses 0.15 to 0.2 grm. it produces disturbances of cöordination and somnolence, and finally, mydriasis, convulsions and death. It paralyzes the spinal cord and the cardio-inhibitory centre.

Germain Sée concludes, from his investigations, that sparteïn produces an increase of force of the heart's action, and that this is more pronounced than that caused by digitalin. He says, farther, that sparteïn rapidly restores a disturbed cardiac rythm. — *Pharmaceutische Randschau.*

The Treatment of Erysipelas.

An interesting contribution to the treatment of erysipelas, emanates from the university clinic of PROFESSOR KRASKE, of Freiburg, Dr. G. Kuehnast being the reporter, in No. 9 of the *Centralblatt fuer Chirurgie.*

Kuehnast formulates his views as follows :

1. The treatment of erysipelas by multiple scarifications and incisions, with subsequent application of carbolic acid, is the most effective method at our disposal.

2. The method is not to be recommended in cases of light erysipelas, and in cases of erysipelas of the face or other exposed surfaces.

3. Certain modifications may be practiced. Thus in extensive erysipelas in

decrepid individuals, the scarifications may be limited to the margins where the process is progressive. In children and old people it is advisable to substitute salicylic or boric acid for the carbolic acid washing and dressings.—*Weekly Medical Review.*

The Blood Plaque.

The chief interest of PROFESSOR OSLER's Cartwright Lectures, the last of which appears in this week's issue of *The News*, lies in the full consideration of the much debated third corpuscle for which the term plaque is suggested. This element has had a hard struggle for recognition at the hands of histologists, and even yet there are capable observers who are not convinced of its existence.

The balance of testimony is strongly in favor of the views of Osler, Hayem, Bizzozero, that they are pre-existent, independent blood elements.

The evidence brought forward by those who maintain that the plaques are important agents in coagulation, may be thus summarized: First, they are the elements which immediately adhere to any foreign body within the vessel, or to its cut edges, if wounded; second, in circulating blood the plaques may be shown to be the bodies which aggregate upon any laceration, and form the basis of the thrombi so produced; and, third, they compose the structures known as white thrombi.

It is to be hoped that the presentation of this subject will stimulate further research, and enable us, before long, to pronounce more definitely on the relation of these elements to blood formation.—*Medical News.*—*North Carolina Medical Journal.*

A Danger in House Sanitation.

The space underneath the floors in dwellings, between the flooring and ceil

ing of the room below, is a part of the house which receives very little attention from the householder who may pass a considerable amount of time above it. Because it is not of much thought, it does not follow that it is not an important object for consideration. On the contrary it may become of prime importance in the health preserving qualities of a house.

In most houses, there is no attempt made to fill this space. The floor is laid on top of the joists, and the lath and plaster is put on the bottom, leaving a long open space between joists, connecting with the space between the studdings and the sides of the building. This free connection is almost universal, and is objectionable in every case. It permits a free circulation of cellar air all over the system of partitions and assists its general dissemination into the atmosphere of the house. It creates an uninterrupted passage-way for rats, mice, and other vermin, which often make themselves objectionable, to say the least. In case a fire starts in the lower portion of the house from an overheated flue, or other cause, these open passages offer avenues for the spread of the flames so that before any manifestation of its presence is made, it is far beyond control.

These are the most patent objections to the open-spaced floors, as constructed in many houses. There are others which are more powerful than those recited, which will become perfectly apparent when attention is called to them. In houses constructed with open spaces there is an inviting place for dust, dirt, and other impurities to collect, by constant sweeping, scrubbing, and the friction of many feet. The modern sanitarian is educated to believe that wherever there is dirt there is danger. The constant presence of germs in decomposing

animal and vegetable matter, makes the presence of this collection of dirt quite to be feared.

Another source of danger is the filling, or ceadening, as it is sometimes called, which is used to fill up these spaces when anything is used. Manifestly, it should be nothing of a decomposable nature, or a medium which could afford a harbor for vermin.

The constant reappearance of a disease in a house or in a room, may be connected with this harbor of refuge for germs beneath the floors. These spaces are seldom the recipients of pure air which would oxidize impurities, nor are they much affected by any ordinary disinfecting process. It may be urged, then, that all floor-spaces be filled carefully, and when filled, it be with some such material as asbestos, mineral wool, or other matter not apt to become dangerous either from its own decomposition or by the reception of decomposable material.—*The Sanitary News*.

Perityphlitis in Typhoid Fever.

PROF. DA COSTA had, at the Pennsylvania Hospital, a rare sequel of typhoid fever—*perityphlitis*. He directed that it be treated with poultices, opium, quinine, and supporting measures; the aspirator to be used if any evidence of pus appeared.—*Cal. and Clin. Record*.

Charcoal Enemata in Typhoid Fever.

DR. DUVAL writes in *l'Abcille Medicale* of December 21, 1885, calling attention to the value of rectal injections of charcoal in the treatment of typhoid fever. He gives small enemata of simple water, containing a tablespoonful of vegetable charcoal, two or three times in the twenty-four hours, and finds that by this means he is able to cure the meteorism, and also to destroy the fetid

odor of the stools. At the same time there is usually a marked improvement in the general symptoms, thus seeming to prove that no small part of the danger of this disease is due to the resorption of septic material contained in the rectum.—*Med. Record.*

Some of the Complications in Typhoid.

PROFESSOR G. WAGNER (*Zur Kenntniss des Abdominaltyphus*; "*Deutsche Arch. f. klin. Med.*"; "*Cent. f. d. med. Wiss.*," No. 51, 1885) gives some interesting facts relating to typhoid fever. He says disease of the soft palate are common. They are, for the most part, catarrhal anginas that appear during the first week of typhoid, and occasionally produce disproportionate local changes. At times a cachectic angina (angina pultacea) occurs. This is characterized by a reddened basis with a spotted or uniform whitish discoloration of the palate and tonsils. The whitish discoloration is due to epithelial swelling and exfoliation without any fungous formations. This form occurs at the height of typhoid. Another form that is occasionally seen at this stage of the fever is a diphtheritic or croupous angina, probably due to infection of an existing angina. In addition to these, there is a form, as yet little appreciated, which the author styles "specific typhoid angina," of which he has seen three cases. It is distinguished by round or oval, lentil-sized, grayish, sharply defined sores, from two to six in number, which are to be seen on the soft palate at the commencement of the fever. On the surface of these small ulcers the microscope discovers white blood-corpuscles, squamous epithelium, and vegetable organisms, but the latter are not typhoid-fever bacilli. The submaxillary are slightly or not at all swollen;

there is only some difficulty in swallowing. During the second week the ulcers heal without cicatrices. A combination of typhoid with acute morbus Brightii the author had witnessed in six cases, one of which terminated fatally. He will not decide if there is a form of nephro-typhoid until the characteristic typhoid anatomical changes are found in the kidneys. He has seen as a complication two cases of acute articular rheumatism. He has met with six cases in combination with the hæmorrhagic diathesis.

Rhus Poisoning.

DR. L. D., in writing to *Medical and Surgical Reporter*, says:

I may say that swamp sumach is *rhus venenata*, a shrub six to twelve or more feet high, compound leaves, seven to thirteen leaflets, nearly always found growing in wet or swampy places, quite poisonous, as I have occasion to remember. *Rhus toxicodendron* grows upon dry land, erect, decumbent, oftener climbing by rootlets upon rocks, trees, etc., leaflets in threes, poisonous to some people, but to a less degree than the former. In California we have *rhus diversiloba*, quite abundant on dry ground and along creeks, seldom seen climbing, although it will climb by rootlets; leaflets in threes, and seems almost if not quite as poisonous as *rhus venenata*. All through spring and summer (occasionally in winter), I see numerous cases of poisoning from this *rhus* (commonly known as poison oak), more or less severe, according to the extent of surface affected. The best remedy I have found is the following: ℞. Borax, pulv., ʒij.; acid, carbolic, ʒj.; morphia, sulph., grs. x.; pulv. acacia, ʒiv.; water, q. s. ad., ʒviij. M. Agitate till solution is formed. Use with camel-hair brush.

The carbolic acid and borax doubtless help to kill the poison, while with a few brushings the skin becomes coated with the gum, and the irritation and pruritus are allayed.

Ether and Opium in Small Pox.

During a recent meeting of the Medical Society of the Paris Hospitals, MM. DREYFUS-BRISAC and BALZER, mentioned that they had tried M. du Castel's ether-and-opium method of treating small pox for a considerable time, and had convinced themselves of its efficacy. It consists in sub-cutaneous injections of ether, a daily dose of from fifteen to twenty centigrammes of opium being administered by the mouth. In severe and confluent cases the papules become abortive, suppuration is diminished, and the general improvement is rapid. M. Balzer prefers administering the ether as well as the opium by the mouth, but M. du Castel considers this less efficacious than the hypodermic method.—*Lancet*.

The Galvano-Cautery as an Effectual Treatment of Diphtheria.

Almost simultaneously, and certainly independently of each other, the report of the successful exhibition of a new remedial procedure, viz., the galvano-cautery, comes to us from two different quarters. Dr. Bloebaum presented his experience with the galvano-cautery in diphtheria in a recent number of the *Deutsche Medizinal Zeitung* (p. 973, 1885), and expresses his unqualified satisfaction with the results obtained, while in the *Rivista Venet*, of November, 1885, we find a similar eulogy of this treatment by Dr. Tedeschi (*Comunicazione Preventiva del Dott. v. Tedeschi di Trieste*).

These authors declare that the application of the galvano-cautery does not

produce the slightest pain, as the diphtheretic membrane is of course void of sensibility. At the mere touch of the glowing wire the membrane rolls up and falls off. Tedeschi emphasizes the fact that the once cauterized portion never again assumes a diphtheretic nature, and the application forms at the same time a positive check to the extension of the process over the neighboring parts. After the application of the cautery the fever is found to be sinking, and frequently to wholly disappear after two to four hours. At the same time the glandular swelling on the neck and the œdema of this region are decreasing.—*Therapeutical Gazette*.

Lactic Acid as a Destroyer of Pathogenic Tissues.

Since MOSETIG-MOORHOF's favorable results with this agent (*Centbl., f. Chirg.*), various other observers have made use of it, in lupus, superficial epithelioma, papillomatous growths, fungous processes, scrofulous ulcerations, laryngeal phthisis, etc. Its advocates claim that that it is not a true caustic, but selects diseased and spares healthy tissues. Wherever its application is practicable it is consequently to be preferred to curetting.

The acid is a syrupy liquid miscible with water. Though not considered necessary by some, its action may be confined by covering surrounding parts with plasters, collodion or traumaticini; fats are an impediment. It is applied on linen, felt, or the like, either pure or reduced with water, or mixed as a paste with a pure pulverized silicic acid. It may be applied with a brush, but does not then act as rapidly. It is further recommended to bind it on with rubber, paper, or other confining material. It causes considerable pain for a few hours (Bum says 1-3) and is usually removed in twenty-four hours or less.

Joseph (*Deut. Med. Woch.*), cured a leucoplakia buccalis with 80 per cent. diluted lactic acid. Schnitzler reported at the September *Naturforscher-Versammlung* his experience with it—not very favorable—in tuberculosis of the larynx, Krause, of Berlin, has also used it in this affection, and Jellinek (*Wien. Med. Wochenschrift*), in Schrotter's clinic, has for some months given it a more thorough trial. For this purpose he prefers a 20 to 30 per cent. solution. The healthy mucous membrane is but slightly affected, while infiltrated portions are slowly destroyed. The more succulent the infiltration, the more vigorous the action; œdematous parts shrink in three or four days, and troubles in deglutition are rapidly relieved. Most favorably affected were small ulcerations, especially on the vocal cords; larger sores were only prevented from further growth. In ulcerous, granular and hypertrophic pharyngitis he had good results. In nasal troubles simple brushing does not suffice; longer contact is necessary. Jellinek believes that in laryngeal phthisis by daily application more can be accomplished with this than with any other remedy, and that in its earlier stages it can be cured.

Bum (*Wien. Med. Wochenschrift*), has for several months been employing it in fungous, *i. e.*, tubercular disease of soft parts—skin, subcutaneous tissue, lymphatic glands—in dispensary practice. The unhealthy granulations are reduced to an easily reducible pulp; the walls of the cavity do not bleed; after two or three applications, with intermediary pauses of two days, a permanent dressing of iodoform gauze is used, abundant healthy granulations develop, and a smooth, soft scar results. Lactic acid will attack healthy as well as unhealthy epidermis, but in the sub-

dermal tissues it seeks out fungous nests and destroys them. Bum gives the histories of nineteen cases in patients from 1 to 52 years of age. There were eight males and eleven females; eight ulcers, seven fungous and four fistulous. The average number of acid dressings was three, and the average time of cure twenty-five days, or, deducting one who removed dressings, but nineteen and eight-tenth days. No failures, and up to date, six weeks to five months later, no relapse.

Finally Moseitig has returned to the subject again (*Wien. Med. Wochenschrift*), with the demonstration of good results in a large facial epithelioma in a man aged 55, and an ulcer rodens on the face of a woman aged 60. In the former he had made twenty-six applications in a month, and in the latter he had made twenty already. In caries he finds it excellent, good demarcation being produced, and there being less liability to relapse than after curetting. He has tried injections of the acid, 1-2 to 1 grm. of a 50 to 70 per cent. solution. Whether relapses may yet occur he, of course, cannot say.—*Annals of Surgery.*

DISEASES OF THE NERVOUS SYSTEM.

Thomsen's Disease.

W. HALE WHITE, M. D., in *Brain*, sums up, in the following words, a critical digest of what is at present known of the above mentioned affection.

1. It occurs in young subjects, coming on usually in youth or childhood.
2. It lasts a long while; is never fatal; and may pass off.
3. The muscular difficulty is much increased by cold and mental excitement.
4. It occurs in members of the same family, and is slightly hereditary.

5. Other neurotic disturbances in the family are by no means always well marked.

6. Voluntary muscles only are affected, the legs perhaps oftenest.

7. There is an increase of bulk in the muscles.

8. But considering their increase in size, they are not so powerful as might be expected.

9. On attempted voluntary movement the latent period is usually prolonged; then comes a severe contraction, lasting from five to thirty seconds; then in some cases a sudden, and in others a slow relaxation. This peculiarity constitutes a myotonic contraction.

10. The above is more marked, the longer has been the interval of rest. After repeated contractions the difficulty becomes less, and soon passes off, the contractions being ordinary.

11. Mechanical stimulation of nerves shows a diminished excitability. Farodic or galvanic stimulation of nerves gives slight myotonic contractions on being rapidly repeated.

12. Mechanical stimulation of muscles shows increased excitability, with long myotonic contractions. Galvanic stimulation usually gives closing contractions; K S Z is generally the best, giving a good myotonic contraction, but the exact order is variable. Strong farodic current on closing gives a good myotonic contraction; on opening, a very slight contraction.

13. With stimulations rhythmically following each other, we get wave-like contractions passing along the muscle from the kathode to the anode.

14. The reflexes are normal.

15. There is increased width of the muscle fibers, which lose some of their striation, are rounded instead of polygonal, and have protuberances on their contour. The sarcolemma is thick.

A Case of Acute Mania with Complete Remission of Symptoms During a Temporary Plugging of the Sinuses.

DR. J. BULKELEY HYSLOP, in *Brain*, relates the case of a married lady, 41 years of age, suffering from an attack of acute mania for several weeks. She developed signs and symptoms of plugging of the sinuses of the skull, which continued four days, with increased mania. On the fifth day, however, "a marked change came over the patient. She became suddenly quiet and composed, talking in a rational manner, and showing no sign of mental weakness. She was slightly feverish, however, with a throbbing pulse." In about eighteen days the indications of plugging of the sinuses disappeared, and the mania as promptly reappeared.

[This case is interesting, and indicative, though it possesses an element of doubt as to whether the plugging of the sinuses and cessation of mania bore to each other the relation of cause and effect or were coincidental.]

A. H. P. L.

The New Hypnotics.

In a clear and concise paper, Prof. DUJARDIN-BEAUMETZ (*Therapeutic Gazette*), first defines what class of remedies should be classed as hypnotics. Morphine and opium do not belong to this category, inasmuch as they cause cerebral congestion, while in true sleep cerebral anæmia obtains. They act beneficially, however, in all cases of insomnia brought on by pain; they belong rather to the class of analgesics and stimulants than to the hypnotics. Chloral and paraldehyde are true hypnotics; they act by bringing about that condition of the brain which obtains in physiological sleep. Chloral, in the author's opinion, does not act by being split up into formic acid and chloroform, but it acts directly on the nervous

elements of the brain. The experiments the author performed some years ago fully decide this question. He injected 45 grains of chloral under the skin of a hare; the animal almost immediately fell into a state of anæsthesia, absolutely similar to that caused by chloroform, and this condition lasted until the chloral ceased to be eliminated by the lungs and urine unchanged. The speedy total anæsthesia could not be explained if the theory is adopted of the breaking up of chloral into formic acid and chloroform, for this decomposition is so slow, and the liberation of chloroform so feeble, that anything like such profound anæsthesia could not be produced by such doses. The depressing effect of chloral on the heart and its irritant effects on the stomach must be prominently kept in view. Hence chloral should be interdicted to all persons suffering from cardiac affections, and in particular to those who have aortic stenosis or insufficiency. It should also not be given to patients affected with stomach disorders, nor in diseases of the larynx and pharynx, by reason of the burning sensation in the back of the throat that attends the swallowing of the chloral potion. Paraldehyde exists in two forms—the one liquid at 0° C., the other solid at 10° C. It is to this last alone that the name of pure paraldehyde belongs. This pure paraldehyde is soluble in alcohol and in water, one in two parts. A good formula for administering it is paraldehyde ℥ iij, water ℥ vj; ℥ ss. of this is given at a dose, and, as it has rather a disagreeable odor, it is best given in alcoholic liquors, especially in rum. The following formula makes a pleasant elixir: ℞. Paraldehyde, ℥ iijss.; alcohol, ℥ jss.; tinct. of vanilla, ℥ ss.; water, ℥ j.; simple syrup, ℥ ij. Dose, ℥ ss. (gr. 15). It may be administered in enemata with the yolk

of an egg, and it is said that the active dose by enema is one-half less than by the mouth. It has also been employed hypodermically, which method, though quite safe, is very painful. Experiments on the lower animals show it to affect successively the cerebrum, spinal cord and bulb, producing complete anæsthesia and loss of all the reflexes. It is a true hypnotic, causing sleep by anæmiating the cerebro-spinal axis. Its elimination takes place almost exclusively by the lungs, a fact which is explained by its extreme volatility. A peculiar feature of this drug is its antagonism to strychnine. Dujardin-Beaumez has confirmed the results of Italian experimenters on this point. In one of two hares he injected into the subcutaneous cellular tissue ℥ ss. of paraldehyde; the other received none. In the latter 1-60 of a grain of strychnine was injected under the skin; the animal immediately fell into tetanic convulsions and shortly succumbed; 1-12 of a grain of strychnine was injected in the hare dosed with the paraldehyde, and the animal survived. Compared with chloral, paraldehyde has the following advantages over it: (1) It is less irritating, and hence better tolerated by stomach and pharynx; (2) it is not a cardiac poison; (3) it works better in strychnine poisoning, but is less an analgesic. He considers it particularly beneficial in nervous insomnias and in those produced by the abuse of alcohol. Contrary to the statement of others, the author has not found that it loses its effect on patients on continued administration. He gave it in one case for months with benefit.—*N. Y. Medical Journal.*

Two New Hypnotics.

Urethan, the ethylic ether of carbominic acid, and aceto-phenone, or hypnone,

are the latest additions to the list of hypnotics. The first, because of its free solubility in water, has a decided advantage. A dose of eight grains is said to produce several hours of natural sleep. In those forms of heart trouble where chloral and morphine are contra-indicated, it has been successfully employed without ill results.

Tincture of Stramonium in Epilepsy.

Cases of petit malare materially benefited by the use of tincture of stramonium—15 drops three times a day for some days. This may be given alone, especially after a long course of potassium bromide. It is a much neglected remedy.—*North Carolina Medical Jour.*

Brucine.

DR. MAVS, of Philadelphia, reports that he finds a 5 per cent. solution of pure brucine an efficient local anæsthetic. He has applied it successfully in a case of toothache in a decayed tooth, and for relief of the burning produced in the mouth by Cayenne pepper. Externally, it diminishes sensation, and has been found to relieve itching—also the pain produced by a mustard poultice, and the itching by Croton oil application.

Dr. Zeiss tried a 3 per cent. solution for relief of pain from furuncles in the external auditory canal. The pain was mitigated in two to four minutes, and did not return for several hours. In the pain of suppurative otitis, it gave some relief. He had found it especially useful in mitigating pain produced by applications to the throat and nasal passages of iodine, sulphate of copper, nitrate of silver, etc. In burns he had found it of no value.

Dr. Squibb highly lauds creosote water as an anæsthetic application to burns and scalds, and the remedy is one

capable of more extended uses.—*American Lancet.*

Hystero-Catalepsy in a Male Patient.

DR. A. McLANE HAMILTON recently, according to the *New York Medical Journal*, cured a case of persistent hystero-epilepsy in a man 35 years of age, by squeezing the patient's testicles firmly in his hand. The patient, he says, awakened as if from a dream, with evident pain in his head and the usual cry. From that moment he had no return of the catalepsy, and becoming perfectly natural, he convalesced rapidly.

Some Forebodings of Incipient Insanity.

1. Irritability and tendency to take offense.
2. Moroseness and silence, or sometimes fault-finding with servants.
3. Suspicion and jealousy of best friends.
4. Impairment of memory, forgetting hours of meals.
5. Inattention to exercise and state of bowels.
6. Neglect of personal appearance.
7. Altered facial expression, notably in melancholia, with marked furrows.
8. Prominence and brilliancy of corneæ, in hysterical and puerperal mania.

Bodily symptoms.—1. Harsh, dry skin as a rule, though sometimes perspiring.

2. Sometimes a peculiar odor.
3. Coated tongue, with offensive breath.
4. Constipation and feeble circulation.
5. Headache and pallor of face.
6. Sexual appetite, either in abeyance or abnormally strong.
7. Frequent suppression of menses in females.
8. Subjective deafness, or abnormal auditory sensations.
9. Altered conversational style, and talking to ones-self.
10. Delusions and illusions later on.—*Medical World.*

Essential Vertigo.

DR. L. BREMER, in a paper read at the last meeting of the American Medical

Association (see *Weekly Medical Review*), gives the following physiological explanation of this distressing symptom:

Complications of sight, hearing or digestion, frequently accompany the disease, which must not, however, be confounded with aural, ocular, or stomachial vertigo. Neither pathology nor physiology have done much towards demonstrating the seat of the trouble; we cannot, as yet, speak of an equilibrial centre. The equilibrium in man is maintained by a complex nervous machinery, composed of a number of afferent and efferent nerves, and their cerebral and peripheral terminating apparatus. The chief motor centre is the medulla oblongata and the subsidiary and local vaso-motor centres play an important part in the production of vertigo. These centres are particularly unstable in the nervously exhausted or neurasthenics. The cerebellum is not, according to recent investigations, the exclusive co-ordinating or equilibrial centre, but it is one of reinforcement of the motor impulses as they are transmissible from the psycho-motor area to the voluntary muscles. E. V. is generally brought on by a vaso-constriction in those arteries that supply the mid-brain, the recognized seat of the centre of equilibration. But this vaso-constriction is chronic, and with this a more or less permanent irritability and instability of the equilibrial ganglionic cells is brought about. In advanced and confirmed cases, the highest sensory impressions suffice to bring on the vertigo without the vascular disturbance.

[This, it seems to us, is about equivalent to saying that the mode of its production is unknown. The explanation is, however, ingenious, and if it only led to some definite therapeutic indication, it might be of some value; but, unfortunately, it does not.]

B. F. W.

DIGESTIVE TRACT.

The Influence of Alcohol, of Beer, of Black Coffee, Tobacco, Salt and Alum upon Digestion.

DR. C. BIKFALVI, of Klausenburg, reports, according to the *Deutsche Medicinal Zeitung*, upon a series of experimental studies of digestion to the following effect:

1. Alcohol, even in small quantities, arrests the digestive processes. The digestion of albuminates is arrested more than the transformation of dextrin to grape sugar. Gastric juice, with 20 per cent. of alcohol, digests six to seven times smaller quantities than the normal secretion. This is explained by the precipitation of pepsin by the alcohol.

2. Beer does not promote digestion. It appears that this is due, not so much to its alcohol, as to the presence of large quantities of neutral salts that bind the free acid of the gastric secretion. If a few drops of hydro-chloric acid are added, the beer no longer inhibits.

3. Wine in small quantities appears to promote digestion; in larger quantities its action is that of alcohol.

4. Black coffee also, when taken in small quantities, stimulates the digestive functions; large quantities act unfavorably.

5. Moderate smoking does not alter digestion. Excessive smoking, however, is of bad influence, because the tobacco derivatives—alkaline reaction of nicotine—neutralizes the gastric juice.

6. Small quantities of salt are conducive to the processes under discussion. (Digestion.) Large quantities arrest them probably by hindering the swelling of the food.

7. Alum is decidedly injurious to digestion. Even the change of dextrin is retarded by small quantities. It is used

by some bakers in bread ; this should not be tolerated for the above given reasons.—*St. Louis Medical Journal.*

The Digestibility of various kinds of Foods according to Vanderbeck.

Meats.—Easy to digest : Mutton, venison, hare, sweetbread, chicken, turkey, partridge, pheasant, grouse, beef. Hard to digest : Pork, veal, goose, liver, heart, brain, lamb, duck, salt meat, sausage. *Fish.*—Easy : Turbot, haddock, flounder, sole, oysters, trout, pike. Hard : Mackarel, eels, salmon, herring, salt fish, lobster, crabs, mussels, cod. *Vegetables.*—Easy : Asparagus, French beans, cauliflower, beets, potatoes, lettuce. Hard : Artichoke, celery, spinach, boiled cabbage. *Fruits, etc.*—Easy : Baked apples, oranges, grapes, strawberries, peaches, cocoa, coffee, black tea, claret. Hard : Apples, currants, raspberries, apricots, pears, plums, cherries, pineapples, chocolate, pickles, beer.—*Journal of Reconstructives.*

The Digestion of Milk.

DR. M. REICHMANN of Germany draws the following conclusions from a number of elaborate experiments as to the digestibility of milk in the human stomach. 1. Boiled milk leaves the healthy stomach more rapidly than an equal quantity of unboiled milk. 2. The digestion of boiled milk is more rapidly accomplished than that of unboiled milk. 3. The coagulation of unboiled milk in the stomach is complete in five minutes. 4. The coagulation is not caused, by the acid of the gastric juice, but by the influence of a special ferment (milk-curdling ferment). 5. The acidity of the gastric juice is at first due almost solely to lactic acid, and, later in the process of digestion, to the presence of hydrochloric acid. 6.

Hydrochloric acid first appears in perceptible amount forty-five minutes after the ingestion of half a pint of milk. 7. For the first hour and a quarter after the ingestion of milk the acidity gradually increases, and then decreases, until the milk has entirely left the stomach. 8. The curds of casein in digestion of boiled milk are much softer than in the case of uncooked milk.—*Medical World.*

[It would be interesting to the practitioner to know whether these experiments relate to the adult or infantile stomach, or both. If children can always digest boiled milk more easily than that which is not boiled, it is a fact worth knowing. A very important question is how do these experiments tally with an unhealthy stomach?]

A. H. P. L.

DISEASES OF RESPIRATORY ORGANS.

The Treatment of Profuse Hæmoptysis.

In discussing the treatment of hæmoptysis, of course only the cases in which the hemorrhage is profuse need to be considered, for slight hæmoptysis requires no definite treatment. In the treatment of the serious form the general methods employed must be the same as that for profuse hemorrhage from other parts of the body ; and although containing no new points, the paper recently read by Dr. Samuel West, before the Medical Society of London (*British Medical Journal*, January 16, 1886) contains the most successful methods, brought together in such a succinct way, that it is worthy of being laid before our readers. Dr. West shows that rest, absolute of the body as a whole, and of the diseased part so far as possible, is the main essential principle ; and with this object in view, the

patient should be kept in a recumbent position, speaking prohibited, cough checked, and excitement avoided, or, if present, controlled by drugs. These indications are best met by the use of opium, which Dr. West regards as indispensable in most cases of hæmoptysis. Of the so-called hæmostatic remedies two groups may be formed,—the topical astringents and the vascular constrictants. Chief among the former are the perchloride of iron, alum, gallic and tannic acids, and acetate of lead; but, powerfully as these remedies act when applied to the bleeding surface, it is difficult to see how they can produce the same local effect when administered by the mouth, for it is hard to comprehend how a few minims of dilute solution introduced into the stomach can produce an effect which the undiluted solution can effect only when applied directly to the bleeding surface; consequently, if they act at all, it must be by producing vascular constriction. Of the groups of remedies which produce vascular contraction, digitalis and ergot are the most prominent examples. Both of these drugs produce contraction of the peripheral arteries, and if hæmoptysis were due to capillary oozing they might possibly arrest the hemorrhage; but we know that hæmoptysis is not due to capillary oozing, but to lesions of fairly large vessels. Hence these remedies, instead of being useful, may be even dangerous, and increase the hemorrhage. Hæmoptysis always tends to stop itself, from the fact that the blood pressure is reduced from the loss of blood, and the greater the reduction the greater is the tendency to form a clot. This fact has long been recognized, and therefore one of the early standard methods of treatment of hæmoptysis was to produce hemorrhage from other parts by free blood-letting; and,

although blood-letting is now believed to be indicated in but very few cases, an attempt may be made to reach this end, not by removing the blood from the body, but by detaining it in some part of the body distant from the seat of the hemorrhage. This may be, to a certain extent, accomplished by extensive dry cupping, or by dilating some of the vast vascular systems of the body, and making them act as temporary reservoirs for the blood. This might possibly be accomplished by producing purgation, or the cutaneous system might possibly be dilated through pilocarpine, or even nitrite of amyl; however, the possible objection to the use of these drugs is they dilate the vessels of the lungs as well. Then, again, the blood-pressure may be influenced through the heart, as by use of cardiac depressants, of which antimony is the most reliable; while, lastly, diet is of the very greatest importance. The principle of absolute rest and restricted diet should be applied in all cases of hemorrhage. It is thus seen that without giving a long list of drugs, or discussing in detail the various methods of treatment of hæmoptysis, Dr. West indicates the conditions which have to be fulfilled, and the essential principles which should guide our choice of remedies. Our treatment of hæmoptysis is as yet extremely unsatisfactory, and perhaps the following out of some of the lines of treatment suggested above may lead to valuable results.—*Therapeutical Gazette.*

[One of the best ways we have ever adopted to arrest profuse epistaxis, (where simpler means have failed) is to ligate the lower extremities, one or both for a few moments. We can see no objections to this treatment in profuse hæmoptysis and would suggest its trial.]

Ed.

The Treatment of Pleurisy and Empyema.

Based upon a wealth of clinical experience, Dr. Aufrecht, of Magdeburg, holds very decided views regarding the management of these affections, and communicates them to the *Berliner Klinische Wochenschrift*.

He recommends: 1. Operation in the axillary line in the fourth inter-costal space, the patient occupying a dorsal recumbent position. 2. A trial puncture by Pravaz's syringe before operating. 3. If there is reason to believe that less than 1500 C. C. of fluid will be discharged the operation had better be left undone. 4. Not more than 2500 C. C. should be evacuated. 5. The thoracentesis should not be repeated, unless a vital indication demand it. 6. The operation should be made in all cases of large exudations, irrespective of the degree of temperature of the patient, at once, *i. e.*, as soon as the case presents itself for treatment.

Aufrecht bases these conclusions on over thirty cases of operation. He gives salicylic acid in the after-treatment.—*Weekly Medical Review*.

Unusual Causes of Coughing.

In these words, Dr. Clarence C. Rice concludes a paper in the *Medical Record*, May 1 :

The "unusual causes of coughing," then, are two: First, hypertrophied glossal papillæ, overlapping an epiglottis which is bent far forward, but otherwise normal; and, second, a congenitally asymmetrical epiglottis, which has been made still longer by inflammation, caused by constant friction with the tongue. Abnormal conditions of the tongue and ulcerations of the epiglottis are mentioned in text-books as sources of irritation and causes of cough, but this relation between the

tongue and the epiglottis has not been specially recognized as a strong cough-producing factor. I believe it is frequently so. I consider the recognition of this lesion to be of great importance to the physician; for it explains the etiology of many coughs the causes of which have not hitherto been accurately determined. Since my attention was first called to this lesion, I have seen many cases in which it existed, and in which it could be demonstrated beyond a doubt that it was the sole cause of cough.—*Medical and Surgical Reporter*.

Pilocarpin in Pneumonia.

The Paris correspondent of the *British Medical Journal*, tells us Dr. Humbert Mollière has successfully treated double pneumonia with pilocarpin; the patient, exhausted by dysentery and albuminuria, was attacked with pneumonia in both lungs, and the intestinal disturbance was greatly aggravated. A centigramme of pilocarpin was injected; the respiratory movements fell from forty-eight a minute to twenty-four, and dyspnœa was much relieved; four hours later, a fresh injection was made, and was repeated the next morning; each injection was followed by profuse sweats and salivation, and dyspnœa was greatly relieved. The patient rapidly recovered. In administering pilocarpin, M. Mollière was guided by former experience. An elderly man with uremia, accompanied with dyspnœa and delirium, who seemed dying, was greatly relieved, and ultimately cured by a similar treatment. Dr. Mollière describes another case. A young woman with a comatose form of uremia and renal lesion, following a cardiac affection, was freed from the comatose condition by injections of pilocarpin.—*Medical and Surgical Reporter*.

Prophylactic Measures Against Cold.

At a recent meeting of the Société de Biologie, Professor Brown-Séguard read a paper on the prophylactic means to be adopted against accidents resulting from cold, which he founded on the following theory: "The neck is one of the regions of the body the most sensitive to cold; there is no doubt that a great number of accidents, such as coryza, laryngitis, bronchitis, cystitis, enteritis, etc., which are reflex phenomena, result from the impression of cold on the nerves of the skin of the neck." To avoid these accidents, M. Brown-Séguard recommends the blowing on the neck with the bellows of warm air, which should be gradually cooled, by which means the neck is rendered less sensitive to the action of cold. The Professor found that ten sittings were sufficient to produce effect.—*Medical and Surgical Reporter*.

A New Sign in Auscultation.

PROFESSOR PITRES, of Bordeaux, indicates a new sign in auscultation. Dr. Davezac describes it as follows in the *Journal de Médecine de Bordeaux*: The patient is seated, and is auscultated in the dorsal region. An assistant places a sou on the thorax, in different parts, according to directions, and percusses. The ear of the auscultator listens at the opposed corresponding parts. The healthy side is first examined; then the side with pleurisy, where the note is much higher. A clear metallic sound indicates pleuritic effusion; when this sound is absent there is no effusion.—*British Medical Journal*.

Prevention of Phthisis.

At a meeting of the *Conseil d'Hygiène*, Paris, the following resolutions were adopted:

1. The most active agent in the transmission of this disease resides in the sputa.

2. Care must be taken not to allow this expectoration to be thrown on the ground nor on linen, where it may be transformed into dangerous dust.

3. We recommend, therefore, that patients be instructed to spit into utensils containing sawdust, and that these are to be emptied and washed once a day, and their contents are to be burnt.

4. Any room which has been occupied by a phthisical person should, after his death, be disinfected with sulphur before it is again occupied, and all linen must be steamed.—*Medical World*.

[We take exception to the first resolution, though heartily endorsing the others.]

A. H. P. L.

Ice in the Sick-room.

A correspondent of the *National Druggist* thus writes:

The writer's son suffered with typhoid fever during the heated term of last summer, when the temperature of the room often rose to 90° or 95°, and the patient's temperature ran up to 105° F. and over.

A number of tubs were placed in the room and kept filled with ice, and the doors kept closed. The temperature of the room sank to 80° or less, an average of 12 or 15° below the temperature of the other rooms in the house, and the cooler atmosphere not only added to the comfort of the patient, but aided in keeping down the body-temperature, and materially contributed to a final recovery.

We would strongly urge the use of ice in the room as a measure of comfort and luxury for all who are confined to their beds during hot summer days.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Points in the Therapeutics of Diseases of the Joints.

DR. A. B. JUDSON, (*Med. Record*).

It is sometimes said that the treatment of joint diseases is enveloped in obscurity, and that the methods in use are various and conflicting. As an attempt to clear up the therapeutical atmosphere, I would like to make two or three points, as our legal brethren would say.

In the first place, I think we fail to recognize and acknowledge that articular osteitis is, from the nature of the case, an affection of long duration, and one in which absolute restoration to perfect symmetry and complete function is very decidedly the exception and not the rule. In these days of brilliant and painless operations and marvellous discoveries in physics we resent being limited to simply reducing deformity and placing the part and system in a favorable position for the slow process of natural repair. Until a perfect cure has been found, however, and tested by time, it is better not to disappoint our patients, but to give them the assurance that they will receive at our hands all that the present state of science can grant.

In the second place, I think obscurity has been caused by the mistaken precedence which has been unwittingly given to mechanics over pathology. The machinery of the joint being out of order, and certain muscles abnormally contracted, we have concluded that it is a question of dynamics, and that the pressure incident to muscular action is the cause of the destruction of cartilage and bone. Instead of prudently stopping to verify this conclusion by the examination of morbid specimens, which prove that muscular action plays but an insignificant part, we seek a mechanical

remedy for what appears to be a mechanical lesion, and invent an apparatus for counteracting the muscles. And when the apparatus is adjusted and the symptoms abate, we congratulate ourselves and imagine that the relief experienced is a proof that the muscles were causing all the mischief, failing to see that we cannot directly oppose the muscular action at all, and that, without knowing it, we have fortunately been applying fixation, which is a constant accompaniment of traction, and which a timely resort to pathology would have told us was the very thing which the inflamed joint needed. I have none of my fellow workers in view (we have all been followers of Dr. Henry G. Davis), but have simply tried to show how pathology and mechanics have failed to walk hand in hand, as they should have done, in the treatment of joint diseases. The therapeutical precepts suggested above have been expressed in detail in former papers, and sustained by reasons which seem to me conclusive.

The third point I wish to make is that ankylosis has not been given its proper value in the formulæ of this therapeutical problem. When long-continued inflammation has rioted in the tissues of a joint, deforming the articular surfaces and locking them up in organized lymph and shortened ligaments, we have ankylosis, the ultimate degree of which will depend, in my opinion, on the promptness and success of our efforts to arrest the inflammation. And I think that we are wrong when we fear adding to the amount of ultimate ankylosis by early and thorough fixation of the joint. To me it seems reasonable that such a course will diminish the resulting ankylosis by subduing the inflammation and preventing an excess of its products. The statement has been made, and I believe can be sus-

tained by records, that fixation of a healthy joint, no matter for how long a period, is powerless to produce ankylosis. It causes a temporary arrest or impairment of motion, such as can be overcome by habitual effort on the part of the patient, a disability very different from the ankylosis following inflammatory disease, which is, with rare exceptions, permanent. If this view be correct, then fixation is to be applied as early in the case as possible, and with uncompromising persistence, in the belief that, so far as the joint is a healthy one, fixation is absolutely harmless, and that so far as the joint is diseased, fixation will, by subduing the inflammation, increase ultimate mobility.

There are, of course, other sources of obscurity, and this will be the case until we attain omniscience. I cannot but think, however, that the three points which I have tried to make dissipate some of the difficulties in the way of the unanimous recognition of correct methods.

[JOHN HILTON persistently called attention to the value of rest in the treatment of all kinds of cases, whether surgical or medical, and also showed that where the rule failed, it was only apparent, as the intended rest was proved to be the very opposite. Dr. Oscar H. Allis, of Philadelphia, in a special lecture before the Anatomical and Surgical Society, of Brooklyn, in 1880, on the treatment of fractures of the humerus implicating the elbow joint, insisted upon absolute immobility of the joint for several weeks, and maintained that if promptly immobilized after the injury, passive motion never had to be resorted to. Prejudice was then, was during Hilton's time, and is now all the world over strong against immobilization and in favor of passive motion—irritation. In a paper of ours before the same body

and on the same subject a few months later we had occasion to strongly endorse immobilization. In the discussion which followed, some of those present "confessed" to having immobilized fractured elbow joints and watched them with no little trepidation during their progress and gratifying surprise at the satisfactory result and entire needlessness of passive motion. Since then we have immobilized and not employed passive motion and have found our results better to ourselves and patients than those resulting from the passive motion of our neighbors. In our paper we also quoted one of Hilton's many valuable axioms, saying in effect that the nerves which supply the skin over a joint also supply the muscles which move the joint, and the joint itself. From this he rationally concluded that to irritate, by fracture or otherwise, the nerves of the joint, was to excite the muscles controlling it to contraction. His conclusion, therefore, was that immobilization, prompt, perfect and continuous, should be the rule. So well did Dr. A. L. Ranney think of these lectures of Hilton, that he copied most of the axioms and cases they contain and published them in his *Applied Anatomy of the Nervous System*. We congratulate Dr. Judson on having made a short but strong, valuable and forcible contribution to our science.]

A. H. P. L.

On Antiseptic Irrigation of the Knee Joint for Chronic Serous Synovitis.

DR. ROBERT F. WEIR concludes an article in *New York Medical Journal*, as follows:

1. Subacute or chronic synovitis when the usual treatment fails after a fair trial.
2. In undoubted hydrops articuli where it should at once be done.

3. In threatening pyarthrosis from any cause.

4. In certain obstinate cases of gouty synovitis.

It has also been applied to acute synovitis with painful distension, and to hæmorrhosis and to pyarthrosis, but in the first two conditions it is believed that the simple puncture without the washing out will, in most instances, suffice, and in the latter, incisions and drainage will be required.

My own experience has convinced me of the value of this method of treatment in chronic serous synovitis, and I believe it a plan which can be applied not only to the so-called hydrods articulari, but also to the lingering effusions that remain so often obstinate to the use of rest, elastic and other pressure, and counter-irritants, from iodine to the Paquelin cautery. And it is with this impression growing upon me that I could recommend its use in cases of simple synovitis that have resisted longer than a month a fair trial of the usual remedies against joint effusions. It is, in careful hands, a safe and efficient remedy, and it is one that can be easily carried out. The puncture is made at the inner or outer side of the upper synovial pouch, after it has been rendered more tense by the pressure, on the other side of the joint, of the hand of the surgeon or the assistant. If this pressure is carefully managed, not only at this stage but also during each evacuation of the joint, being gradually removed while the joint is filling up with the carbolic solution, there will be no entrance of air into the articulation. Where I have not been able to have satisfactory help in the way of a skilled assistant, I have preferred to call in the aid of the carbolic spray to avoid this mischance. A rather large-sized, carefully disinfected ordinary trocar and

cannula is chosen, to avoid the choking up of its lumen by the lymph flocculi often found in the synovial secretion. After the joint is evacuated of its fluid, a 1-to-20 carbolic-acid warm solution is allowed to flow from a fountain syringe through the canula, till the joint is distended, when the nozzle of the syringe is removed from the mouth of the cannula, and the solution is permitted to run out from the joint. This should be repeated several times till the fluid comes out nearly clear, or so that only a slight opalescence remains, which is due to the action of the carbolic acid on the highly albuminous contents of the joint. The joint is finally emptied, and, while pressure is yet firmly made, the canula is withdrawn with a jerk, and a mass of antiseptic sublimated gauze, on which some iodoform has been dusted (not the iodoform gauze as usually made with resin, which often prevents the egress of synovial and other discharges), is placed quickly over the opening. Several layers of antiseptic material are then added and the whole joint is covered with a plentiful supply of absorbent cotton, all secured by a bandage firmly applied. The limb is then immobilized by a posterior splint or plaster-of-Paris bandage.

Usually but moderate reaction follows, which in the course of twenty-four hours begins to subside. At times considerable pain and distension are complained of, but all dressings can generally be removed in a week or ten days, and the patient allowed movements of the joint in bed. It will then be felt, as a rule, that the capsule is thickened, but that no effusion exists. This thickening may last several weeks longer, and should not deter the patient from going about by easy gradations. Though more commonly resorted to for the knee, this carbolic injection has also been employed with good results in other joints, nota-

bly in the shoulder and elbow. It has also been tried satisfactorily in the joint complications of gonorrhœal rheumatism. For those cases, however, where an arthritic involvement has occurred during the infection of scarlatina, typhus, and other zymotic diseases, and especially where a purulent synovitis is impending, the use of puncture and washing out with a solution of corrosive sublimate (1 to 1000) is preferred by Schede. This he tested in two cases where there was commencing suppurative synovitis. In each the carbolic injection was first employed without benefit, but the next day, as the joint was again rapidly filling with pus, it was injected with the sublimate solution and the inflammation promptly checked. He thinks that the sublimate solution is more potent for disinfecting purposes, and the carbolic solution more active as an irritant. Where pus is present in considerable quantity, however, it is much better to open the joint by an incision on each side the patella, with a third opening at the top of the synovial pouch (according to Hüter), and to wash out with the same sublimate solution and then insert drainage-tubes. This method of drainage, I can testify, is by all odds the most effective in suppurating knee joints.

Proposed Modification of Pirogoff's Operation.

At the recent congress of Russian practitioners, Professor TAUBER described and demonstrated on the dead subject an operation for removal of the foot, which he believes has several advantages over Pirogoff's amputation. Standing on the outer side of the limb, he commences an incision at the insertion of the tendo Achillis, and carries it forward just below the external malleolus to the dorsum of the foot, and

then vertically downwards on the inner side in front of the heel. When the middle line of the sole is reached, the incision is carried along it backwards and prolonged upwards to the starting point at the insertion of the tendo Achillis, a flap having thus been cut, consisting of the inner side and half the sole of the heel. The joint is then opened, the external ligament being first divided and then the internal. The astragalus is seized with the bone forceps and removed, nothing being left but the os calcis, the soft covering of which on the inner aspect is untouched. The os calcis is seized with the bone forceps and turned so that the articular surface is towards the operator. The forceps are now taken by an assistant, who holds them tightly; the operator then saws the bone longitudinally in two, the outer half, which is free, is removed, the inner half remaining attached to the flap. The ends of the tibia and fibula are then sawn off just above the malleoli. The cut surfaces of these will be found to correspond almost exactly with that of the os calcis, which is now brought into apposition with them. The advantages claimed for this operation are: 1. The posterior tibial artery itself is untouched, only its branches being divided. 2. The insertion of the tendo Achillis, as well as its bursa, are not injured. 3. The surfaces of the os calcis and of the leg bone correspond very nearly to one another.—*Lancet*.—*Maryland Medical Journal*.

[The operation of Professor Jarvis S. Wight, of Brooklyn, has all the above advantages, besides being simpler and not necessitating the opening of the ankle joint. Two incisions are made from one malleolus to the other, one incision extending in front of the ankle joint and the other under the heel. The os calcis is sawn through from below

upwards, and then the tibia and fibula just above the articular cartilage. This operation is simple, efficient and quickly done. The originator calls it the lowest possible amputation of the leg with a piece of bone in the posterior flap.]

A. H. P. L.

Extirpation of the Thyroid Gland.

PROF. KOCHER, of Berne, in a paper before the 15th Congress of the German Surgical Society, which met in April last, reiterated his statement of three years ago, that total extirpation of the thyroid at adolescence was followed by cachexia and eventually idiocy. He therefore concludes that the operation, if done at all, should be confined to adults. While this may be so, it seems extremely doubtful, because it does not seem rational; experience seems to have shown that the total excision of this body at one operation is fraught with more or less danger. Yet there has been no satisfactory explanation. Some advise excision in two or more sections. It seems, however, most promising to cause its removal by suppuration induced by the parenchymatous injection of irritants and digestants. This subject still offers a rich field for original research.

A. H. P. L.

Nerve Suturing and Nerve Grafting.

According to DR. MOSES GUNN, of Chicago, before the American Surgical Association, the motor or sensory qualities of a nerve depend upon the structure in which the nerve ends and not upon the nerve itself. He shows by actual experience, that if motor and sensory nerves are cut and subsequently united by suture, so that, for instance, the outer head of the median is stitched to the ulnar and its inner head to the median, in time there is complete recov-

ery of motion and of sensation. In one case the median was so injured that its ends could not be approximated. The distal segment was engrafted upon the trunk of the ulnar, and there was partial restoration of function on the fifty-fourth (54) day. Another similar and even more satisfactory case is also cited. This is valuable information and trust it will not have been vainly offered. *Never* fail to stitch the distal segment of a divided nerve to *some* nerve, even if it be a different one.

A. H. P. L.

The Surgery of the Pancreas as based upon Experiments and Clinical Researches.

DR. N. SENN, of Milwaukee, in a paper before the American Surgical Association, presents the following conclusions:

1. Restoration of the continuity of the pancreatic duct does not take place after complete section of the pancreas.
2. Complete extirpation of the pancreas is invariably followed by death, produced either by the traumatism, or gangrene of the duodenum.
3. Partial excision of the pancreas for injury or disease, is a feasible and justifiable surgical procedure.
4. Complete obstruction of the pancreatic duct, uncomplicated by pathological conditions of the parenchyma of the organ, never results in the formation of a cyst.
5. In simple obstruction of the pancreatic duct the pancreatic juice is removed by absorption.
6. Gradual atrophy of the pancreas from nutritive or degenerative changes of the secreting structures is not incompatible with health.
7. Physiological detachment of any portion of the pancreas is invariably followed by progressive degeneration of the glandular tissue.

8. Extravasation of pancreatic juice into the peritoneal cavity does not produce peritonitis.

9. Crushed or lacerated pancreatic tissue is removed by absorption, provided the site of operation remains aseptic.

10. Complete division of the pancreas by elastic constriction is never followed by restoration of interrupted anatomical continuities.

11. Limited detachment of the mesentery from the duodenum, as required in operations upon the pancreas, is not followed by gangrene of the bowel.

12. In all operations upon the head of the pancreas, the physiological attachment of the peripheral portion of the gland should be maintained by preserving the integrity of the main pancreatic duct.

13. Partial excision of the splenic portion of the pancreas as indicated in cases of circumscribed abscess and malignant tumors, in all cases where the pathological product can be removed completely without danger of compromising pancreatic digestion, or of inflicting additional injury upon important adjacent organs.

14. Ligation of the pancreas at the point or points of section, should precede extirpation as a prophylactic measure against troublesome hemorrhage and the extravasation of pancreatic juice into the peritoneal cavity.

15. The formation of external pancreatic fistula by abdominal section, is indicated in the treatment of cysts, abscess, gangrene, and hemorrhage of the pancreas due to local causes.

16. Abdominal section and lumbar drainage is indicated in cases of abscess or gangrene of the pancreas, where it is found impossible to establish an anterior abdominal fistula.

17. Through drainage is indicated in

cases of abscess and gangrene of the pancreas, with diffuse burrowing of pus in the retro-peritoneal space.

18. Removal of an impacted pancreatic calculus in the duodenal extremity of the duct of Wirsung, by taxis or incision and extraction, should be practised in all cases where the common bile duct is compressed or obstructed by the calculus and death is threatened by cholæmia.

19. In such cases, the principal source of danger, extravasation of bile into the peritoneal cavity, should be avoided by preliminary aspiration of the dilated bile ducts, accurate closure of the visceral wound with fine silk sutures and absolute physiological rest of the organs of digestion, during the time required in the healing of the visceral wound.—*Journal American Medical Association.*

Germs and Ptomaines.

In concluding his paper before the French Academy of Medicine, Prof. PETER made the following remarks: "M. Gauthier has shown that in the dead body, and even in the living, ptomaines are found; these alkaloids, ptomaines or leucomaines, are absolutely toxic; an auto-infection, characterized by hyperthermia, is the result. This theory rids us, at least for a time, of the tyranny of the microbes. If urea, which is an alkali, is constantly formed in our organism, why should there not also be formed an alkaloid in it? It is only a question of degree. Life is a contingent phenomenon; it is a series of partial deaths. It may, therefore, be said that we carry in ourselves while living a portion of our own corpse, but we resist the work of auto-infection by two distinct mechanisms—the elimination of the toxic substance and its destruction by oxygen. We should no longer hesi-

tate between the parasitic doctrines, which are shrouded in dark hypotheses, and this new doctrine, which is as luminous as it is precise, which explains the phenomena of normal and abnormal life"—*Lancet*.

Ptomaines and Leucomaines.

In 1870, M. ARMAND GAUTHIER first announced that the putrefaction of proteid substances gives rise to certain alkaloidal products. About the same time Selmi, of Bologna, communicated to the Academy of Sciences of that city a memoir that set forth that the stomach of persons who died a natural death contained, after a period of time, substances that behaved toward particular reagents in a manner identical with vegetable alkaloids. He also showed that the same substances are present in the alcohol that has been employed in the conservation of anatomical and pathological specimens. To these substances the name ptomaines was applied.

Gauthier and Itard, Gareschi and Mosso, and G. Pouchet, are notable for their work in defining the composition of the majority of these crystalline bodies.

Recently Brouardel and Boutmy, and Brieger, show that at different stages of the putrefactive process different bases of this character are developed, and that the same species of bacteria may furnish products of a highly different character, corresponding to differences of soil. For instance, the bacteria of putrefaction in their multiplication upon the flesh of mammals are attended by the development of an alkaloid far different from that developed upon the flesh of fish.

In 1881 M. Gauthier discovered that there were present constantly in the normal excretions of healthy, as well as

sick beings, substances that closely resemble the ptomaines. Such substances are the alkaloids discovered by Liebrecht and G. Pouchet in the urine. Such peculiar bodies are also found normally present in the saliva, etc. In order to distinguish them by a name from the cadaveric alkaloids, the term leucomaines was chosen for them.

Gauthier also demonstrated the presence, even in a state of health, of certain nitrogenous extractive substances, non-crystalline and non-alkaloidal, in the secretions. These he finds to possess a high degree of toxicity, much higher than either the ptomaines or leucomaines. The virulence of snake-bite, for instance, he found to be due to the presence of such substances.

Up to the present time it has been admitted that these animal alkaloids, physiological and pathological, arose as a consequence of fermentative action. The leucomaines, taking them as an example, were supposed to arise in septic maladies by the specific action of pathogenic microbes, and in health by the intestinal processes of fermentation that accompany digestion. Gauthier has a different conception of their origin. Starting from the premise, which is well established, that every being in a state of health excretes more oxygen than is assimilated, Gauthier entertains the belief that this excess is produced by the auto-combustion of aliments and tissues, leading to the production of the ordinary products of disintegration, *i. e.*, carbon dioxide, water, urea, etc., without any access of oxygen from outside the organism. In the tissues themselves, independent of the outer world, disintegrations take place, and we may assume that the tissues, at least in part, are possessed of vital qualities akin to those observed in fermentative processes.

Gauthier goes on to state that if the intimate life of the animal cells, grouped in a certain tissue and living without oxygen derived from outside, shows a similarity in the phenomena of assimilation and disintegration to the processes of bacterial fermentation, then we may look in the excreta so produced for the identical substances that characterize the products of putrefactive fermentation. And, he says, we actually find in the normal secretions the identical substances peculiar to true putrefaction, to wit, carbon dioxide and ammonia, in part free, in part as compounds, phenol, indol, scatol, acetic and lactic and butyric acid, etc. The identity is almost complete, and it is therefore no matter of surprise that the normal excretions of the kidneys, of glandular apparatus, and the blood itself, should contain these toxic alkaloids and extractives.— *The Weekly Medical Review*.

[The only trouble about Messrs. Gauthier and Peter is that they are as roseate in their account and as extreme in their claims as are the bacteriologists in theirs. It is as wrong, in our opinion, to totally discard the germ theory and universally adopt theirs, as it is to do the opposite. No doubt many, perhaps most, affections may be explained on the hypothesis of Messrs. Gauthier and Peter, but the same is true of the germ theory in a great many instances. Leucomaines and their effects will undoubtedly, in the course of time, be the means of explaining much that is now not understood about predisposition and immunity, while germs may at some future time be positively shown to have a causative relation to many more diseases than is now conclusively proven. The action of the French Academy in desiring to discard the germ theory in toto was ridiculously precipitate. The

question of general and local infection, in other words, of germs and ptomaines and leucomaines, is the greatest of the age as regards medical science and the prevention of disease. There is a hysterical streak in medical men, as in others, that causes them to promptly accept theories of rude application on a purely fanciful basis and then as rapidly discard them for others equally as poor. The mass of us are so stampeded from time to time, constantly making sweeping claims, while the original investigators keep quietly on their way, uttering now and then words of warning and restraint to their over zealous and not so well informed followers. Could this senseless tendency be checked, the great problem now before us would be capable of an earlier solution.]

A. H. P. L.

On the Advanced Operative Treatment for the Radical Cure of Hernia.

DR. ROBERT ABBE read a paper with this title, in which he first mentioned conditions which rendered a radical cure of hernia desirable, and then briefly referred to a number of operations which had been performed, which, although their safety might recommend them, had been condemned because of their failure to cure. This remark might almost be said to be applicable also to Heaton's method. This method seemed to have been used more commonly in this country than in Europe. The operation with which the paper had specially to deal, however, was the open one, which the author had adopted in twenty-one cases. The method of procedure adopted by surgeons in this country and abroad was essentially the same. In Liverpool, especially, the silver wire suture was employed instead of catgut for closure of the ring. In view of the importance of an oper-

ation for the radical cure of hernia, exact information regarding the histories of patients operated upon should be had in order to judge of the real merits of the procedure. For this reason he gave the histories somewhat in detail of the twenty-one cases in which he had done the open operation. In sixteen of the cases there was not strangulation, and in a portion of the others the symptoms of strangulation were not very marked. The result of the treatment had led him to ask two questions: First, was the open operation a safe one? and, second, did it effect a radical cure? If we judged by the statistics of Liverpool surgeons, we must admit that it was safe, but such good results had not been obtained elsewhere. Other statistics showed a death rate of one in eight. It was true, however, that this showed the result of treatment in the worst cases, for only such had usually been subjected to operation. There were dangers arising from adherent intestine, incarcerated omentum, fatty heart, feeble health, etc. Again, we had to face the fact of possible hemorrhage. Banks, of Liverpool, had referred to a case of hemorrhage in which the patient recovered after laparotomy and securing of the bleeding point. The accident had also occurred in the hands of experienced surgeons in this city. It took place in one of the cases reported by the author, in the manner in which he believed it usually occurred—namely, by shrinkage of the mass of omental tissue, and loosening of the ligature. To avoid this accident, he advised the use of carbolized silk, ligating the broad and thick mass of omental tissue, three, four, or even five times, and in addition securing any bleeding vessels on the cut surface. Peritonitis, suppuration, and hemorrhage had been the three bugbears which had led surgeons to let the her-

nial sac alone. But the greatest danger from peritonitis was due to the development of erysipelas, and the occurrence of this accident was not very likely if antiseptic methods were strictly observed. Inasmuch as hemorrhage had occurred in the hands of the most careful and experienced surgeons, it might be a question whether it could be adequately guarded against in all cases. In one of the twenty-one cases death occurred from fatty heart and intestinal obstruction, brought on by the relations of the returned omental stump. It was not probable that, had laparotomy been performed, the constricting band could have been divided. In a third case the open operation was performed, and at the same sitting some varicose veins of the leg were operated on, which resulted in suppuration and death. The hernial wound was doing well. The author was decidedly of the opinion that suppuration and union by granulation in the canal and about the ring, led to a much better final result than primary union did. This was also the estimation of the granulation process by English surgeons. Adhesive inflammation about the ring, excited by whatever method, was delusive. The induration following Heaton's method, usually disappeared within a month. If we could bar the ring tight, and keep it barred, we might keep back pressure, but the catgut suture became absorbed within a week, and allowed the strain to come upon the soft tissues too soon. The patient should support the parts from without many weeks, and perhaps many months, after the operation. With regard to a return of the hernia, it was extremely probable that there would be a recurrence within a year or two. It was much less likely to follow an operation upon a femoral hernia than upon an inguinal hernia. But recurrence of the

hernia was not a sign of failure of the operation, for the patient was almost always restored from complete invalidism to perfect health and ability to do his work. The sixteen unstrangulated hernia which he had operated upon, had all been unmanageable, and all of the patients expressed great satisfaction at the result of the operation.—*New York Medical Journal*.

Rupture of the Ligamentum Patellæ and its Treatment by Operation.

Professor H. B. SANDS, of New York, has lately (*Annals of Surgery*) made an elaborate study of rupture of the ligamentum patellæ, and at the conclusion of his paper reports a case in which he successfully sutured the ligament in a patient who otherwise would have been a cripple for life. The injury is sufficiently rare to make Professor Sand's study very valuable scientifically, independent of the practical conclusion at which he arrives. He adds records of thirteen cases gathered from the records of the New York Hospitals to the sixty-five which Maydl had been able to collect. The rarity of the injury as compared to fracture of the patella is given as follows :

	Fracture of Patella.	Rupture of Lig. Patellæ.
N. Y. Hospital	150 cases.	3 cases.
Bellevue "	140 "	7 "
Roosevelt "	44 "	2 "
St. Luke's "	19 "	1 "

The injury is sparingly discussed in most of the standard surgical textbooks, and little is to be learned about it save that the rupture of this tendon and of the triceps and tendo Achilles are the ones most likely to occur and that they are to be treated on the general principles of rest and extension. Erichson disposes of the whole matter in a

dozen lines. P. S. Conner, in the International Cyclopedia of Surgery, devotes a few lines to its discussion, and proposes suture. J. Lockhart Clarke, in Holmes' System, quotes Paget and recommends extension and bandages from above downwards. Prof. Sands' tabular statement of the thirteen cases, previously referred to, including his own two, one of which was operated upon, is a valuable addition to the literature of the subject.

The case upon which Professor Sands operated was one in which eight months had passed without restoration of function, and the operation was made difficult by the retraction of the quadriceps, which had to be incised in many places. The history of the case was uneventful except that for some days after the operation the patient suffered much pain. The operation was successful, the last report of the case showing extension to the normal limit, flexion to right angle, the patient being able to go up and down stairs without assistance. This is the first modern case as far as Prof. Sands has been able to discover. "Maydl states that in a posthumous work by Veslingius (*Obs. Anat. et Posthum.*), published in 1740, he found a notice of a case in which tenorrhaphy of the ligamentum patellæ was performed with success." Prof. Sands does not propose the operation in all cases of tendon rupture, but looks forward to the time when it will be the general practice. Speaking of the hesitation still felt in opening into large joints, he says: "I confidently anticipate the time when skillful and careful surgeons will be able to divest it of all danger to life or limb; and whenever this period arrives, our time-honored, but clumsy, tedious and uncertain method of treating both fracture of the patella and rupture of its ligamentous attachments

may well be abandoned in favor of some form of operation calculated to secure an immediate union of the divided parts."—*Maryland Medical Journal*.

On Erasion (So-called Arthrectomy of the Knee.

MR. G. A. WRIGHT reports to the *Medical Chronicle* his experience with this operation in sixteen cases. The operation consists in opening the joint freely by a semilunar incision, just as in the ordinary mode of excising the knee; the skin is reflected and the capsule removed on each side of the patella and patellar ligament, or, if preferred, the patella may be sawn across and the fragments turned upwards and downwards. If the former plan is employed, free incisions parallel to the long axis of the limb are made on each side of the patella, extending a little above its upper border as well as downwards nearly to the insertion of the ligamentum patellæ into the tubercle of the tibia; the object of this is to allow the patella to be freely displaced laterally, and turned round so as to expose its articular aspect during the process of erasion.

The rest of the operation consists in carefully cutting away with forceps and scalpel or scissors every particle of pulpy granulation tissue, all the infiltrated capsule and the semilunar cartilages, and scraping quite clean all the articular cartilage, picking out granulation tissue from any pits in the cartilage, and, if necessary, gouging away any small spots of diseased bone. The process must be most thorough, and extreme flexion of the limb is required to completely expose and clean the posterior part of the joint; the crucial ligaments are scraped, but carefully preserved, the lateral ligaments usually divided.

The upper synovial sac must be thoroughly cleaned. The most difficult part of the operation is getting away the posterior part of the semilunar cartilages, and the synovial membrane at the back of the joint.

The process is a tedious one, often taking one and a half or two hours, including the subsequent putting up in a splint. As soon as all bleeding has been stopped, the limb is fixed on an excision splint and dressed in the usual method, antiseptically. Wood wool is the dressing Mr. Wright prefers, from its perfect absorbent properties, and the firm, even support it gives; drainage should be at the back of the joint on each side, as after excision, the tubes being carried through openings made behind the joint. He prefers to Esmarch the limb before beginning the operation.

His reports include cases of pulpy disease with no suppuration, cases with varying amounts of bone disease, some with extensive abscess, some with small amounts of abscess, and, finally, cases where there was general tuberculosis. In those that have done well the common factors appear to be (1) Absence or very small amount of suppuration. (2) Superficial or at least not wide spread bone disease. (3) Absence of general tuberculosis. In short, fairly early disease in a not hopelessly tuberculosis child. Although in one case a freely movable joint resulted, he does not advise the attempt to obtain motility by early passive movement, except in a few instances where the wound has healed at once, and there is no obstacle in the way, such as dense and lowly vitalized cicatricial tissue. Erasion, if it fails, leaves the limb in little, if at all, worse condition for excision afterwards. In those cases where amputation became necessary, either the local or constitutional condition forbade hope of

successful excision. Where it succeeds, erosion leaves as sound a limb as excision, without shortening. The limb is very liable to become flexed after healing of the wound. He thinks, then, that in suitable cases erosion is, in disease of the knee, better surgery than excision, but its application is strictly limited. — *Journal American Medical Association.*

A New Surgical Dressing.

For some time past, DR. ROBERT PARK has been using for the dressing of sores and ulcers a powder composed of burnt *kieselghür* and iodoform, to which a varying proportion of eucalyptus oil or other odorating substance is added.

Kieselghür, it may be mentioned, is a diatomaceous earth, and is otherwise known as white peat. When this is burnt in a furnace an extremely light powder is the result, composed entirely of inorganic ash, varying in color from pure white to a pinkish tint. It is extremely absorbent and antiseptic.

As a diluent for iodoform it has no equal, and, as it is much cheaper than the latter, it is economical in use. For insufflation it is admirably adapted, owing to its lightness and absorbent powers; and it has been thus prescribed in naso-pharyngeal affections, and in gynæcological practice. Upon the whole, he has been well satisfied with the results.

For cases of chancroid it is better adapted than iodoform alone, in the proportion of equal weights. In this form, indeed, it is adapted for dressing either the soft or the hard sore.

As a dusting powder in erysipelas, erythema, and eczema, its advantages over starch and other powders, are owing to its great power of absorbing moisture; but its extreme lightness is against its use *alone* for this purpose.

Mixed thoroughly with absorbent cotton wool, it adds greatly to its absorbent power, and furnishes it with detergent and antiseptic qualities. In this manner it forms an excellent elastic dressing for boggy ulcerations.

There are many other uses to which this remarkable substance will be found adapted by practitioners when they have become acquainted with it. — *Therapeutic Gazette.*

Trigger-Finger.

Apropos of this curious affection, the *British Medical Journal* says, that according to M. MARCANO (*Journ. de Med. et de Chir. Fran.*, 1884), the curious phenomenon called *doigt à ressort*, by Notta and Nélaton, is the result of a knotty swelling of the flexor tendon, by which the peculiar jerk is produced. During flexion and extension, the movement of the finger is suddenly stopped for a short time, and then completed very quickly and violently, as if a spring had been put into action. The jerk can be reproduced experimentally on the dead body by surrounding the flexor tendon with a string, so as to increase its volume. The *doigt à ressort* is observed chiefly in people subject to rheumatism, but an injury may also cause it.

In all cases the swelling of the tendon can be made out by careful palpation; it is the rubbing of the nodule against the sesamoid bones, or the sheathes of the tendons, which is the cause of the jerk. — *Medical and Surgical Reporter.*

Laparotomy for Diagnosis.

DR. CHRISTOPHER HEATH, of Baltimore, maintains that, 1st, in surgical affections of the abdomen, laparotomy should be the rule after the establishment of a precise diagnosis; and 2d, that an explorative laparotomy is always indicated if all other methods of diag-

nosis fail to satisfy. He considers laparotomy for diagnostic purposes an established and proper aid to diagnosis, because its results are ill in such comparatively few instances. Dr. A. Vanderveer, of Albany, could not doubt the experience, which proved to him that a simple incision of the abdominal wall, not implicating the viscera, would heal with certainty and without trouble, even if left to itself. He failed to see any advantage in the larger suture, and considered the old fashioned one best, that included the whole thickness of the belly wall. Dr. C. J. Parks, of Chicago, is of the opinion that the size of the incision has no influence in the subsequent behavior of the patient, but is of the mind that abdominal incisions above the umbilicus heal slower than those below it.—*American Surgical Association.*

VENEREAL DISEASES.

Transmission of Syphilis.

KASSOWITZ, of Vienna, formulates the mooted points of this question as follows :

1. The observation of many physicians, especially pediatric practitioners, proves that women, who never exhibited symptoms of syphilis, give birth to syphilitic children. In these cases there is no doubt that the virus is contained in the spermatic secretion of the father.

2. In many cases the mother subsequently shows no syphilis. Therefore, in such cases, no infection of the mother by the child has taken place.

3. A retro-infection of the mother by the fetus is theoretically possible, but not definitely proven.

4. However, it is beyond doubt, that those mothers of syphilitic children, that never showed symptoms of syphilis, are much less receptive for syphilitic infection than other individuals.

5. Such women are not to be considered in a latent syphilitic state, because, first : All objective signs are wanting ; and second : They give birth to healthy children when impregnated by a healthy male.

6. It is a fact that women with recent syphilis may give birth to healthy children. The virus is not transmitted from mother to child in such cases ; and such children have a certain degree of immunity to syphilitic infection.

7. In some few cases a transmission of the virus from the mother, that was infected during pregnancy, to the healthy fetus, has been proven.—*Weekly Medical Review.*

Treatment of Cerebral Syphilis.

In the *New York Medical Journal*, this question is discussed by DR. HERBERT G. LYTLE, who concludes that the treatment of cerebral syphilis is, of course, by mercury and iodide of potassium. The former is curative, the latter palliative. It is strange to see in an English work on syphilis, published in 1884, the statement that iodide of potassium, in some cases, must be given in large doses, ʒj to ʒij in twenty-four hours ; but that, as a rule, it is better to begin with about seven grains three times a day. In cerebral syphilis it is best to commence with thirty grains, t. i. d., and rapidly increase the dose until you get the physiological effect or the symptoms disappear. The hygienic management is important. The diet should be plain and nutritious. The patient should avoid bodily and mental exertion or excitement. He should not, as a rule take alcoholic stimulant. Special symptoms must be met by appropriate treatment.—*Medical and Surgical Reporter.*

[It is a well known fact among neurologists, that in many cases of cerebral or

other kinds of nervous syphilis, large doses of iodide is the only hope, and the life of the patient depends on the ability of the stomach to retain the drug in sufficient amount.]

A. H. P. L.

Impermeable Urethral Stricture Treated by Electrolysis.

DR. WM. T. BELFIELD, in the *Journal of the American Medical Association*, says of the treatment of stricture by electrolysis, that :—

1. It is applicable to strictures at any point in the urethra.

2. Any stricture or succession of strictures, however rigid and cartilaginous, however long and tortuous, however tight (even if impermeable), can be readily and safely perforated.

3. As a rule it causes no pain nor bleeding, is followed by no chill nor urethral fever, and it is always devoid of danger.

4. When properly handled it can produce no false passage nor other local lesion.

5. The effects are more enduring than those of either cutting or stretching; whether or not they are permanent (as maintained by Dr. Newman), my experience does not yet enable me to assert.

There are, however, numerous cases of stricture for which electrolysis is not merely preferable to urethrotomy and dilatation; it is, indeed, the only treatment practicable. These cases may be divided into three classes :

1. Impermeable strictures without complete retention of urine. I have treated four such cases where the strictures were impermeable to even the finest instruments, though the patients were still able to force a little urine through them. In each case a No. 12 French bulb was passed into the bladder without difficulty; and the patients were immediately relieved from the an-

noying frequency and pain of urination. In none of these cases did any chill, urethral fever or other constitutional disturbance follow the operation.

2. Impermeable strictures with complete retention. I have treated by electrolysis three such cases, in each of which the bladder was distended to or above the level of the umbilicus. One was a traumatic stricture following rupture of the membranous urethra by a blow upon the perineum; in one of the others the strictures (of gonorrhœal origin) were scattered along the urethra from meatus to prostate. In each of these I succeeded in passing a No. 10 bulb (French) into the bladder at the first sitting, and to insert a catheter immediately. *Each of these patients was therefore saved from a perineal section, which would otherwise have been inevitable.* One of the three, who had an elevation of temperature previous to the operation, experienced a severe chill and violent fever within the first twenty-four hours; but was entirely recovered on the third day. The other two showed no reaction.

3. Tight and rigid strictures (permeable or otherwise) with perineal or scrotal fistulæ.

[Dr. Robt. Newman has already fully demonstrated the efficacy of electrolysis in relieving urethral strictures. Why any one should still fail to appreciate this point we cannot see. It is pleasant to see recorded the above successful cases. The reason why the method has failed with many is that the current used was greatly in excess of what was required.]

A. H. P. L.

Nephrectomy on a Twenty-three Months Child.

DR. R. PARK also related the case of a twenty-three months child on whom he performed excision of the right kid-

ney by abdominal incision through the right linea semilunaris, *i. e.*, at the outer side of the rectus abdominus muscle. The kidney was fibro-cystic. The pedicle was tied and dropped back into the belly. The kidney weighed four pounds. The patient is now perfectly well, seven months after the operation. It was a boy. The laparotomy was done because the tumor was too large to admit of removal any other way.

New Method of Dilating a Stricture.

DR. WILLIS P. KING, in the *St. Louis Courier of Medicine*, reports two cases of urethral stricture which he dilated by hydraulic means after all other methods had failed. He tried filiform and other bougies, and large and small catheters, but all without effect. At last, in the case of his ten months old boy, he introduced a small catheter down to the stricture and forced through it some water from his mouth and thus was able to enter the bladder. In the other case, he had attempted every known means and was going to resort to an external urethrotomy, but changed his mind, introduced a No. 6 silver catheter down to the stricture, injected water forcibly with a syringe, and then easily pushed the instrument into the bladder. The plan seems a very good and safe one.

Urinary Calculus Sloughing Through the Perineum.

DR. W. T. CHATHAM, in the March number of the *North Carolina Medical Journal*, reports the case of a negro boy, eight years old, who having inherited the calculous diathesis, developed a urinary calculus weighing $\frac{5}{8}$ i. $\text{\textcircled{D}}$ ii, which sloughed its way through the perineum, carrying with it part of the prostate and urethra, the scrotum, both testes and the major part of the penis.

The case is well authenticated. The patient made an entire recovery, but died some time later of dysentery.

Fatty Tumor of the Testicle.

DR. ROSWELL PARK, of Buffalo, related the history of the case of a man, who in nineteen months developed a fatty tumor of the testis weighing three pounds. It was excised with perfectly satisfactory results. The testicle had to be exterminated with the tumor.

DISEASES OF THE SKIN.

The Value of Antimony in the Treatment of Psoriasis.

MR. JAMES MASON (*Glasgow Medical Journal*) strongly recommends the administration of tartar emetic in psoriasis, and details the following case:—A boy $\text{\textcircled{a}}$ t. 15, for the last year and a half had been troubled with a "scaly skin," which gradually grew worse, till he consulted a medical man under whose treatment he remained for eight weeks without deriving any benefit whatever. He was then put on five minim doses of vin. antim, and in one week his face and head were almost entirely free from scales. The dose was then increased to ten minims four times a day during the second week, and at the end of the third week all trace of the disease had vanished, with the exception of a small white patch on his right elbow.—*Maryland Medical Journal*.

To Remove Warts.

According to the *American Therapeutic Gazette*, castor-oil, constantly applied for two to four or six weeks—that is once a day—has not failed in any case of any size or long standing, in the hands of Dr. Dumm, of Columbus, Ohio.—*Kansas City Medical Record*.

Differential Diagnosis of Ulcers of the Face.

DR. CHRISTOPHER HEATH, (*Medical World.*)

<i>Lupus.</i>	<i>Rodent Ulcer.</i>	<i>Epithelioma.</i>	<i>Syphilis.</i>	<i>Struma.</i>
In young people.	In elderly patients.	In adult life.	In children.	In children.
Attacks skin of ala of nose.	Favorite position the skin of lower eyelid.	Attacks junction of skin and mucous membrane—lips, nose, eyelids.	Affects corners of mouth and margins of nose with deep scars.	Superficial eczematous ulceration, with crusting on lips and nose, leaving no scars behind.
Commences in a discolored tubercle.	Commences often in a brown horny patch.	Commences as a small irregular tubercle.	Commences often in vesicles or blebs.	
Ulceration superficial, and slowly spreading across the cheeks, healing at one part and breaking down at another.	Spreads steadily with no induration.	Infiltrates from first and extends rapidly.	In adults.	
No glandular affection.	No tendency to heal.	Glands involved. Painful.	Superficial more or less circular multiple ulcers about any part of face, with scars of healed ones; or, deep unhealthy cavities from breaking down of gummata.	
Not usually painful.	No glandular affection.			
	Not painful.			

DISEASES OF THE EYE AND EAR.

Earache Caused by an Ulcer on the Tongue.

DR. A. D. WILLIAMS (*St. Louis Medical and Surgical Journal*):

An elderly man came to me complaining of a more or less constant and severe pain in the left ear. An examination of the organ developed the presence of nothing abnormal and I was obliged to look elsewhere for the cause of the pain. In my search I found on the tongue, on the left side, opposite to the last molar, a deep ulcer filled with a fungous growth, the origin of which was evidently an abrasion caused by a sharp corner of a carious tooth. When this ulcer was irritated by food, the probe or medicine, pain was experienced in the adjacent ear, showing quite clearly that the earache was secondary to irritation of the ulcer. I have frequently before this had patients complain of earache, when an examination developed the fact that a carious or aching tooth was the cause; but this is the first instance in which I have traced the pain to an ulceration of the tongue.

[John Hilton was the first, we believe, to call attention to this cause of ear trouble. In his book on "Rest and Pain," he details a case exactly like the above. The patient's earache disappeared after the withdrawal of a sharp edged carious tooth, that had caused continuous irritation of a nerve filament at the bottom of an ulcer situated on the side of the tongue.] A. H. P. L.

Tanno-Vaselin in Conjunctivitis.

The tannin should be thoroughly pulverized and then well mixed with the vaselin by long continued rubbing together.

The strength of the mixture may vary from 10 to 30 grains to the ounce. The upper lid is everted and a portion of the ointment as big as a grain of wheat is applied to the conjunctival surface, the lid drawn out and the two made to rub together several times till the ointment melts and is well distributed; then the upper lid is let down. The application is to be made once a day, best in the forenoon. The diagnosis must be correct.—*St. L. M. & S. Jour.*

DISEASES OF WOMEN.

Laparotomy for Pelvic Abscess.

DR. A. REEVES JACKSON presented the following case before the Chicago Gynæcological Society, the history of which, with discussion, appeared in the April No. of the *Obstetric Gazette*:

Anna N., twenty-four years old, had been married six years, and had one child eighteen months old. Five and a half weeks prior to my visit—she had miscarried, producing a fœtus four months old. A few days after that event, Dr. Braun found the patient suffering from symptoms of pelvic inflammation, which had since continued, with varying severity.

On examination, I found on the left side of and behind the uterus, a swelling as large as a medium-sized orange, with rather indistinct outlines. Its lower portion was in a plane with, or somewhat below, the *os uteri*, and bimanually its upper margin could be felt extending above the fundus, which was pushed strongly to the right. Both uterus and tumor were immovable. The latter had a slightly elastic feeling in some places, although I was unable to detect any certain fluctuation through the vagina, rectum or hypogastrium. Through the posterior vaginal wall, at a point about an inch above the lower portion of the swelling, I fancied I received a sensation of bogginess, and this, taken in connection with the history of the case, gave me the belief that pus was present. Accordingly, I thrust a curved trocar and canula into the swelling by way of the vagina to the depth of about two inches, with no other result than the emission of a few drops of blood.

It was then concluded that the patient should have prolonged hot water vaginal douches daily, rectal feeding, and

appropriate anodyne and tonic medicines.

Under anæsthesia I examined the abdominal and pelvic organs. The pelvic swelling had undergone no marked change, except that it seemed to have increased in an upward direction, extending now to a point about an inch above the *symphysis pubis*. At this place I thought I detected obscure fluctuation. The swelling as felt *per vaginam* was hard at every accessible point. All operative measures were declined by the patient and her friends, and the treatment advised consisted in the administration of morphia and quinine, and peptonized milk for diet.

The patient became much worse. The pelvic pain was controlled only by large doses of morphia given hypodermically, and the stomach retained almost nothing. The pulse was 130, temperature, 102° F. It was decided that laparotomy should be performed.

The patient was etherized, and the bladder emptied by catheter. She was the thinnest person I ever saw placed upon an operating table. Immediately before the taking of ether her pulse was 124, temperature, 103° F.

The hair of the pubis was shaven off, and the skin of the abdomen washed with soap and carbolized water. An incision three inches long, ending below at the upper portion of the *mons veneris*, was made in the middle line of the hypogastrium. Deepening the cut, I came upon the peritoneum, which, however, could not be separated from the parts beneath. Proceeding inward through dense structures the knife suddenly entered an abscess cavity, which at once gave exit to a stream of pus to the amount of two or three ounces. Passing my finger through the opening, I found that the cavity extended downward behind and to the left of the uterus,

about three inches. The abscess walls proper could not be accurately defined. The inflammatory process had matted together the upper part of the uterus, the left broad ligament, tube and ovary. The cavity was washed out, and a rubber drainage tube passed to the lower end, the outer portion of the tube being stitched to the edge of the wound at its lower extremity. The remainder of the wound was closed with sutures, and dressed in the usual manner.

The night following the operation the patient slept fairly well without an opiate.

When I saw her the next day she had taken milk and lime water with relish; her pulse was 108, and temperature 100 2-5° F.

In brief, the relief of the symptoms was immediate, and the recovery uninterrupted.

Concerning the etiology of pelvic abscess, I should like to call attention to the literature of the subject. Sanger, (1) whose statements regarding etiology I have found to be the most complete, says, that one out of nine of all gynecological affections is of gonorrhoeic character. He further says that fifty per centum of these are diseases of the uterine appendages; although, of course, any part of the genital tract may be primarily invaded. In the Fallopian tubes, he finds that disease most often has its principal focus, where it begins and whence it spreads. He distinguishes six kinds of salpingitis:

1. Septic, puerperal and non-puerperal.
2. Tuberculous.
3. Syphilitic.
4. Actinomycotic.
5. Gonorrhoeic.
6. A mixed form.

The gonorrhoeic is the most common form of the disease, and it produces the most severe cases of pelvic inflammation.

It has not as yet been proven that the gonococci of Neisser, can, of them-

selves, produce abscesses; but destruction of the surface of the mucous membrane is sufficient; an entrance is thus given to the septic, pus microbes, the *staphylococcus aureus* and *albus* and the *streptococcus pyogenes*, which are probably always present.

The invasion having taken place, we must ask ourselves by what channel does the inflammation travel? Where should we expect finally to find an abscess in case one should form? The Fellows will remember the beautiful experiments of Bitas, Koenig, (2) Schlesinger; (3) experiments which about three years ago I repeated in the dead-house of the Cook County Hospital, although the purpose I had in view at that time was a different one. These gentlemen injected, by means of fine canule, fluids, such as colored glue, into the periuterine tissues of puerperal and non-puerperal bodies. Koenig found (a) that fluids, injected in the region around the *fundus uteri* and uterine portion of the Fallopian tubes, first pass upwards into the iliac fossa to reach the crest of the ilium, then downwards towards Poupart's ligament, and finally into the *pelvis minor* or true pelvis; (b) fluids injected into the periuterine tissues, in the neighborhood of the internal os, first fill the extraperitoneal connective tissue of the *pelvis minor*, then follow the round ligament as far as Poupart's ligament and ascend in a backward direction into the iliac fossa; (c) that when the injection is made near the lower portion of the posterior surface of the uterus, the fluid first flows into the *cul de sac* of Douglas and thence rises into the iliac fossa.

Schlesinger, although in the main agreeing with Koenig, differs with him in the following two points: He says, (a) when fluid is injected into the neighborhood of the *fundus uteri*, it first

passes into the iliac fossa, but thence it does not descend into the true pelvis, as Koenig observed, but it ascends, running up the anterior abdominal wall; (*b*) from the broad ligament the fluid finds its way into the iliac fossa and thence upwards towards the kidney, running in the mesentery of either the ascending or descending colon. Schlesinger further makes the interesting statement that his pericervical injections filled the pericervical tissues, but that they never produced a tumor which could be felt above the *symphysis pubis*.

As far as my experience goes, the results of these experiments correspond well with the clinical facts. The puerperal abscesses which I have opened were situated, two over the crest of the ilium, one on Poupert's ligament, and one on the anterior abdominal walls, about three inches above the ligament.

As before mentioned, about three years ago I made similar experiments, the fluid I employed was milk. My object, at the time, was to ascertain the exact relative position of such an artificial exudate, representing an abscess, with regard to the anterior wall of the abdomen, especially of an exudate in one of the broad ligaments. I wanted to see for myself what difficulties I must be prepared to encounter in uniting the walls of a pelvic abscess, after having opened it, to the edges of the abdominal wound. As might have been expected, I found the difficulties of the operation to vary partly with the size of the exudate and partly with the degree of tension of the abdominal parietes. On the whole, the matter seemed simpler to me than I had *a priori* imagined.

Whether in cases of pelvic inflammations and abscesses laparotomy should be done or not, is a question of comparatively recent date, it being but little older than five years. As I have already

said in my paper on "Periuterine Abscess," the operation is always to be regarded as a last resort and should never be thought of in cases in which the abscess can with safety be reached in any other way, which, of course, includes opening it through the rectum.

Lawson Tait, (⁴) of Birmingham, and Martin, of Berlin, were the first who attempted to prevent the terrible contingencies of pelvic inflammations by attacking the disease at its original seat; Lawson Tait (⁵) removed the suppurating uterine appendages, Martin (⁶) operated for suppurating, periuterine hæmatocele. Tait operated for a suppurating hæmatoma of the right Fallopian tube (peritonitis), in 1878, and he removed both tubes for pyosalpinx and an ovary for abscess in 1885.

In 1885, Martin (⁶) performed laparotomy in three cases of intraperitoneal hæmatoma, *i. e.*, retrouterine hæmatocele. He opened the peritoneal cavity, incised the sac, and evacuated the blood and pus; he then drained into the vagina, through the pouch of Douglas, and closed the opening he had made into the sac from the peritoneal cavity by sutures.

In the discussion following the reading of Martin's paper, Kalténbach opposed Martin's operation, and pleaded for an extraperitoneal operation, reaching the abscess either from above Poupert's ligament, or, as Hegar recommended, from the ischio-rectal fossa.

In 1880, Feldman, (⁷) of Goettingen, published an operation for double pyosalpinx.

In 1882, Baumgaertner published a case of hæmatocele in which Martin's operation had been successfully performed.

These more or less sporadic operations called the attention of the profession to the subject, and already during the fol-

lowing year, 1883, upwards of fifty or sixty cases were reported, in which laparotomy was resorted to for the cure of pelvic inflammations.

Palliative Treatment of Uterine Cancer.

DR. GACHES SARRANTE, in an article on the treatment of uterine cancer (*Nouvelles Arch. d. Obstet. et de Gynec.*), thus summarizes the results of his experience :

In cancer of the uterus, frequent dressing with liquids, powders, or other antiseptic agents, presents the following advantages :

1. When regularly applied, they suppress absolutely the hemorrhages, even when rebellious.

2. They modify the nature of the lesion by removing the putrescent products which form on its surface, and give it the appearance of a healthy sore.

3. At first they calm the pains, which later return with increased intensity, finally to cease definitely.

4. They prevent the absorption of infectious products, and thereby greatly improve the general health of the patient.

5. They moderate the extension of the lesion, and prevent extension by contiguity to the vagina and bladder.

6. Finally, they permit the patient to live the life of the world at large, and, so to speak, to dissimulate her malady.—*Medical and Surgical Reporter.*

Pelvic Abscess Simulating Uterine Fibroid.

In this case, wherein the diagnosis of soft uterine fibroid was made, the patient was thin and anæmic. The abdomen was somewhat distended. A smooth, elastic swelling was felt rising up from the pelvis to the level of the umbilicus; it was not tender. The swelling was symmetrically situated with regard to the middle line. It was dull on percus-

sion; laterally, beyond the limits of the swelling, the abdomen was resonant. Nothing could be heard on auscultation over the tumor. The patient was put under the influence of ether in order that the relations of the swelling might be the more thoroughly determined. Through the speculum a sanious discharge was seen to be issuing from the os externum. A catheter having been passed to make certain that the bladder was empty, a swelling was felt in front of the cervix, depressing the anterior fornix. Bimanually, this swelling was found continuous with that already noted in the hypogastric region. The uterus was moveable; every upward impulse given to the cervix moved the tumor with it. The body of the uterus could not be made out distinctly from the tumor. It was thought that the latter extended rather further towards the left than to the right. The sound was not used on this occasion. The temperature was 101.4° on admission, and varied for some six weeks subsequently from 102° at night (on one occasion 103.5°) to 99° in the morning. Dr. A. H. N. Lewers, who reports the case in the *Lancet*, drew off a pint of very offensive pus by the aspirator, and the patient made a good recovery.—*Ibid.*

Treatment of Cystalgia in Women.

CHARLES MONOD gives the following classification of cystalgias in women :

1. Cystalgias due to lesion of the urethra (polypi and fissures).

2. Cystalgias symptomatic of a lesion of the bladder, inflammation, tumor, tubercle.

3. Cystalgias symptomatic of lesions in other organs, as those of the uterus and its annexa, or of the other pelvic viscera.

4. Cystalgias of nervous origin, *e. g.*, symptomatic of locomotor ataxia.

5. Such manifestations as can be traced to no cause, and which may be considered as idiopathic.

The treatment of these various conditions by forced urethral dilatation is advocated :

1. In urethral affections dilatation is beneficial because exerting a beneficial influence upon the spasmodic and painful element of the disease, and also upon the lesion which has produced and maintains the cystalgia.

2. In cystalgia caused by neoplasms, dilatation, while affording temporary relief, can only be recommended as a means of diagnosis, preparatory to the ablation of the tumor.

3. In the treatment of simple cystalgia, injections of boracic acid, nitrate of silver, and sedative preparations should be tried before resorting to surgical procedure.

When urination is persistently painful and frequent, forced dilatation which frequently gives unexpected relief, should be tried before establishing a vesico-vaginal fistula.

Observation shows that this method of treatment causes pain to disappear, and also improves the condition of the vesical mucous membrane, while it also permits the easier application of local remedies. In tubercular cystitis, dilatation may be practised as a final measure for the relief of pain.

4. In conditions designated as irritable bladder, forced dilatation is especially efficacious whether the cystalgia depends upon fissure of the cervix uteri, disease of the uterus, vagina, rectum or anus; indeed, unassociated with any recognizable lesion.—*Annales des Maladies Org. Gen. - Urin.*—*American Lancet.*

Methyl Iodide as a Vesicant.

After describing its properties in the *Brit. Med. Jour.*, Dr. ROBERT KIRK says:

From the preceding statements it will have been observed that the iodides of both ethyl and methyl are more powerful agents than the strong tincture of iodine already mentioned, and which Dr. Churchill considered the best of all applications to the cervix uteri. As distinguished from most other agents which are applied to the cervix or the interior of the uterus, iodine is characterized by its tendency to produce a serious instead of a plastic exudation, but in this respect it is much surpassed by its methyl and ethyl compounds. These circumstances point to the two latter bodies as peculiarly applicable where such effects of iodine are deemed desirable; and I have found the application of methyl iodide to the cervix have a remarkable effect in relieving pain in some forms of uterine disease. For milder effects and for application to the interior of the uterus the ethyl compound is an excellent agent. The effect of this body applied on a Playfair's probe to the fundus, and retained there one minute, is often remarkable. A few days afterward the cervix has generally the soft feel and even the somewhat purplish tinge of the cervix of pregnancy. The cervical canal will frequently admit a sound which could not previously be passed; while pain is almost invariably relieved. But this is a subject requiring to be treated in some detail, and it must suffice merely to allude to it in the present communication.—*Medical and Surgical Reporter.*

Vicarious Menstruation.

PUECH, in his collection of over two hundred cases of vicarious menstruation (*Cincinnati Lancet*) gathered from different authors, sums up his statistics as follows: Menstruation at roots of hair, 6 cases; by auditory canal, 6; by lachrymal ducts, 10; by nose, 18; by gums,

10; by cheeks, 3; by mouth, 4; by bronchial tubes, 24; from stomach, 32; by the breast, 25; by the axilla, 10; by the umbilicus, 5; by the bladder, 8; by the bowels, 10; by the hands, 7; by the lower limbs, 13; by various regions, 8. In young girls subject to vicarious menstruation the genitals are always moist with a muco-sanguinolent matter at the time of their courses.—*Weekly Medical Review*.

Thermo-Cautery in the Treatment of Chronic Metritis.

DR. E. Schwarz (*Centralbl. f. Gynaekologie; Amer. Jour. Med. Sci.*) advocates the use of the thermo-cautery in chronic metritis, and reports most satisfactory results from its use in thirty cases so treated. Complete cure and permanent alleviation of the symptoms have not resulted in every case; but this, he says, is not remarkable when the pathological and anatomical foundation of the affection is taken into consideration. In about one-third of the cases in which the wedge-shaped incision, recommended by Schroeder and Martin, was indicated, Dr. Schwarz, by means of the knife-shaped galvano-cautery, burned from each lip of the uterus a wedge-shaped portion of tissue about one inch in length, the same breadth, and from one-fifth to two-fifths of an inch thick at the base. Commonly, the same effects were obtained by the use of the cautery as with excision of the knife. In special cases the size of the portion removed was determined by the degree of hypertrophy existing. Ordinarily, without fear of persistence of the diseased membrane from one-fifth to one-third of an inch broad can be allowed to remain. This, after the disappearance of the abnormal condition of nutrition, rapidly shrinks and returns to a normal condition, so that in from

four to six weeks the parts are found fully covered with normal mucous membrane as far to the os uteri.

The application of the cautery is made in a few minutes. No assistance is necessary. A glass speculum neither too long nor narrow is required, and in order to avoid making this too hot a short pause is made in the application of the cautery, during which irrigation is practised. Ordinarily, the pain experienced by the patient is not severe, and she fails to discover the occurrence of anything unusual unless previously advised of the operation intended. Moreover, patient, who complained of severe pain from scarification of the parts, experienced no unpleasant sensation from the use of the cautery. After the operation the cauterized parts were dusted with iodoform and the vagina packed with antiseptic gauze. The patient usually only kept her bed two or three days.

Separation of the eschar usually occurred during the first eight days. Extensive suppuration as a result of the operation has not been noticed, but under the use of the iodoform tampon or sublimate gauze and irrigation, healing without extensive discharge has always quickly resulted.

In other cases in which such extensive hypertrophy did not exist, but in which it was necessary to reach the numerous dilated blood vessels, the wedge-shaped cauterization was not practised. A pointed cautery was used by which was burned into each lip a number of holes from one-fifth to three-fifths of an inch deep, and about the diameter of a goose quill. Cicatrization, under these circumstances, occurred more rapidly than in the cases first noticed, and without notable suppuration.

Hemorrhage was observed neither during nor after the operation, nor as a re-

sult of the separation of the eschar, and likewise but little inflammation or marked stenosis of the os uteri was noticed.

In every case there was marked and lasting improvement of the condition; in no case was the condition of the patient rendered worse. The results anatomically correspond to those clinically obtained.

In all cases there was more or less considerable diminution of the uterus, and a decrease in its vascularity. In some cases, however, it was found necessary to repeat the operation, owing to insufficient cauterization at first.—

Weekly Medical Review.

Operation for Vesico-Vaginal Fistula without the use of the Catheter in the After-Treatment.

DR. HUGH M. TAYLOR (*Va. Med. Monthly*). Before the lamented Sims contributed so much to perfect the operation for vesico-vaginal fistula, the use of the catheter, immediately after the occurrence of the fistula, was thought by many to be the only means at all likely to bring about a cure.

Professor Simon, of Heidelberg, has for some time contended that too much stress has been laid upon the use of all catheters after this operation, and also that the advantages of the metallic sutures and the necessity of absolute rest had been over-estimated. The patient we refer to had a fistula for twenty years, dating from her last confinement, which was instrumental in character. An examination showed that great destruction of tissue had resulted. The neck of the uterus looked as if it had been amputated close up to its vaginal attachment. There had either been destruction of its tissue, or the vagina was closely adherent to it, and covered it up; and the cicatricial bands had

drawn or turned what remained of the os through the fistula into the bladder. It was only by fishing for it in the bladder that the exact location of the os could be ascertained. The adhesions were old and strong, and no reasonable amount of stretching served to bring the cervix back into the vagina, and we did not think it probable that frequently repeated stretchings would bring about the result.

The fistula was as large as a silver dollar, and the only way we could get tissue enough together to close the opening was by attaching the lower border of the fistula to the remains of the posterior cervical lip, or, more correctly speaking, to the mucous membrane of the vagina covering it. The tissues were so changed and blended at that point that it was hard to tell one from the other. In doing this operation, the os was enclosed in the bladder, necessitating menstruation through that organ.

What made the operation much easier than it may appear, was that the vagina was short and very capacious, and the cervix pulled down low by the adhesions; this rendered it easy to bring the border of the fistula and the cervix in apposition. A large surface was denuded, and eight or ten sutures were necessary to bring it together.

A piece of perforated rubber tubing, such as we had used successfully before, and seen used in a number of cases, was introduced as a catheter. For the first twelve hours it did its work well, and the bladder did not rebel against its presence. After that time, however, violent tenesmus came on, lasting several minutes at a time, or, in fact, until the catheter was expelled. Several times it was re-introduced, but quickly driven out again. At last, as a matter of necessity, we were obliged to leave it out, and allow the patient to pass her

water, thinking this a lesser evil of two. We were under the impression that the catheter was the cause of the trouble, and hoped for its cessation as soon as we removed it. Our hopes in this respect, however, were not altogether fulfilled; for several days the bladder did not quiet down. Every twenty or thirty minutes the tenesmus would return, and last until a small quantity of urine was voided; and so frequent was the desire, that the patient kept the bed-pan under her all the time, and it was found impossible to keep her quiet. The straining was more like the second stage labor pains, and looked very much as if the bladder was trying to expel the neck of the uterus.

Frequently repeated doses of morphine and belladonna controlled the tenesmus to some extent; and finally, by the time the stitches were taken out, on the twelfth day, the desire returned only about every two hours, and was attended with but little pain and straining. Much to our surprise, the vagina remained perfectly dry throughout, and the union was found to be complete.

During all this disturbance, the urine remained free of mucus and phosphatic deposit. How much of this was due to the absence of the catheter, and how much to the free administration of lemonade, we are unable to say; but from the confidence we have in lemonade in limiting phosphatic deposit, we are inclined to assign some effect to both.—*Archives Genæcol., Obstet. and Pediatrics.*

[Within the past two months we have operated twice for vesico-vaginal fistula, using silk sutures and not using the catheter at all. In both cases the results were perfect.]

A. J. C. S.

Unique Case of Vesico-Vaginal Fistula.

DR. E. C. DUDLY recently reported to the Chicago Obstetrical Society the

following interesting case, in which the entire vesico-vaginal septum, the vaginal portion of the cervix, and anterior wall of the cervix to the internal os had sloughed away, leaving no bladder tissue between the inner extremities of the urethra and the points at which the vesico-uterine ligaments connect the bladder with the uterus. The only operation which seemed possible was to unite the posterior wall of the cervix uteri with the neck of the bladder. This would turn the uterus into the bladder and necessitate menstruation through the urethra. The anterior wall of the uterus could not be approximated to the neck of the bladder, but it was found, on further examination, that the mucous membrane of the bladder, if caught with the tenaculum about an inch in front of the uterus, could be drawn to the neck of the bladder and held without undue traction. The operator, therefore, undertook to close the fistula in this way, by denuding a strip of the mucous membrane of the bladder from side to side and inch in front of the uterus, and thus he utilized that portion of the bladder between the line of denudation and the uterus, and made it a substitute for the lost anterior wall of the cervix and vesico-vaginal septum. Twenty-two silver wire sutures were employed after Sims' method. Union by first intention followed, notwithstanding the failure of the nurse the third day to keep the catheter *in situ*, which allowed several ounces of the urine to accumulate in the bladder. Notwithstanding the decrease in the size of the bladder necessitated by the operation, the patient experiences no difficulty in retaining the urine all night. The operator is not aware that another case of this kind has been previously reported.—*Journal American Medical Association.*

Pelvic Anodyne.

As an example of pelvic anodyne, with special reference to the ovaries, DR. ALFRED MEADOWS (*British Medical Journal*) knows of none that can compare with conium, or, better still, with the alkaloid conia, used in the form of a vaginal pessary. In all cases, whether neuralgic or inflammatory, in which the ovaries are the seat of pain, conia is quite a specific. No drug that Dr. Meadows knows of, acts with equal certainty and success. Lastly, he supposes we are all agreed that bromide of potassium exercises a most powerful influence upon the ovaries. No drug, in his experience, can equal it in controlling ovarian mucorrhagia; it not only limits the flow in these particular cases, but, it seems, also, to exercise a distinct and controlling influence upon ovulation itself; hence its value in checking ovarian mucorrhagia, so far as regards its too frequent periodicity, for it certainly increases the length of the menstrual interval; in other words, it controls too frequent menstruation, or, as he prefers to say, too frequent ovulation.—*Weekly Medical Review.*

Palpation of the Pelvic Organs.

DR. B. S. SCHULTZE, of Jena, has recently published (*Centralbl. für Gynäk.*), an original communication on bimanual palpation of the pelvic viscera. He had already noted ("Ueber Palpation der Becken," *Jen. Zeitschr. für Med. und Naturw.*, 1870, v., p, 113) that the contracting and relaxing psoas muscle, along the brim of the pelvis, was an excellent guide to the fingers engaged in detecting the position of the ovary in the bimanual method. External pressure along the same part of this muscle will often, in cases of chronic oöphoritis, or complicated parametritis, cause

severe pain, especially when the hand passes over the ovarian vessels and nerves as they cross over the pelvic brim. [See reporter's note below, with regard to pressure on the obturator nerve.] When the psoas is kept in a state of clonic spasm, through apprehension of pain or through faulty position of the lower extremities, it may readily be taken for a swelling, the result of pelvic inflammation. As long as the psoas remains relaxed it cannot readily be distinguished by the hand placed upon the iliac fossa, but the pelvic brim can be felt through it. When, however, the patient bends her thigh, the brim cannot be felt through the contracting muscle, which becomes very evident to the touch and is distinctly tender.

Dr. Schultze finds that two muscles are to be detected on careful vaginal palpation, and to be taken into account as valuable guides to other structures. These are the obturator internus and the pyriformis. [The sphincter vaginae and levator ani are easy to detect. The anterior part of the latter, when in active contraction, is often mistaken for the former, which lies below it, separated sometimes by a distinct groove. The tendinous arch, whence part of the levator ani takes its origin, can be felt under the lateral part of the vagina; and, by passing the finger forwards towards the anterior bony origin of the muscle, behind the body of the os pubis, the obturator gland can be detected if it be enlarged or inflamed, as in some cases of pelvis cellulitis and gonorrhœa. Vaginismus is very frequently, we find, caused by painful contraction of the levatores ani in cases of fissure of the anus or inflamed hæmorrhoids.—REP.]

The obturator internus, Dr. Schultze states, is a muscle generally well developed, and its movements can be felt through the vaginal walls if the patient

rotate the corresponding leg outwards. Its contraction becomes particularly evident during extension and adduction of the thigh, when not only its origin around the obturator foramen can be defined, but also the portion lying further back towards the sciatic notch. Pressure on the contracting muscle seldom causes pain, but pressure on the obturator nerve produces sharp, crampy pains, radiating to the thigh along the course of the nerve.

[This, if misunderstood, may be taken to be symptomatic of some acute inflammatory process in the pelvic cavity. A thorough exploration of the vagina with the finger, in a case of suspected uterine disease, is very likely to involve pressure on the nerve, and this may become a source of fallacy. Pressure on the ovarian plexus must also cause pain even in health, and thus the tenderness is not necessarily a proof (*vide supra*) of chronic oöphoritis.—REP.]

The pyriformis is difficult to detect by vaginal palpation in subjects where the vagina is long, and the pelvis deep. It can easily be touched when the pelvis is shallow and the vagina broad, or in women of diminutive proportions. When the uterus is high up, as in advanced pregnancy, the finger can easily reach the upper border of the muscle. The pyriformis is, according to the evidence of palpation, very irregularly developed in different patients, and it is not so evidently set in action as the obturator, during active rotation outwards of the lower extremity. On the other hand, in many cases it remains in continual contraction, especially when the patient lies in an uncomfortable position, or is in a state of alarm. Pressure on the contracting pyriformis is often intensely painful, possibly, ("vielleicht," evidently might be said with full confidence.—REP.) through

transmission of the pressure to the sacral plexus. Through these peculiarities the pyriformis may become a prominent source of fallacy. Dr. Schultze, a few years ago, examined a very corpulent patient suffering from chronic metritis and parametritis. He took the two contracted pyriformes for the ovaries fixed to the back of the pelvis.

When both the pyriformes and the obturatores interni are set in action, the bulging of the obturators is most prominent a little behind the middle point of the foramen ovale. As each obturator bulges but little, there is not much chance of its being taken for a tumor or a collection of inflammatory deposit. The most projecting part of the pyriformis in full contraction is much more evident to the touch; it stands out three-quarters of an inch or more from the anterior surface of the sacrum. The inner borders of the two pyriformes in full contraction lie over an inch apart, so that two fingers can be pushed between them in vaginal palpation. The separate bands of fibres can be detected as they arise from the sacrum between the sacral nerves, provided that the muscle be set in action whilst the finger presses in the right direction. If the patient, lying in an easy attitude, have rotated the lower extremity outwards without setting the pyriformes in action, she should be told to hold the thigh stiff. This will set all the femoral muscles in action, and the pyriformes may then be distinctly felt. This will be sufficient to distinguish the muscles in question from a morbid growth or deposit.—*London Medical Record*.—*Journal American Medical Association*.

Some Uses of Cocaine in Gynecology.

DR. CHAS. HERBERT THOMAS, in an article published in *Medical and Surgical Reporter*, said:

I have found it particularly valuable in certain cases of cervical endometritis in which, though there may be no erosion externally, and but little characteristic discharge, there is a state of extreme sensitiveness existing about the region of the internal os uteri. A probe of cotton easily bringing blood and any application made to the part, is liable to produce bleeding and severe radiating and ovarian pain. Cocaine, carefully applied with the syringe or the cotton-carrier, prevents the pain and bleeding, which would otherwise follow the necessary medicinal application; the swelling being also materially reduced. The congestive or inflammatory stenosis which usually exists is consequently for the time, relieved, and applications to the part itself, as well as to the endometrium, are greatly facilitated. In urethral caruncle sensibility may be so destroyed that the painful excrescences may be clipped off and the site painlessly cauterized. Cocaine is also extremely useful in painful irritation and inflammation of the female urethral tract, and especially of the part just within the meatus, a condition attended with distress, frequently referred to the bladder. Appropriate medication is painlessly made after its application, which may be conveniently made by means of the glass medicine-dropper. As a means of preparation for the operation of stretching either the urethra or the cervix uteri, it is of unquestionable value. To precede the application of caustic to a chancre, it is also effective. I am informed by my friend, Dr. Levis, who has had a large experience with the drug, and who uses it extensively and with great satisfaction, that in plastic operations upon the vagina, where considerable surfaces are to be flayed, the cocaine anæsthesia is insufficient to prevent pain. It has been rec-

ommended in dysmenorrhœa, and there is good reason to believe from several reports which have been made, that it is capable of producing excellent results when applied to the os uteri and to the cervical cavity by means of a small cotton tampon. I tested it recently in a case of uterine colic, using it hypodermically in two doses of one grain each about half an hour apart, but without appreciable relief. It has been tried internally in doses of one grain or more in the vomiting of pregnancy, and has met with some favor, but in the only case within my own knowledge, it entirely failed.

In a case of vaginismus brought me by a practitioner from a neighboring city, the condition was quickly relieved by the local application of cocaine, and a complete examination was easily made, when without its use general anæsthesia would have been necessary. In a case of hyperæsthesia of the vagina, with mild vaginismus, in which frequent local treatment was required, a suppository containing one grain of cocaine, introduced into the vagina a half hour before each treatment, entirely abolished the spasm and rendered the introduction of the speculum easy and comparatively painless. Cocaine suppositories also produced excellent results in a case of rectal tenesmus after opium had proved insufficient.

Uterine Hæmostatics.

Uterine hæmorrhage is so frequent an accident, and in so many cases has such serious consequence, immediate or remote, that means for its arrest have been eagerly sought.

Probably the tendency of therapeutics in recent years is to rely less upon the gross elements of materia medica, the things which we can see, handle, weigh and more upon the subtle forces, such as

heat and electricity, which the physician can bring to his command. And this tendency is very clearly shown in the department of obstetrics and diseases of women. The astringents, mineral or vegetable, which were once in such vogue, are now rarely employed for the cure of uterine hæmorrhage.

We may, by certain remedies, such as digitalis, slow the circulation, and thus lessen the flow, but we do not thereby cure. When hæmorrhage results from an altered condition of the blood, so that it has lost its plasticity, and thus one hæmorrhage invites another, deep calling unto deep, we may in some of the cases ultimately cure the flow by remedies which improve the condition of the blood, a process, however, which requires weeks for its accomplishment. When the hæmorrhage is consequent upon a toxæmia, as malarial poisoning, medicines addressed directly to that state, such as quinine or arsenic, in most cases prove of marked value.

The tincture of Indian hemp has been strongly recommended in the hæmorrhage caused by uterine fibroids, and in menorrhagia associated with painful menstruation; it is an uncertain remedy, and when it does do good, probably it is solely from the relief of the pain which acts in causing an increased afflux of blood to the uterus. So, too, opium may, in like manner, act favorably in similar cases, yet neither of these remedies is to be regarded as a certain uterine hæmostatic. The alkaline bromides, from their sedative influence upon the ovaries, may have a beneficial influence in some cases of menorrhagia.

A few months ago a distinguished German authority reported very favorable results from the tincture of hydrastin. Kugelmann has recently stated that he had succeeded in causing the menopause by hydrastin administered

internally, and the local application of iodine.

Hamamelis has received the strong endorsement of Cheron in the October number of the *Revue Medico-Chirurgicale des Maladies des Femmes*. He advises fifteen to sixty drops of a tincture made of equal parts by weight of hamamelis and alcohol, twice a day. He also uses the solid extract, one part to five of glycerine, as an application to the neck of the womb, or the extract with cocoa butter, as a vaginal suppository. He asserts that this medicine exerts a positive influence upon hæmorrhages and passive congestions, and upon the pain which accompanies these morbid states.

Ergot probably ranks in the professional mind at the head of uterine hæmostatics. It certainly is one of the most valuable remedies both for the obstetrician and the gynæcologist. Without considering the obstetric uses of this agent, we may remark that its value in controlling uterine hæmorrhage bears a direct relation to the development of the uterus; if this organ be of normal size in the unimpregnated condition, the power of ergot is usually slight, whereas if it be much enlarged, as by a fibroid tumor, that condition termed fibrous pregnancy existing, more decided effects from the remedy may be justly expected. We believe, in all cases of uterine hæmorrhage, whether consequent upon a fibroid or not, and when the medicine is continued for a length of time, iron can be usefully combined with it, though there has been a vague notion that iron increases the flow, and, hence, is not to be administered when this is excessive. But in the ergot treatment of uterine fibroids, it frequently happens that a good result is not obtained until the medicine is administered hypodermically. In hæmorrhage from cancer,

ergot is useless; and this statement is true, whether the hæmorrhage be caused by active congestion as it is in the early stage of the disease, or whether it result from ulceration, as it does in the further progress of the malady.

Time permits a reference to only one other uterine hæmostatic, to wit, hot water. This is applied by means of a rubber bag to the lumbar vertebra, or by vaginal injections. For the vaginal use of hot water to lessen profuse menstruation the profession is indebted to Trousseau, though its general use in uterine hæmorrhage must be credited to Emmet. Vaginal injections of very hot water constitute one of the most certain means for the arrest of uterine hæmorrhage; in some cases the injection is carried into the uterus. Those who have frequently failed with this means certainly have not used the water hot enough, or in sufficient quantity, or with the patient in proper position.—*Medical Age*.

DISEASES OF CHILDREN.

New Cause of Prolapsus of the Rectum.

Such a case was reported by BOECKEL in the *Revue de Chirurgie*, and made the basis of some interesting remarks. The observation is made that the treatment of this accident in children is generally considered very difficult, and the cause is usually believed to be a too great laxity of the rectal sphincter. Since the year 1881 the author has contended for the importance which congenital narrowings of the upper end of the rectum exercise on the development of the rectal prolapsus. A congenital stenosis does not necessitate, inevitably, an immediate prolapse, such a condition may not appear until the child is six months or a year old.

The reason is that in early life the liquid stools of the child pass through

the stenosed portion easily, while later on, when they have become solid, they cannot do so.

In the cases which have been observed, the stenosis has always been situated at the junction of the rectum and the sigmoid flexure. The prolapsed portion has a conical form—an ox-horn shape—while in cases in which the prolapse is due to relaxation of the sphincter, it has a mushroom shape. An anal pessary has been devised by Boeckel for the cure of this trouble which consists of a stem seven centimetres long and eighteen millimetres in thickness, with an olivary extremity and a canal throughout its entire length. It joins a circular disc five centimetres in diameter, which is applied at the anus, the stem having been projected into the rectum. Four straps are attached to the disc, the two anterior ones being supplied with buckles, and anterior and posterior ones meet at the shoulders, thus fixing the apparatus. The instrument may be left in place without removal for two days, after which a bath will be required. After wearing it five or six days, a cure is usually produced. The theory of the operation of the instrument is that the contractions of the intestine constantly tend to push the stenosed portion downward upon the olivary extremity of the instrument and thus dilatation is effected.—*Archives Pediatrics*.

Bromide Sodium per Rectum in Convulsions of Childhood.

DR. D. E. KEEFE, of Springfield, Mass., kindly sends us the following history:

I was recently called to see a child, age five years, who had been in alternate spasm and coma for three hours, the mother and friends having tried all the household remedies and means usual in

such cases; could get no information tending to throw light on the cause; so I proceeded in the following manner: 1st, purgative enema which operated efficiently, and also induced vomiting; 2d, alternate dipping into tubs of hot mustard water and cold water, with cold to head; 3d, mustard pastes to feet, hot mustard cloth to spine and abdomen; 4th, dashing cold water in face and breast with rubbing and squeezing hands: all failed, and as he could not swallow I thought of sodii bromidum; dissolved 20 *grains* in a little water and injected into rectum; the convulsions ceased, the child passed into a quiet slumber, and no recurrence of attack has taken place, though two weeks have elapsed.—*obstetrics*.

On the Differential Diagnosis of Distention of the Fallopian Tubes.

By JOHN W. TAYLOR, F. R. C. S., in *British Medical Journal*.

The title of Dr. Horrocks' paper, "A Pelvic Tumor," seemed to invite friendly suggestion or criticism. But the further consideration of a particular case, the exact nature of which may probably never admit of absolute proof, will be unprofitable, while the broad question of the differential diagnosis of a distended Fallopian tube from an uterine myoma is an important one, and its discussion may be eminently profitable.

And because I do not quite agree with Dr. Horrocks in the leading features of this differential diagnosis, I desire to point out what in my experience are the chief marks of similarity and difference between the two diseases.

1. Menorrhagia may be common to both diseases, but in uterine myoma it is painless, in tubal disease it is very painful.

2. Moderate enlargement of the uterus (from 3 to 3½ inches) is present in

tubal distention accompanied by hemorrhage (as in most cases where metrorrhagia is a prominent symptom); an enlargement beyond this may generally be expected in myoma.

3. The tumor formed by distention of the Fallopian tube is always single or double, and is always posterior to the uterus; nodular myoma is usually multiple and the situation of the outgrowths variable.

4. The tumor formed by a distended tube, even when chronic and quiescent, is always very tender to touch, whether the touch be from the examining fingers of the surgeon or the passage of scybala through the rectum; a myomatous nodule, unless inflamed, is comparatively insensitive. Probably for a similar reason dyspareunia is a very general symptom of tubal disease but is almost unknown in myoma.

5. The outline or shape of a distended tube is fairly constant, in possessing a longer and a shorter axis; that of nodular myoma is round or quite irregular.

6. The tumor caused by a distended tube varies in its firmness or consistency, and at some time or other will show signs of elasticity or fluctuation; that of nodular myoma remains hard.

7. Both a distended tube and myoma of the posterior uterine wall may sink lower in the pelvis by causing retroflexion of the uterus, but, apart from this, the former, though adherent, tends to sink slowly by its own weight; the latter reaches a lower point only by increased growth.

8. When pregnancy occurs, the uterine enlargement being caused chiefly by the development of the muscular tissue of the uterus, a myoma of this tissue will be much more likely to be raised by the growing uterus than a distended tube, which is only adherent, and often but lightly, to its peritoneal investment.

The only other condition that is likely to be confounded with distention of the Fallopian tube is cyst or abscess of the ovary. A special form of cystic disease of the ovary is often, perhaps generally, combined with occlusion and distention of the tubes, and if the latter be correctly diagnosed in these cases, this is sufficient for every practical purpose. But ovarian abscess or cystoma of the ovary in an early stage, the associated tube remaining normal, needs rather careful differential diagnosis from a distended tube. I have found the chief point of difference to be this, that in a cyst or abscess of the ovary a space can be found between the tumor and the uterus unoccupied by any swelling; in distention of the Fallopian tube the tumor is continuous with the uterus. By this means I have on two or three occasions diagnosed a cystic condition of the ovary only, when tubal disease has been expected, a diagnosis which has been confirmed by operation.—*Obstetric Gazette.*

Puerperal Fever.

In the Vienna school puerperal fever is known as septic infection, depending (1) upon the local lesion; (2) the infection of these local lesions. Then follow: (1) high fever and inflammation of the genitalia; (2) peritonitis, or pyæmia. There are three varieties recognized.

First. Puerperal peritonitis, or puerperal endometritis, with a symptomatology of fever, unclean lochia, meteorismus, vomitus, and peritonitis. Post-mortem section shows endometritis consecutiva, salpingitis and peritonitis purulenta, with exudations.

Second. Puerperal metro-phlebitis or pyæmia without peritonitis, the septic virus passing through the placental sections to the uterine veins. As symp-

toms we have: High fever, chills, torpor, subinvolution of the uterus. The abdomen is flaccid and painless on percussion. There may be icterus and metastatic phlegmon.

Third. Peritonitis plus pyæmia, or lymphangitis uteri, or phlegmona pelvis septica.

The treatment is local when a woman begins to have fever on the second day post partum. The external genitals and vagina are washed with 1-2 per cent. carbolized water, or with a 1-5000 sublimate solution. When operations have taken place, and the lochia are pathological, and there is high fever, the uterus is irrigated, a glass tube being used. Iodoform bacilli, containing 5-6 grms. of iodoform, are placed in the uterus. The formula used is: \mathcal{R} . Iod. pulv., 18 parts; Amyl. puræ; Glycerinæ; Gum arabic, aa, 2 parts.

Ice applications to the abdomen are used in peritonitis incipiens. Ergot is used internally. The antipyretics used are quinine, 1-2 grms. daily; sod. salicyl., 3-4 grms. daily; antipyrin, 1-2 grms. daily. If these do not avail, the cold bath is resorted to. Alcohol is used freely in pyæmia, but never in peritonitis. In incipient peritonitis the following treatment obtains: Ice pills; ice cataplasms on abdomen; opium by the rectum, and quinine by rectum. In puerperal ulcers local applications of iodoform, or of iodol (which is expensive but devoid of odor), are resorted to. Salicylic amyllum (1 part of salicylic acid to 5 parts of amyllum), has also its merits. It has been found that the cases of puerperal metro-phlebitis, although attended with metastatic transference of the poison, forming abscesses and involving the lungs themselves, tend, in a large percentage of cases, to recovery; while those cases of puerperal peritonitis almost always end fatally.

Women seemingly moribund, in whom the whole system is poisoned, begin to recover as soon as elaborate metastatic action obtains. These patients are given alcohol very freely.—*Jour. Amer. Med. Ass.*

Statistics of the Lying-in Clinic.

Dr. Emil Ehrendorfer (Ueber anti-septische—locale—Behandlung in der Geburtshilfe (*Archiv. f. Gynäk.*, Bd. xxvii, Heft 2), writing of the statistics of the Lying-in Clinic here, for the the years 1882, 1883 and 1884, has furnished us with some very interesting data. In 1882 the puerperal mortality was 0.51 per cent; in 1883 0.33 per cent.; and in 1884 it was 0.32 per cent.—this including three cases of Cæsarean section. Puerperal fever in 1882 occurred in 4.31 per cent., in 1883, in 3.59 per cent.; and in 1884, in 3.08 per cent., while other pathological diseases resultant upon labor fell from 6.17 per cent. in 1882 to 4.87 per cent. in 1884; and all this from a strict attention to anti-septics and cleanliness in every possible detail. In these matters few people have a riper experience than Dr. Ehrendorfer. As first assistant to Prof. Spaeth he is responsible every year for about 3000 labors.

One is very much struck here with the rarity of perineal lacerations. The matter becomes plain, however, when one sees with what tact the perineum is handled during labor. The woman rests on her back until the head presses upon the vulva, then she is turned upon her left side, with the buttocks resting upon the edge of the bed, the legs well drawn up and kept apart either with a pillow or by an assistant. The nurse sits on the right side of the bed, with her back to the face of the patient; the left hand is passed over the right thigh of the patient, and manipulates the child's

head; the free right hand of the nurse keeps the perineum moist with carbolized water, and assists the left hand. The patient is enjoined not to bear down, and the head is kept back forcibly, so as to prevent a too sudden birth. The fingers of the left hand are occasionally run around the presenting part of the fœtal head, just inside the labia, or the head is gently moved toward the symphysis by a well directed action of the left hand. The main thing is to keep the perineum moist and to keep the head back. If there is thinning of the perineum, and a danger of laceration either lateral or bilateral, episiotomy is resorted to. If there be immediate danger of a central rupture, an incision is made from the posterior labial commissure, creating a laceration of the second degree, which is operated on immediately after labor. Lacerations of the first and second degree, and even sometimes of the third degree, are operated on immediately after the birth of the child, except when the woman's condition contra-indicates such a procedure. For all minor lacerations serres-fines are used. I have seen several cases of hydramnios lately, and apart from other methods, the curves made with the women in different positions are quite sufficient to distinguish this condition from others which may simulate it.

Inflamed Nipples.

The following ointment has been found useful: ℞. Ung. plumbi (nitrate), gr. xx; cocaine mur., gr. ii; tr. benzoin co., 3 ss. M. Sig. Apply locally.

Dr. Janeway's Laxative Pills.

℞. Ext. Belladon., ext. nux vom., gr. iij; resin podophylin, gr. vj; aloes soc., gr. xij. M. Ft. mass and divide into twelve pills. Take one on retiring.—*New England Medical Monthly.*

CONSTITUTIONAL DISEASES.

Typho-Malarial and Typhoid Fever.

The *Medical World* prints the following differential diagnosis quoted from an editorial in *Miss. Val. Med. Mo.*

Typho-Malarial Fever. *Typhoid Fever.*

No prodromes, but usually preceded by evidences of chronic malaria toxæmia, either latent—save in the form of blood charges, hepatic and splenic enlargements, etc.—or by well developed intermit-

Prodromic stage well-marked, by malaise, headache, disordered digestion, vertigo, disturbed sleep, mental depression, and great muscular weakness.

Onset marked by a distinct chill.

Chilliness accompanies the prodromes, and usually ushers in the febrile stage.

The fever often reaches its highest point on first or second day; sometimes intermittent, usually markedly remittent, the oscillations gradually growing less distinct as the fever continues.

The fever gradually ascends, with a remittent wave, reaching its acme on the evening of fifth or sixth day.

Countenance bright and expressive of cheerfulness and hope; cheeks florid, even in the presence of diminished quantity of red corpuscles.

Countenance dull, and expression indifferent, soon passing to drowsiness and stupor.

Tongue, at first white fur, then red, flabby, often glazed: as a rule does not indicate serious pathological change; sordes rare.

Tongue early becomes marked by a dry brown streak through centre; later, generally dry, brown and cracked; sordes the rule in place of the exception.

Pain in head of neuralgic character, and present, if at all, only during early stage of the fever.

Headache early, dull and severe, followed by coma.

Abdomen normal as a rule.

Abdomen distended and tympanitic, with gurgling in right iliac fossa.

Movements of bowels but little disturbed.

The *constant lesions* of Peyer's patches give rise to diarrhœa as one of the most uniform of all of the symptoms of typhoid fever. "The stools are at first dark, but early in the first week they become fluid, offensive, ochre-yellow, resembling 'pea soup,' and may be streaked with blood. 'They number from three to fifteen in the 24 hours.'"

Eruption rare and not characteristic when observed.

Eruption almost constant and well marked, consisting of fifteen or twenty small rose colored spots on abdomen, chest and back.

Rarely fatal.

A grave form of disease, from ten to thirty-five per cent. terminating fatally.

No specific treatment; quinine useless as an antiperiodic.

No specific treatment; quinine useless as an antiperiodic.

Pathology obscure, save that referable to malarial toxæmia.

Pathology well understood, and consists in certain characteristic lesions of the Peyerian patches and solitary glands. Mesenteric glands and spleen enlarge and soften.

Etiology, mooted.

A special typhoid germ, resulting from the decomposition of typhoid stools, and many times radiating from a central point where one case has contaminated the water, and assuming epidemic proportions.

Preventive Inoculation of Yellow Fever.

Dr. MEYRIGNAC employs the sediment of the urine of yellow fever patients, which contains the zoöspores of the peronospora lutea, and injects it, dissolved in distilled water, with a Pravaz's syringe. Three hundred Mexicans were inoculated before the epidemic of 1884, and not one has died. Inoculation is generally followed by an abortive attack of yellow fever, the symptoms being benign, slight, incomplete, and of short duration. This modified yellow fever seems to confer complete immunity from a second attack. —*London Medical Record.*

Chlorhydrate of Pereirine in Malarial Fevers.

Pereirine is an alkaloid derived from the bark of a shrub belonging to the Apocynaceæ family, the Geissospermum laeve, a native of Brazil. The bark of this plant has a very bitter taste, and is frequently used in the treatment of ma-

larial fevers, the patient being usually bathed in a decoction of the bark.

The late Brazilian chemist, E. Correia, was the first to extract from the bark of the Paupereira, as it is commonly called in its native country, an active substance of an alkaloidal nature, which he called Pereirine. This substance has since been used by many Brazilian practitioners in a variety of affections, with excellent results. Dr. Domingos Freire has succeeded in obtaining a combination of pereirine with the acids, and its use has been thereby greatly extended. The muriate and valerianate of pereirine are soluble, and chemically pure, in this respect being much superior to the alkaloid. I much prefer the muriate of pereirine, as it is very soluble in water, and have used it in many cases, always with marked success. Patients whose fever resisted the salts of quinine were promptly cured by the use of pereirine.

I have recently obtained a brilliant victory by the use of this salt. My patient was a woman, who for three months had suffered from a severe attack of malarial fever of an intermittent type. All the usual therapeutic agents had been employed without success. A change of climate had been tried without avail, the patient continuing to have the intermittent attacks.

On examination I found a marked enlargement of the spleen and liver, with jaundice and great emaciation. I prescribed chlorhydrate of pereirine in doses of two grammes (gr. 30), to be divided in four capsules, and taken four hours before the usual time for the beginning of the attack. This medicine was preceded by a dose of calomel.

As a result the patient had no attack on that day. But the following day the fever returned, no pereirine having been administered. On the following

day another dose was administered as before, and on a few subsequent days gramme doses were given.

The malarial fever has not since appeared, and the patient is well. In many cases I have found this drug valuable, especially in the intermittent fevers, and the malarial fevers of children. When the salt is to be given to children, I usually prescribe it in syrup of orange peel.

We all meet with cases of malarial poisoning in Brazil which resist quinine and arsenical treatment. In these cases the use of chlorhydrate of pereirine will achieve a brilliant success, and the practitioner will loudly praise this invaluable drug, which must henceforth occupy an important place in the therapeutics of malaria.—*Bull. Gén. de Thérapeutique.—Medical Age.*

On the Influence of Food on Animal Temperature.

PROF. HERING, in Kiew, has studied in detail the question of the influence of ingestion of food on the variations of animal temperature, and has come to some very interesting results, which we find published in the *Centralblatt für Med. Wiss.* The observations were made on a man in whom the operation of gastrotomy had been performed on account of œsophageal stenosis.

Hering found a fall in the animal temperature after each meal, and observed that the extent of this fall depended upon the difference in temperature between the ingested food and the stomach.

Ingestion of food and muscular action play, in Hering's estimation, a more important rôle regarding the daily variations of temperature than Liebermeister and other German observers have assumed. Our experimenter found that after the ingestion of hot food the pulse became quicker and soft, respiration

more hurried and superficial, and that the temperature fell in the rectum, but rose in the axilla.

On the contrary, after the ingestion of cold food the pulse became slower and hard, respiration slackened, and the temperature fell both in the rectum and the axilla. Vintchgau regards these phenomena as the results of the peptonization of ingested albuminates and the subsequently produced latent heat, while our observer attributes them to a nervous influence. In his estimation the ingestion of cold food produces a constriction of the blood vessels as the result of vaso-motoric irritation; in this manner an increase of the arterial pressure is caused, which directs the blood current from the intestinal tract toward the periphery. Thus the hard pulse and the sinking of the temperature in the stomach find a rational explanation.

The ingestion of cold food, on the contrary, leads to a general paralysis of the vaso-motor nerves, and an afflux of blood to the intestinal tract, while the heart increases its working power in order to retain its influence over the circulation at the usual height.

Alongside of these factors certain other influences require to be considered in the variations of temperature; among these are the periodical ingestion of food, various somatic and psychical actions of the organism, and, finally, time itself, for during the night the temperature is invariably lower than during the day.—*Ther. Gazette.*

On the Value of the Oil of Eucalyptus in some Malarial Affections.

DR. J. H. MUSSER (*Therapeutic Gazette*) concludes, from the above studies, it will be seen: 1. That the oil of eucalyptus is of decided value in about thirty-three and one third per cent. of

all cases of intermitting malarial fever. 2. That it has no specific value in any one type of the disease. 3. That the longer the duration of the disease, the less liable is it to do good. 4. That relapses are not prevented by it. 5. That its influence on the spleen has not been demonstrated. 6. That a dose of ten drops, four times daily, has been a sufficient dose, but that five drops every three hours would be of greater value possibly. 7. That good results are not attained as quickly as by large doses of quinine, but that a good effect should be observed within five days at least.

Buisson's Treatment of Hydrophobia.

According to the *Lancet*, centres have been established in London and in some of the provincial English towns, for the treatment of patients by this method. The *modus operandi* is briefly as follows: The wound is first washed with ammonia water. For seven successive days the patient has a hot vapor bath, with hot drinks, in order to promote free diaphoresis. It is positively affirmed by M. Buisson, that if the treatment is begun on the first day on which the symptoms of the disease make their appearance, a cure will be effected. Hundreds of "cures" have been reported, although, as the *Lancet* adds, "the sources of fallacy are innumerable."—*New York Medical Journal.*

Corrosive Sublimate in Diphtheria.

DR. WERNER, medical officer to a circumscribed factory population of about 2000, near Narwa, in the Gulf of Finland, writes in the *St. Petersburg Medical Journal*, describing the satisfactory results he has obtained in diphtheria by treatment with perchloride of mercury internally, combined with ichthyol inunctions. The

disease is very frequent and fatal in the locality, he having attended during the last six years ninety cases, the average mortality of which was between 60 and 70 per cent., the majority succumbing from general weakness when the local affection was passing off or after it had quite disappeared. Last year the type was peculiarly severe. In July, August and September eleven cases occurred, of which no less than nine proved fatal. From the end of September to the present time, however, during which period there have occurred seventeen cases, all of which were treated with perchloride of mercury, and many of which were very severe, there were only two fatal cases, neither of which was seen till a few hours before death. The author's method is as follows: For young children he dissolves a quarter of a grain of the perchloride in four ounces of water, for children of six or seven half a grain in six ounces of water, and for adults three-quarters of a grain in eight ounces of water. This solution is given to the patients while they are awake, every twenty or thirty minutes, in measured doses, so arranged that the quantities made up shall last from twenty to twenty-four hours—*i. e.*, about half a drachm in the case of young children and a drachm in that of adults. When a good deal of sleep is obtained larger doses are given at longer intervals. As a rule only milk is allowed as nourishment. If considerable pyrexia exists, an enema of from ten to thirty grains of antipyrin, according to the age of the patient, is given, the rectum having been previously cleared out. Externally ichthyol is diligently rubbed in over the swollen glands three or four times a day, the fingers being wetted with water when dry to permit of the rubbing being continued for some time. For the first two days of this treatment the local

affection usually undergoes no improvement, but on the third day it begins to diminish and the general condition becomes better, the appetite increasing and the children regaining their wonted spirits. In no case did the author meet with the extreme debility which was frequent in cases treated by pilocarpine, even when the local affection was decreasing. As the patients approach convalescence the medicine was diminished, so that more than six bottles was never required. Complications never occurred, though three of the patients had previously had scarlatina.—*Lancet*.

Rheumatic Arthritis and Charcot's Disease.

MR. W. ADAMS contrasts the symptoms of rheumatic arthritis of the hip joint and those of Charcot's disease, thus:

Rheumatic Arthritis. Charcot's Disease.

- | | |
|---|-----------------------------------|
| 1. Changes chiefly hypertrophic. | 1. Changes chiefly atrophic. |
| 2. Commences in the soft tissue. | 2. Commences in the bones. |
| 3. Painful throughout its course. | 3. Generally painless. |
| 4. Pain confined to the joint. | 4. Pains shoot through the limbs. |
| 5. No febrile disturbance. No gastric or ocular symptoms. | 5. All these are present. |
| 6. Reflex symptoms present. | 6. Reflex symptoms absent. |
| 7. Limited mobility. | 7. Flail-like mobility. |
| 8. Progress slow and chronic. | 8. Progress rapid and acute. |
| 9. Patients often reach old age. | 9. Patients seldom reach old age. |

—*Weekly Medical Review*.

Anti-Rheumatic Syrup.

A. FORT has found the following a serviceable combination:

R. Potass. iodidi, ʒv; potass. bromidi, ℥iv; syr. gentianæ, ʒ xvij; tr. iodinii, 20 drops. M. Sig. A tablespoonful morning and evening in chronic articular rheumatism. Besides this,

paint the painful joints with tincture of iodine.—*L'Union Med.—St. Louis Courier of Medicine.*

For Rheumatism.

A. J. CONGER has personally tested the following, and commends it :

℞. Potass. iodidi, ℥ ijss ; tr. cimicifugæ, ℥ iss ; vin. colchici sem., ℥ i ; ext. hyosciami fl., ℥ ss ; syr. simplici, ℥ v. M. Sig. Teaspoonful well diluted every four hours.—*New England Medical Monthly.—Ibid.*

Small Doses.

The present tendency in prescribing is to elegance and pleasantness. Although we have capsules, wafers, sugar and chocolate coatings, yet the drug may prove inert by the insolubility of the coating. Since the discovery of various alkaloids, small doses have become more common. If drugs be effectual in small doses frequently repeated, why not prescribe small doses ?

But do not understand me to say that we can prescribe for all diseases in this manner. There are some troubles which are only overcome by heroic doses.

In diphtheria, scarlatina, follicular tonsillitis, potassium chlorate in one grain doses every half-hour affords much relief, and is curative.

One grain doses of croton chloral every half-hour in many forms of neuralgia is beneficial.

In obstinate urticaria, salicylate of soda, in two grain doses every half-hour acts well; also drop doses of balsam of copaiba every half-hour.

The vomiting of drunkards is often helped by half-drop doses of Fowler's solution every half-hour. This is also good in vomiting of pregnancy.

In erysipelas, the muriate of pilocarpine, $\frac{1}{10}$ grain, hypodermically.

Wine of ipecac in drop doses every

fifteen minutes will often arrest obstinate vomiting caused by cancer ; also useful in children.

For vomiting of infants, A. A. Smith, of New York, has used one grain of calomel to one ounce of lime water; to this add one pint of pure water, and give a teaspoonful of the mixture every ten minutes.

In wheezing and cough of children with bronchitis, good results may be obtained with tartar emetic, one grain to two pints of water ; teaspoonful every half-hour.

Sick headache is often relieved by one drop of tinct. nux vomica every five minutes.

One of our best remedies for inflammation of the bladder is tinct. cantharides, one drop every hour.

In excessive menstruation, fl. ext. ergot has been successfully used in minim doses every half-hour, for six or eight hours before the expected flow. A simple febrile movement, with hot dry skin, full and bounding pulse, may be relieved by half drop doses of tinct. aconite root every half-hour ; also useful in acute nasal catarrh.

Sub-acute nasal catarrh, with abundant secretions, is often allayed by minim doses of tinct. belladonna every half-hour, until eight or ten minims are taken.

In malarial fever, when quinine fails, picric acid, gr. $\frac{1}{8}$, in combination with ammonia, is used with benefit ; also beneficial in pertussis.

In asthma, with indigestion and anæmia, Fowler's solution in one drop doses, often proves remarkably beneficial.

Apomorphia, gr. $\frac{1}{200}$ three or four times a day, often produces brilliant results in spasmodic cough.

Cannabis indica, gr. $\frac{1}{3}$ — $\frac{1}{2}$, given for weeks, is a useful agent in the treatment of megrim.

Atropia, in doses of $\frac{1}{200}$ of a grain, usually controls night sweats.

Digitalis, in small doses frequently repeated, exerts a beneficial influence over different kinds of hemorrhages.

Many troubles could be treated with small doses, and benefited as much, and often more, than to administer larger doses.—*Nashville Journal of Medicine and Surgery*.

The Preservation of Solutions for Hypodermic Use.

An ingenious method of preparing and preserving solutions for hypodermic injection, according to the *Pharm. Journ. and Trans.*, May 1, 1886, has been devised by M. LIMOUSIN. It consists in first sterilizing small glass globules, of rather more than a cubic centimetre capacity, and having a long drawn out neck, by heating them in a stove to about 200° C. These are filled with the solution, either by introducing the end of the neck of the heated globule into the cold liquid, or by injecting the hot liquid by means of a finely pointed syringe. The end of the neck is then sealed in a flame. The solutions are prepared hot, with water that has been boiled and previously filtered through a Chamberlain filter. M. Limousin rarely uses distilled water, as he considers the salts present in ordinary water retard the invasion of fungi. Under these conditions he states that solutions of ergot and hydrochlorate of morphine have remained intact for upwards of a year. When required for use, the fine neck of the globule is broken off, and a sufficiency of the liquid taken up in a syringe direct.—*Therapeutic Gazette*.

The Temperaments.

Sanguine.—The body lithe and active; the complexion ruddy and freckled;

the hair sandy or light auburn; the eyes gray or light hazel; the mind resolute, active, sanguine.

Nervous.—The body light of build, rather slow of movement; the complexion fair; the expression thoughtful and intelligent; the hair flaxen, or very light brown; the eyes blue, or bluish-grey; the mind active; but as is commonly said, nervous.

Bilious.—The body inclined to be heavy, but often powerful; the complexion dark; the hair dark: the eyes dark; the mind thoughtful, reflective, determined, and often sad; bilious.

Lymphatic.—The body large and cumbersome; the muscles large and flaccid; the movements slow and hesitating; the complexion pale; the expression heavy and dull; the hair light and scanty; the eyes bluish-grey; the mind slow, but not unhappy—rather, in fact, of easy and careless disposition; supine, lymphatic.

In a little time the observer soon sees the combinations of these temperaments, and writes the temperament down, whether it be simple or compound, almost at a glance.—*Medical World*.

Musk.

A very important and almost entirely neglected remedy in adynamic febrile conditions is musk. Many years ago Trousseau very earnestly called the attention of the profession to the value of the remedy in the treatment of adynamic pneumonia of drunkards, and the wonderful effects which I have seen in such cases led me to employ the remedy in typhoid fever. Thus in the case of an old man over 70 years of age, who for twenty years had been perpetually intoxicated, who was wildly delirious, fighting furiously so that he had to be tied in bed, a dose of musk would pro-

duce calm, lasting for six hours, when the old delirium would return. The reason that musk has fallen so largely into disuse is probably because its expensiveness has led to its being employed in too small doses. What the proper dose of pure musk is we have no idea, because there is no reason for believing that we ever see this drug in a state even approximating purity; but of the best commercial article there is no use in exhibiting less than ten grains. It is best administered by rectal injection, the dose being suspended in an ounce of mucilage of acacia, to which is added 10 to 20 drops of laudanum, in order to secure its retention. The indication to meet when musk is given in typhoid fever is a sudden collapse. Perhaps the use of the drug can best be illustrated by briefly speaking of two cases in which its effects were very marvellous. In the one case I was called in consultation to see a young woman in the fourth week of typhoid fever. I found her with a markedly subnormal temperature, with a pulse that was rising and so rapid and feeble as scarcely to be counted, and with a skin bathed in cold sweat. The expression of the countenance was Hippocratic, the extremities icy cold, and as she lay upon her side there was perpetual retching and regurgitation without effort. No medicine or food had remained upon the stomach for some hours. I said "What is the use of calling me to see this case? she will be dead in a few moments;" but suggested, after some hesitation, a trial of the musk injections. I did not hear further from this case for some months, until incidentally speaking to the gentleman who had called me to consult upon the typhoid fever case which he had lost, he informed me that the woman had not died, but under the influence of the

musk her skin had dried, her temperature risen, the pulse gained in force and lost in frequency, and the stomach became retentive so that the small doses of pure brandy given were kept down, and finally the case progressed well until convalescence. In a contrasting case with this, a boy aged 18, was in the fifth week of an exceedingly violent attack of typhoid fever; the temperature which had already become irregular in its rhythm, one day swung violently upwards; it was $105\frac{1}{2}^{\circ}$ F. and still rising. The lad was put in the ice water pack; this reduced the temperature in twenty minutes to $102\frac{1}{2}^{\circ}$ F. He was then taken out, but half an hour afterwards the temperature had again risen above 105° F. The renewal of the pack caused again an exceedingly rapid fall, showing that the resistive vital forces were very feeble. The second time the temperature rose to 106° a few moments after the boy was taken out of the pack, and again it was reduced by the pack; again it rose as rapidly as before, and there seemed no way of controlling the fever save only by the perpetual use of cold water, which was of course out of the question. The rise of temperature, it should be stated, was accompanied by great nervous disturbance, and by delirium; there was excessive anxiety, the fear of impending death, perpetual restlessness, almost convulsive in its tossings. A full dose of musk was ordered, and in the course of twenty minutes the temperature had fallen below 103° F, the pulse had gained greatly in strength, and the nervous restlessness was completely abated. The symptoms in these two cases were seemingly antagonistic, and yet they rested upon the same condition of vital exhaustion. In the one case the vaso motor centres had given out, and there was a corresponding fall of bodily

temperature. In the other case the nervous centre, which inhibits the production of animal heat, entirely lost its power, and its sudden paralysis was followed by immense rise in the bodily temperature. The stimulant action of the musk had in either case the effect to restore power to the exhausted nerve centres. The great indication for the use of musk is such giving out of the nervous centres which preside over organic life. In the last case mentioned these paroxysms of exhaustion were sometimes marked chiefly by peculiar rigors simulating those of an intense and very adynamic pyæmia. Nothing would control these rigors so well as musk.

In the employment of musk in adynamic conditions of the body, it must be remembered that it is one of those remedies that rapidly loses its power by repeated employment; its use, therefore, must be economized, and the injections ought not to be repeated oftener than is necessary, or indeed to be given until demanded by the pressure of urgent necessity.—*Therapeutic Gazette*.

Chronic Tea Poisoning.

DR. BULLARD (*Boston Medical and Surgical Journal*) concludes: 1. That the action of tea is cumulative. 2. That its action is more pronounced on the young and on those subject to anæmia, or in a depressed physical condition, although persons otherwise healthy, not infrequently show toxic symptoms. 3. That among the class of people under consideration, who, as a rule, use medium grades of Oolong and English Breakfast tea, the average amount needed to cause toxic symptoms is a little less than five cups per diem. 4. That chronic tea poisoning is a frequent affection, and that its most common symptoms are loss

of appetite, dyspepsia, palpitation, headache, vomiting and nausea, combined with nervousness and various forms of functional nervous affections, hysterical or neuralgic. These symptoms are frequently accompanied by constipation and pain in the left side or cardiac region.

The Physiological Action of Urethane.

PROF. COZE, of Nancy, sums up the physiological action of urethane, the new hypnotic, as follows: 1. Urethane has a marked hypnotic action, causes muscular relaxation, and, in large doses, anæsthesia. 2. It lowers the pulse and respiration, and reduces temperature. 3. It is slightly irritant, but may be administered subcutaneously. 4. It does not disturb nutrition, nor the fluids of the body. 5. It is, physiologically, an antidote for strychnine. 6. It should be tried in all cases of convulsions, particularly tetanus.—*Buffalo Medical and Surgical Journal*.

Francisceine.

Francisceine, according to the *British and Colonial Druggist*, is proposed as the name of a new alkaloid which has just been extracted from the Brazilian manaca root, the produce of the *Francisca uniflora* and certain other species. The principle in question has a very powerful purgative and diuretic action, and is also possessed of diaphoretic and emmenagogue properties.—*Lancet*.

DISEASES OF THE URINARY ORGANS.

Subcutaneous Use of Ergotinine in Diabetes and Albuminuria.

DR. DEHENNE (*L'Union Médicale*), claims to demonstrate:

1. That ergotinine or ergotinine subcutaneously will cause the temporary

and often the permanent disappearance of the glycosuria, polydypsia, polyuria, emaciation, and weakness of diabetes.

2. That these symptoms disappear in a regular order—the polyuria and polydypsia disappear after 5–8 injections; the glycosuria lessens after the second or third injection, and disappears after the tenth or twelfth.

3. That the glycosuria reappears if the treatment be stopped too suddenly.

4. That the disappearance is permanent after six or eight weeks of treatment.

5. That the injections are entirely harmless.

6. That by this treatment, diabetics can be prepared for any surgical operation, particularly cataract.

7. The freedom of this treatment from digestive disturbances.

He injects six to ten drops—sometimes more—daily.—*Analectic.*

Arsenite of Bromine in Diabetes Mellitus.

Following the advice of Dr. Austin Flint, Jr., DR. N. S. DAVIS, JR. (*Journal of the American Medical Association*) has been testing the value of liq. brom. arsenitis, and reports that all the cases in which he has administered it have uniformly been improved. The treatment consisted in directions as regard diet, and the use of the arsenite of bromine in doses of 3 to 5 drops three times daily. Of course it is very doubtful as to whether the improvement in the cases reported by Dr. Davis was due to the medicine which was given or to the restrictions of the diet, since, as is well known, the latter alone, without any medication, will, in many cases, be sufficient to produce decided improvement. Dr. Davis gives the following summary as to restrictions in diet which are advisable:

ARTICLES OF FOOD FORBIDDEN.

Bread, cake, pastry of all kinds, and food prepared with flour, cracked wheat, oatmeal, rice, potatoes, turnips, beets, beans, corn, carrots, prunes, grapes, figs, bananas, pears, apples, preserved fruits, liquors of all kinds, whether distilled or fermented.

ARTICLES OF FOOD PERMITTED.

Soups, except those rich in vegetables, meat of all kinds, fish, egg, oysters, radishes, cucumbers, cresses, celery, lettuce, spinach, cauliflower, cabbage, tomatoes, oyster-plant, onions, string-beans, parsley, mushrooms, salads, pickles, olives, oil, lemons, gooseberries, currants, sparingly of raspberries, strawberries, oranges, milk, tea and coffee without sugar, but with glycerine in its place if desired.

More or less variation can be allowed from this in mild cases, and in severe cases more rigor may be required, although it is difficult to hold a patient to a diet more rigid than the above.

An Experimental Study on the Toxic Power of Febrile Urine.

Before the Académie des Sciences the author narrated the results of forty experiments which he had performed with M. Ehrmann. They were summarized as follows:

1. Uræmia tends always to coma, and almost always to death, but this tendency is more marked than when normal urine is used.
2. Smaller amounts of febrile urine (two-thirds or one-half) are needed to cause uræmia.
3. The toxic power of urine cannot be estimated by its density.
4. There are in febrile urine toxic agents which are not even in small proportion in healthy urine.—*Gaz. Hebd.*
—*Analectic.*

DISEASES OF CIRCULATORY ORGANS.**Right-Sided Endocarditis.**

DR. BYROM BRAMWELL finds :

1. That right-sided endocarditis is much more frequent than is usually supposed; and that this conclusion is in no way contradicted, but on the contrary, rather confirmed, by clinical evidence and clinical facts.

2. That Sibson's arguments against the tricuspid murmur of early acute rheumatism being indicative of right-sided endocarditis, are not valid.

3. That a tricuspid murmur occurring in the early stages of acute rheumatism in a previously healthy person who is not anæmic, is indicative of a rheumatic affection of the right heart.

4. That whether (*a*) the tricuspid regurgitation is the *direct* result of the inflammation of the tricuspid valve, or whether (*b*) it is due to a rheumatic affection of the wall of the right ventricle, with resulting relative or muscular incompetence, the pathological evidence seems to show that when the right heart is so affected in acute rheumatism as to produce a tricuspid leakage, inflammation of the endocardium of the right heart is often (usually) present.

5. That although right-sided endocarditis is of frequent occurrence, it is comparatively seldom followed by permanent organic disease of the tricuspid valve; in short, that right-sided endocarditis is an eminently curable affection.

The importance of this conclusion, if it be correct, can hardly be over estimated. It is not a conclusion of mere scientific and pathological interest, but is of the greatest practical and therapeutical value. It shows the immense importance of rest in the treatment of endocarditis. The only reasonable explanation of the fact that mitral endo-

carditis is more severe and more frequently terminates in permanent valvular disease than tricuspid endocarditis, seems to be that the closure of the mitral segments is more forcible and that the inflamed mitral segments are subjected to greater strain than the tricuspid segments. In treating cases of mitral endocarditis our main objects should be to imitate nature's method of cure; to place the mitral valve, so far as we are able to do so, in the same condition as the tricuspid valve; in other words, to reduce the force (and also the frequency) of the cardiac contractions and to allow the products of inflammation to be absorbed just as they are usually absorbed on the right side of the heart.—*American Journal of Medical Science.*

Fatty Heart.

PROF. BARTHOLOW speaks very favorably of the use of nitro-glycerine persistently in the treatment of fatty heart. It takes the strain off the weakened organ and allows it to gain strength while its work is lessened.

Mycotic Endocarditis.

DR. WYSSKOWITSCH details the particulars of an experimental inquiry into the nature of ulcerative endocarditis (*Virchow's Archiv.* 103, Heft 2), to which is prefixed an account of the histological examination of twelve cases of endocarditis in the human subject. Four of these cases were chronic valvular thickening with calcification and necrotic areas, surmounted by warty deposits of fibrin; in four others the vegetations were more or less vascularized at their union with proliferated endothelial layers (thrombo-endocarditis); the ninth case appeared to be a chronic condition of the preceding; the tenth and eleventh showed post mortem œdema after

chronic endocarditis, with, in one case, bacteria (undoubtedly saprophytes). Lastly, there was a recent case of ulcerative endocarditis, which yielded abundance of micrococci on the valves, in the spleen, and kidneys; on cultivation the micro-organisms had the characters of staphylococcus pyogenes aureus. The experiments which form the second part of his paper consisted in inflicting on rabbits an injury of aortic valve by means of an instrument passed down the carotid artery; then injecting into a vein a few hours later cultures of various micro-organisms. It was shown that the operation of piercing the valve was well borne, and not *per se* followed by any pathological consequences; but that the inoculation was often productive of a malignant mycotic endocarditis upon the injured valve, with secondary metastasis, as in human ulcerative endocarditis. These positive results occurred when the inoculation was made with either of the following micro-organisms: Streptococcus pyogenes, staphylococcus pyogenes aureus, and coccus sepsis (Nicolaiier); but the injection of micrococcus tetragonus and bacillus pneumoniæ had no such sequel. It was also found that the staphylococcus produced much inflammatory reaction and supuration, whereas the streptococcus, although causing much more valvular deposit and more numerous infarctions, had no such severe action. The changes in the heart and vessels were not limited to the valves pierced by the stylet; the micrococci growing also on the mitral valve and aortic wall, which happened to be eroded by the passage of the instrument. It is, therefore, suggested that mycotic endocarditis may be of various forms, depending upon different varieties of micro-organisms. Other experiments to induce endocarditis after inhalation and subcutaneous injection

of streptococci yielded negative results; but it was found that the rabbit can only bear inhalation of very small quantities, and it was doubtful if the micro-organism entered the blood stream at all. Professor Orth, under whose direction this research was undertaken at Göttingen, comments in another article upon the results obtained; they prove, he thinks, that the term "disposition" is no empty one, the mechanical injury of the tissue laying it open to the attacks of the micrococcus which is deposited in the clots. The experiments show also how slight may be the amount of injury required to so lower the vital resistance of the tissue.—*Lancet*.

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DISEASES OF THE NERVOUS SYSTEM.

Stammering and Stuttering.

DR. J. D'ORSEY writes to the *British Medical Journal*, that as much misapprehension exists concerning the above subjects, the following may be of interest:

1. Speech, or articulated voice, depends for its perfect production on vigor of mind, on sound natural organization, and on due training of the vocal or articulating apparatus.

2. Stammering is inability to articulate, marked by slowness, stoppage, hesitation, and indistinctness, but not with repetition; whereas, stuttering consists in a painful repetition of the same consonants, often attended by flushing and facial contortions.

3. Stammering and stuttering may sometimes be caused by organic defects, such as cleft palate, harelip, enlarged uvula, inflamed tonsils, etc.; but these impediments are far more frequently due to functional causes, that is, habit, imitation, heredity, etc. Nervousness is often the consequence, or concomitant of stammering, rather than its cause.

Organic defects must, of course, be treated medically or surgically, but the subsequent cure belongs to the elocutionist, while functional derangements (wrong action of the voice apparatus) are peculiarly his province.

4. The sooner the curative process begins, the greater is the prospect of success. What is easily eradicated at an early age becomes hard to remove at a later period; though at any time of life, alleviation, if not cure, can be assured as the result of perseverance. "He will grow out of it," is a fatal saying. A fair time ought to be given, according to the nature of the case; for "a few lessons" cannot reasonably be expected to undo the mischief of many years; and the teacher is often accused of failure, when the blame is solely attributable to the patient or the parent.—*Med. Record.*

A Novel Method of Treating Hysteria.

RUAULT (*France Médicale*) affirms that he has frequently controlled an hysterical fit by making firm pressure with the thumbs on the supraorbital nerves at the supraorbital foramina. The patients are described as first contracting the facial muscles as if in pain; they then cry out and take several inspirations, followed by a long expiration. They now relax their muscles, and the convulsion is at an end. Pressure should not be maintained after this, lest another attack be excited.—*New York Medical Journal.*

Tonga in the Treatment of Hemicrania.

DR. JOHN HENNING, in a letter to the *Therapeutic Gazette*, reports a case of severe hemicrania in which all of the usual remedies had been administered over a period of two months. The patient was free from pain only when under the influence of morphine. Fluid

extract of tonga was finally tried, in doses of thirty minims every three hours, three successive doses being administered in the course of twenty-four hours.

A radical cure was obtained after the use of nine doses.—*Ibid.*

DIGESTIVE TRACT.

Pilocarpine in Ascites.

DR. H. C. COATES, of Valparaiso, Ind., sends us the history of a patient 70 years of age, on whom he had performed paracentesis abdominis for three consecutive times, removing at each operation from one to three gallons of fluid. Despairing of curing his patient, whose disease resulted from an alcoholic liver, he prescribed pilocarpine, 1-6 gr. morning and evening, with two ounces of whiskey. No improvement following, the dose of pilocarpine was increased to 1-3 gr., morning and night, in a like quantity of whiskey. This increase of dose caused the doctor says, excessive perspiration, and every day following the third operation brought with it a decided improvement, and in six weeks from the final puncture, the patient was well.

Jaundice.

PROF. BARTHOLOW says that when the cause of jaundice has been removed, salicylic acid will remove the bile pigment from the blood more promptly than any other drug.—*Medical Brief.*

Carbolic Acid in Indigestion.

Carbolic acid internally, two to four drops, is a better antacid in indigestion than any alkali. It arrests fermentation and usually gives quick relief in nausea and vomiting of pregnancy.—*Am. Prac. and News.*

The Differential Diagnosis of Gastric Ulcer, Chronic Gastritis and Gastric Cancer.

Dr. A. R. DAVIDSON, in an article published in the *Buffalo Medical and Surgical Journal*, quotes the following from Da Costa's Medical Diagnosis :

Chronic Gastritis.

1. Pain at the epigastrium somewhat augmented by food; also soreness. Both constant, although comparatively slight.

2. Symptoms of indigestion.

3. Sometimes vomiting.

4. No hemorrhage, or but trifling hemorrhage; and even a trifling hemorrhage is rare.

5. Bowels constipated.

6. No fever.

7. Not much emaciation; no cachectic appearance.

8. Not confined to any age. More common in middle-aged or elderly people.

9. Disease may be relieved or cured, or is of very long duration.

10. No tumor.

Gastric Ulcer.

Pain at the epigastrium much augmented by food; subsides when this is digested; paroxysms of pain, but not lancinating; a strictly localized soreness to the touch in the epigastric region, sometimes a painful spot over the lower dorsal vertebrae. Intermissions in the pain of considerable length are frequent.

Symptoms of indigestion sometimes very slight.

Vomiting may be present or absent.

Abundant hemorrhage from the stomach common.

Bowels may or may not be constipated; usually are.

No fever.

Frequently extreme pallor and debility.

May occur in middle-aged persons; but is also frequently seen in young adults, especially in young women.

Duration uncertain; may get well, may run on rapidly to perforation, or may last for years.

No tumor.

Gastric Cancer.

Pain frequently of a radiating kind, often paroxysmal, not unusually severe and lancinating, but not of necessity associated with soreness. Little or not at all affected by food. Pain rarely remits; never intermits for any considerable time.

Symptoms of indigestion. Anorexia; extreme acidity of stomach.

Vomiting a very frequent symptom.

Hemorrhage not very abundant, but occasioning frequently coffee-ground looking vomit.

Bowels obstinately constipated.

Attacks of moderate fever may occur.

Gradual and progressive loss of flesh and debility; and at times with the cachexia hypertrophy of the peripheral lymphatic glands, especially above the clavicles.

Most common in elderly people; rarely occurs in persons under 40 years of age.

Average duration 1 year; may be shorter, but seldom longer; very rarely reaches two years.

Generally a tumor.

To these I would add the following :

11. Free hydrochloric acid may be present in the gastric contents.

12. Urinary examination abundant deposit of urates common.

13. Microscopic examination. Sarcinae ventriculi sometimes present in cases of long standing.

14. Eructations from stomach; odor not abnormal.

15. Causation often referable to abuse of alcohol, gormandizing, and certain diseases, as nephritis, phthisis, cirrhosis of liver, etc.

Free hydrochloric acid usually present.

Urinary examination normal.

Microscopic examination. Sarcinae ventriculi (very rare).

Eructations from stomach; odor not abnormal.

Causation unknown.

Free hydrochloric acid usually absent.

Urinary examination frequently shows marked diminution of urea, occasionally an excess of acetone and indican.

Microscopic examination. Sarcinae ventriculi not infrequent; fragments of cancerous tissue may be found in the ejecta from the stomach. (Rare.)

Eructation from stomach; a peculiar fetor. (Rare.)

Causation unknown.

White of Egg in Obstinate Diarrhœa.

From the *Allg. Med. Cent. Zeit.*, we learn that Celli has recently called attention to the curative properties of the albumen of hen's eggs in severe diarrhœal affections. In a discussion before a medical society at Rome, he advocated its use, and related two cases of chronic enteritis and diarrhœa, which, having resisted all treatment, speedily made complete recoveries under the use of egg-albumen. The same diet is strongly recommended in the diarrhœa accompanying febrile cachexia and in that of phthisis. In two cases of diarrhœa dependent upon tertiary syphilis, it was found of no avail. On post-mortem examination, diffuse amyloid degeneration of the arterioles of the villi was found in these cases. The whites of eight or ten eggs are beaten up and made into an emulsion with a pint of water. This is to be taken in divided quantities during the day. More may be given if desired. The insipid taste can be improved with lemon, anise, or sugar. In case of colic, a few drops of tincture of opium may be added.—*Maryland Medical Journal*.

Krull's Method of Treating Catarrhal Jaundice.

M. R. LONGUET gives an account of this treatment and of Lowenthal's confirmation of its efficacy. It seems that Krull published an account of his method in 1877, but that it excited little attention until Lowenthal took it up. It consists simply in the administration of enemata of cold water; the first injection, of one or two quarts, at a temperature of 50° F., is thrown in gently and retained as long as possible; on the succeeding days an enema is given every morning, the temperature being gradually increased to 71.6° F., which

is not exceeded. The cure is generally accomplished by the fourth day, and in no instance have more than seven injections been found necessary. No failures are mentioned, although several of the cases were of long standing and had resisted the most varied treatment, including the use of that *ultima ratio* of the Germans, Carlsbad water. No medicine is allowed to be taken, and the diet is restricted to vegetables. Lowenthal, who used injections somewhat colder than those mentioned, tried the method in forty-one cases, and he absolutely confirms Krull's report of its efficiency.—*New York Medical Journal*.

The Effect of Bitters on Digestion.

DR. CHELTSOFF (*Lancet*), has been performing experiments with a view of determining the true action of bitter extracts upon digestion. The drugs tested were the ordinary bitters—quassia, cascarilla, calumba, gentian, etc.—and the deductions were briefly as follows: Bitter extracts, even in moderate doses, interfere with gastric digestion. In large doses they diminish the secretion of gastric juice; small doses may cause a temporary increase, but they diminish its digestive power. Bitter extracts do not affect the pancreatic secretion, but they do retard the further process of digestion which proceeds below the pyloric orifice. They affect the flow of bile either not at all or only slightly. They impair the assimilation of nitrogenous food.—*Ibid*.

Tr. Phytolacca in Constipation.

PROF. BARTHOLOW recommends for constipation with deficient excretion of bile, the tincture of phytolacca.—*Medical World*.

DISEASES OF RESPIRATORY ORGANS.

Chromic Acid in Nasal Obstruction.

DR. BRESGEN, of Frankfort, in a recent number of the *Revue Mensuelle*, gives the result of his use of chromic acid in reducing hypertrophied tissue in the nasal fossæ. He places a few crystals on a cotton covered probe and presses them against the tissue to be destroyed. The mucus dissolves the acid and the agent becomes active. He believes the wound from the galvano-cautery is longer in cicatrizing than that from the application of the acid. Cohen, in commenting upon this (*American Journal Medical Science*), says that he has known a perforation of the nasal septum to occur by the careless use of chromic acid, which danger should be borne in mind by all who use this useful agent.

For some time I have used chromic acid more than any other agent for the reduction of nasal occlusions or obstruction from hypertrophy. There are few cases where it should not be preferred to the galvano-cautery. An ounce of chromic acid on a physician's table will, if rightly used, greatly prolong the period of existence of the cautery battery, and, it may be added, should be used as carefully as the cautery. When the hypertrophies are large and greatly indurated, the cautery loop or the wire écraseur will be demanded, but these cases are in the minority.—*Weekly Medical Review*.

The Breasts of Male Consumptives.

According to M. LEUDET, there sometimes exists a congestive swelling of the breasts of male consumptives that is related to the pulmonary disease. There is no deposit of tubercle. The author has observed three cases of this mam-

mary enlargement. The breast is first swollen throughout, and has the character of a disk whose diameter is about three to five centimeters. The skin that covers the gland does not exhibit any change in color, and the subjacent connective tissue is unaffected. After one gland has enlarged the opposite organ may be affected. Pain is experienced in the diseased gland and may radiate round the thoracic wall. This swelling is especially liable to occur on the side the lung of which is most diseased, or when pleuritic attacks are notably present. The swelling is regarded as due to a congestion, the result of irradiation from the central disease. The lymphatic glands are not swollen. After lasting from one to several months, the swollen mamma returns slowly to its normal size; suppuration has not been known to occur.—*Lancet*.—*Practitioner and News*.

Shoulder Joint Friction and Incipient Phthisis.

DR. ANGEL MONEY thus writes in the *Brit. Med. Jour.* :

My object in this brief communication is to draw attention to a certain physical sign that not unfrequently leads to error. As the first physical sign of incipient phthisis is frequently a mere adventitious sound heard over some part of the apex of the lung, and as the friction produced in the shoulder joint by breathing often imitates very closely these pulmonary adventitious sounds, it is not difficult to understand how mistakes in diagnosis should occur.

I think that there are good grounds for believing that lives are sometimes rejected at insurance offices from want of knowledge on this point.

The sound produced at the shoulder joint is almost always of a dry quality, rather creaking than crepitation; but

its character varies considerably. It is difficult to prevent its occurrence in those subjects in whom it is heard; so that fixing the joint hardly aids one much in the diagnosis. But the sound is always loudest over the joint itself, and is better conducted along the bones than along the muscles, over which it is usually faintly heard; but in some instances it may even be audible over the pectoralis major below the clavicle. An important point in the diagnosis is the character of the breath-sound at the apex of the lung; when mere joint-friction is heard, there is of course no prolongation or increased loudness of the expiration. This friction-sound, simulating pulmonary adventitious sounds, was first pointed out to me, and, so far as is known, was first drawn attention to, by Dr. Gowers, in his class of clinical medicine at University College. It is of frequent occurrence, and especially, I think, in patients who have suffered from "rheumatism." I have not heard it often in children, and less often in women than men. There can be no doubt that the practical physician must have become acquainted with the sound, even though he may not have formulated his opinion thereon. If this note should lead to its wider recognition, my end will have been answered.—
Medical and Surgical Reporter.

Curative Treatment of Angina Pectoris.

M. HUCHARD, in an article on this subject, recognizes two forms—true and false angina pectoris. The latter occurs most frequently in women at all ages, and seems to be dependent upon arthritic and gastric affections. This form is characterized by frequent repetition, periodic appearance, long duration, and the site of the pain, which is usually at the middle or inferior part of the cardiac region. True angina is more fre-

quent in men and comes on at a more advanced age. It seldom assumes the periodic form, it is never spontaneous, but brought on nearly always by an abnormal or exaggerated excitation of an enfeebled heart by an effort or an emotion. Its location is distinctly substernal, and the patient suffers agonies. While the pathogeny of the false form is variable, the true form has always the same pathological factor—viz., a sclerosis of the coronary arteries leading to interference with the lumen of the vessels at their mouths, and the paroxysms are induced by a temporary cardiac ischæmia. This arterial theory is accepted by Potain and Sée. Acting on this theory, M. Huchard avoids all medicines that increase vascular tension, such as ergot, or elevate arterial pressure, such as digitalis. He relies upon the inhalation of amyl nitrate (four to ten drops) to allay the paroxysm. In some cases he employs hypodermic injections of morphine, which diminishes the blood pressure and passively dilates the arteries, but is less rapid and less sure than the amyl nitrite. During the intervals of the attacks he strongly recommends the iodides, which he says have a curative effect, but they must be continued for fifteen or eighteen months, fifteen to forty-six grains being given daily. The sodium is to be preferred to the potassium salt, as it is more efficacious and is decidedly better tolerated by the stomach.

An Antiseptic Gargle.

MÜLLER (*Schw. Woch. f. Pharm.*) is credited with the following formulæ:

Thymol, 4 grains; benzoic acid, 45 grains; tinct. of eucalyptus, 3 drachms; distilled water, 1½ pint; also, bichloride of mercury, thymol, each, 3½ grains; distilled water, 1 pint.—*New York Medical Journal.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

On a Method of Forming the Fenestra in Plaster-of-Paris Bandages for Compound Fractures.

DR. R. W. SHUFELDT (*New York Medical Journal*):

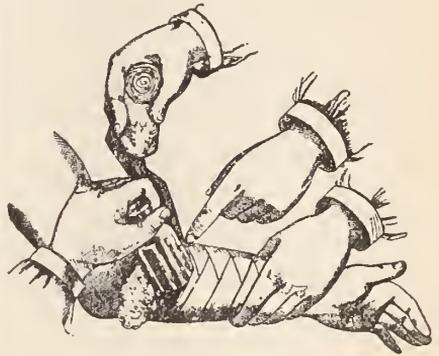
I saw this bandage applied twelve years ago as a *primary* dressing to a compound fracture. The making of a fenestra for the wound afterward was always an annoyance and a troublesome matter. Among the principal difficulties and inconveniences that arose were these: 1. The undue discomfort to the patient, after his own mind had probably been made up that the operation of setting his broken limb was over. 2. As simple as it may seem to the contrary, the difficulty of finding the wound, and so cutting the fenestra that it will occupy its centre. 3. The tediousness of the operation itself, as the plaster has, to a greater or less extent, set before it can be undertaken. And 4. The great liability of any discharge taking place from the wound running down between the bandage that is being applied and the fractured limb, thus giving rise to uncleanness and danger.

To obviate all of these and other difficulties, I have adopted the following method of setting a compound fracture and making the fenestra for the wound, and it can invariably be brought into play with the greatest success:

The bones of the fractured limb being properly approximated, and the limb itself extended and held by the assistants, the wound is first thoroughly cleaned and the limb lightly oiled. We then take a common, clean, and cylindrical glass bottle, with a concave bottom, and the diameter of its base being equal to the diameter of the fenestra we wish to form to accommodate the

wound. The base of this bottle is next completely filled with a wad of absorbent cotton, rendered thoroughly antiseptic (corrosive sublimate, 1 part to water 1,000), and applied over the wound. This must be done by a careful and watchful assistant, and in such a manner that the centre of the base of the bottle and the wound are, as nearly as possible, opposite each other. The bottle is to be held in this position during the complete operation of applying the bandage.

The next step consists in enveloping the limb in a layer, snugly applied, of the material known as "absorbent cotton," carefully passing round the bottle when we come to it. This is held in



place by the application of a *wet* three-inch roller bandage, which in turn *surrounds* the bottle when reached. In the usual manner we then apply the plaster bandages, and the plaster-of-Paris itself, surrounding the bottle as before in the case of the other layers of the dressing.

A few moments are sufficient to allow us to trim down such plaster as has accumulated about the bottle to a level with the outer surface of the splint. This can best be done with a good strong knife-blade. The bottle can now be slightly turned and easily withdrawn, leaving, as it always does, the circular piece of antiseptic cotton covering the wound. With our knife we now nicely

round off the peripheral edges of the circular fenestra thus formed, and we must always do this before removing the cotton from over the wound, as it protects the latter from the *débris* of this part of the operation.

Finally, the cotton itself is carefully removed, and we see that it has taken up such discharges from the wound as have occurred during the application of the bandage, and we have before us as a result, not only our bandage safely on, but a perfectly circular fenestra with cleanly rounded edges, with its exact centre occupied by the wound, which has been kept antiseptic during the application of the entire bandage, and from which no discharges have run down to be absorbed by the first layer of dressings of the splint. The wound may now be dressed with a clean piece of antiseptic absorbent cotton, and the patient be told that the operation of setting his limb is entirely over.

I have made a sketch which illustrates this paper, showing one of the steps in this method of forming the fenestra. It illustrates the application of the three-inch *wet* roller bandage, the next turn of which will cover about one-third of the cotton now in view, and close the triangular opening seen just *below* the bottle. The next move of the operator, in the figure, will be to bring the bandage *above* the bottle, and complete this layer by circular turns about the arm to cover the remainder of the cotton, allowing only the free portion of the latter to project beyond the bandage.

Method of Treating Fractured Clavicle.

At the meeting of the Manchester Medical Society, on February 17, MR. C. E. RICHMOND demonstrated an easy method of treating this injury. The position adopted was similar to the

French one; the palm of the hand of the injured side being laid flat on the chest. The best position for adapting the ends of the fragments was first ascertained by abducting the elbow from or approximating it to the sternum. A piece of broad strapping was passed round both arm and body, to fix it in the required position. A piece of calico, twelve inches broad (more in a big adult), and in length sufficient to go twice round the body, was torn longitudinally, so as to make a four-tailed bandage, leaving about the middle eighteen inches untorn. This centre part was then grooved round the elbow, and the two lengths of the band (*a*), that lay next the body, were taken one up in front of the chest, over the flat hand, and the other up behind. These were then knotted together behind the sound shoulder, the other ends being meanwhile held out of the way. The other two lengths (*b*) were taken round the arm and body in front and behind, and also knotted behind and below the sound shoulder. The (*a*) ends were then brought down, one in front and one behind, and knotted betwixt the fixed elbow and the body, and then cut off short. The (*b*) ends were then again brought round the body over everything, and finally knotted in the hollow above the fixed elbow. Wadding was then inserted under the knots to prevent them from galling, and the hand against the chest was secured to the length of bandage passing over it, by means of a strip of calico passed round both. The advantages claimed were these: 1. There was no necessity for special apparatus; 2. The arm was fixed in the most favorable position; 3. The fixing was permanent. The method had been used in numerous cases with the best results.—*British Medical Journal*.—*Medical Record*.

Fractured Patella—Swan's Operation.

The following are the steps to be adopted. An Esmarch's bandage having been applied to the limb, a vertical incision, four inches in length is made, commencing one inch above the base of the patella, through skin and fascia down to tendon. The coverings having been reflected, a transverse incision is made through the tendon, carefully avoiding its posterior investment at the centre of the incision, or three inches above the patellary base. The anterior fibres of the vasti, which are found to act on the aponeurotic bands which cause the upper fragment to revolve on its own axis, and thus produce gaping at the site of fracture, are now divided as much as may be necessary. The fragment is then found to lie evenly in its position.

Strict antiseptic precautions, physiological pressure, and avoiding the disturbance of reparative processes, ensure a speedy healing of the wound. No hemorrhage of any consequence is to be apprehended.

Diagnosis of Sacro-Iliac Injuries.

1. History of case. Rotation of the pelvis under severe pressure or any force, acting as a wedge between the sacrum and innominate, may injure the articulation without complete separation and deformity. 2. Symptoms usually associated with those of contusion of the hip differing in this: the slightest lateral pressure on pelvis is unbearable. 3. Patient is able to be assisted to the erect posture and walk with crutches, sometimes before he can lie on either side. 4. Great length of time before patient can walk with comfort, and frequently permanently incapacitated for active work. 5. The uninjured side is used as a pivot upon which to swing the pelvis and thus save

the strain on the affected articulation. The foregoing points in diagnosis are prominently stated. The results may be permanent defect in walking, and weakness of the articulation.

POINTS OF DIFFERENT DIAGNOSIS.**Contusion.**

Cause: a direct blow or fall.

Thigh of affected side will not render passive motions.

Patient can be turned or turn after short time without causing severe pain.

Patient suffers pain in soft parts surrounding the hip joint.

Patient recovers completely in a few days, or at most, weeks.

There is apt to be ecchymosis and tenderness on pressure over the soft parts.

Injury to Sacro-Iliac Articulation.

Cause acts as wedge between sacrum and os innominatum or rotates the pelvis under severe pressure.

Thigh of affected side may be freely moved without causing pain.

Patient can not turn nor be turned on either side for a long time, and can walk about some before being able to endure any lateral pressure.

Patient suffers no pain when lying quietly on back, unless the injury is accompanied by contusions.

Patient does not recover for months, and frequently the injury is permanent.

There is no ecchymosis, and pain on pressure is only felt when the force is applied to the bony pelvis, and then at the seat of injury, i. e., the articulation.

The explanation of the symptoms of pain on lateral pressure and ability to stand erect and walk, is explained by the angle of the pelvis (60° to 65°), so that pressure from above or below brings the articular surfaces closer together and does not bring any strain on the ligaments. Lateral pressure, on the other hand, separates the articular surfaces and puts the ligaments on the stretch.—*Weekly Medical Review.*

A Result of Extension in the Treatment of Fracture of the Thigh.

DR. FISCHER reports a case of fracture of the thigh in a child six years of age, which was treated by extension

with weight and pulley. A cure was obtained in four weeks, but it was then found that the ligaments of the knee had been so stretched that the ends of the tibia and femur slid over each other with an audible sound, and hyper-extension occurred when an attempt was made to stand. The trouble was relieved by retention for a month in a silicate of soda splint. The cord passed over two pulleys and a weight of eleven pounds was used. Dr. Schmidt, in referring to this case, reports a similar instance of over-stretching of the knee in an old woman, with fracture of the femur just above the condyles. In both cases the trouble was due to the continuous traction maintained by plasters attached only to the leg and pulling through the knee joint.—*Centrallblatt für Chirurgie*.

[This mishap could easily have been avoided by a proper dressing. In making extension it is always proper to do it without straining any joint. The adhesive strips, if such were applied, should have extended up each side of the thigh as far as the fracture. In that way the ligaments at the knee would not have been strained, and the subsequent complication could not have arisen.] A.H.P.L.

Treatment of White Swelling of the Knee.

DR. A. B. JUDSON concludes a paper under the above heading in the *New York Medical Journal* of June 5, as follows: White swelling or articular osteitis of the knee is an inflammatory affection attended by destruction and degeneration, and followed, as a rule, by impairment of function. Its severity and duration are increased by use of the joint, and also by an impairment of the general health, which is reciprocally affected by the local disease. It has, however, a so called natural cure, which occurs when the morbid process is supplanted by the reparative.

The object of treatment is to prevent ultimate impairment of function and to hasten the "natural cure" by improving the general condition and removing causes of local aggravation. Function is to be preserved or restored by subduing inflammatory action. The health is to be maintained by appropriate medication, an observance of hygienic rules, and a proper amount of out door exercise. Mechanical means should be adopted to secure activity in walking without injury to the affected part.

Locally, fixation of the joint is suggested by the weakening and loss of the hard tissues of the joint and by the presence of hyperæmia, and enforced by the general rule that inflammation should be treated by arrest of function. The affected part should also be prevented from bearing the weight of the body, a precept which is suggested by the softened and excavated state of the bone and the infrequent occurrence of the disease in joints which are exempt from this duty and enforced by the same general rule that the presence of inflammation demands an arrest of function.

Fixation is conveniently secured and deformity reduced by a simple retentive splint, making pressure from before backward in the vicinity of the joint, and from behind forward at the upper part of the thigh and lower part of the leg. Arrest of the weight bearing function, or protection from violence in standing and walking, is to be secured by suspension of the limb, which is conveniently effected by Thomas's ischiatic crutch, with a high sole on the foot of the unaffected limb.

Successful Extirpation of an Intra-Cranial Tumor.

SIG. DURANTE, at the November meeting of *La Reale Accademia Medica*

di Roma, exhibited a patient from whom he had removed an intra-cranial tumor. The patient was a woman, 25 years of age, and of good physique. Besides some mental changes, and loss of smell, and a bulging of the eye, she had become morose and melancholy instead of cheerful and happy. An incision was made upwards and to the left from the inner canthus of the left eye to the top of the forehead. Part of the frontal bone was cut away and a sarcoma as large as an apple extracted. It was attached to the dura by a pedicle and had partly grown down into the ethmoid cells. The patient went home in fifteen days, and was quite well three months later. This is the second case of the kind, but the first successful one.

A New Method for Anæsthetizing the Uninjured Skin with Cocaine.

DR. WAGNER, at the meeting of the Society of Physicians at Vienna, held February 5, 1886, described a method by which the uninjured epidermis might be rendered anæsthetic through the application of cocaine. For this purpose he made use of the property of a galvanic current discovered by Dr. Haertner, in consequence of which fluids move from the positive to the negative pole. If the positive electrode is dipped in a cocaine solution, and placed upon the skin, and the negative pole placed a short distance from it, and a current allowed to pass, the skin lying between these two points of application of the electrode becomes anæsthetic. Wagner made a number of experiments to determine the value of this method to surgical practice in the clinic of Prof. Billroth, and found that by the means of this such anæsthesia as would prevent the appreciation of incisions of the skin was readily attainable.—*Wien. Med. Blatt.*—*Therapeutic Gazette.*

Spontaneous or Infectious Myelitis.

DR. RATIMOFF related to the Russian Medical Society the case of a railway employee who was taken, after a long walk, with chills and severe pains in the left leg. On admission to the Alexander Hospital the leg was seen to be swollen, the skin was tense and œdematous, and the patient had a high fever with delirium. A superficial incision having given no relief, the tibia was trephined and gave exit to a small amount of pus. After this operation the pain diminished and the temperature fell. But the following day the wrist became painful and an abscess formed. The same thing occurred in the shoulder and at other points, and the man finally succumbed from diarrhœa and prostration. Dr. Ratimoff also reported a second case, occurring in a boy fourteen years old, who was suddenly seized with chills followed by a high fever. The right leg was found to be swollen, and the knee-joint contained fluid. In spite of cold applications, rest, and mercurial ointment, the tumefaction increased and the high temperature continued. The bone was then trephined, a large opening being made to facilitate the exit of pus. The pain at once ceased, the temperature fell, and at the end of two weeks the patient was cured.—*Revista de Medicina y Cirurgia Practicas.*—*New York Medical Record.*

[Well worth bearing in mind is the fact that many advances have yet to be made in our minute anatomical studies before an affection like the above can be called "infectious." We have elsewhere maintained that the word infection was a great convenience and very generally applied to an extent wholly unwarrantable in the light of our present knowledge. There are diseases of the cord or brain giving rise to local

nutritive disturbances sometimes terminating in local death. Whether the above disease is of nervous origin or infectious is still a very open question, with the probabilities decidedly in favor of the former. This is, however, not generally known by surgeons, because they know little or nothing of the neurology of to-day.]

A. H. P. L.

Sarcoma and Carcinoma of the Breast.

DR. H. H. MUDD, in *The Weekly Medical Review*:

It is highly important in tumors of the female breast, both from a diagnostic and prognostic stand point, that the surgeon should be able to distinguish between carcinoma and sarcoma. The following are the pathological characteristics of the two forms of tumor.

Sarcoma.

Carcinoma.

1. Commonly develops very slowly, especially at first; may remain stationary for years.

2. Rough, lobulated or lumpy. Lump may be as large as a hen's egg. Tumor finally attaining great size and becoming pediculated.

3. Skin involved after a long interval. Morbid growth approaches the integument, which is gradually thinned as by an abscess, and also frequently marked by large veins.

4. Nipple does not retreat, and is not often changed in appearance.

5. Ulceration occurs after the lapse of a long period. Skin gives way, owing to pressure on its internal surface by lumps which belong to the morbid growth, but the ulcerated border of the integument is thin, loose, and not adherent to the tumor.

1. Commonly develops very rapidly, and may terminate fatally within a year.

2. Slightly roughened, no large lobules. Tumor usually small and flattened on the chest.

3. Skin becomes quickly attached to the morbid growth, is retracted, drawn in, thus giving rise to the appearance of a quilted cover. Large veins are not seen, but in their stead may be observed white lines, sometimes called lymphatic varices.

4. Nipple retracts, and its end seems to be absorbed.

5. Ulceration occurs at an early date. Skin is invaded by the morbid growth and destroyed, border is thickened, hardened and adherent to the tumor.

6. Consistence of the tumor varies in the different stages of the disease; first hard, later, soft spots may be found.

7. The mammary gland remains distinct from the tumor, consequently it is not destroyed, but simply flattened and atrophied.

8. Sarcoma does not become adherent to the deep seated parts.

9. Does not involve the lymphatic system in the early stages of the disease, and rarely even in the late.

10. The morbid growth returns in the majority of cases, commonly in the same organ, and these relapses indicate a finally fatal termination.

11. The general health of the patient often remains quite satisfactory, even after the tumor has been removed several times.

12. The progress of the disease is rarely attended by much pain.

6. Consistence of the tumor never varies in the different stages. Generally firm.

7. This morbid growth from the first fuses with the mammary gland and soon destroys it.

8. Carcinoma adheres quickly to the deep seated parts, especially the pectoralis muscle.

9. Involves the lymphatic system in the early stage of the disease, which is always steadily progressive.

10. The morbid growth will surely and speedily return, usually in some other part of the body, and a fatal termination rapidly supervenes.

11. The general health is quickly impaired, the cachexia becoming very marked in the early stage of the disease.

12. The progress of the disease is attended with severe pain.

Arterial Ligation as a Prophylactic Measure after Sudden, Complete and Permanent Occlusion of the Chief Vein at the Root of an Extremity.

DR. LEWIS S. PILCHER thus concludes an article in the *New York Medical Journal*:

The final conclusions reached as the result of the foregoing discussion, may finally be profitably stated in the following:

1. Serious circulatory and nutritive disturbances are to be apprehended.

a. In the upper extremity, when, in addition to the occlusion of the main vein at its root, simultaneous occlusion of any considerable number of the lesser and collateral branches has also taken place.

b. In the lower extremity, when the occlusion of the main vein at its root is

sudden and complete, and has not been preceded by any conditions which might have occasioned a previous dilatation of collateral channels or the development of new ones.

2. The accidents of excessive œdema and of gangrene, when they occur, are due to the intense and active congestion of the limb through the arteries with blood for which there is no adequate outlet.

3. The development of collateral paths is not by the breaking down of valve-barriers at the entrance of large collateral trunks, but by the dilatation of a multitude of minute branchlets. To effect this, an increased arterial *vis a tergo* is not required. Any increase in the normal blood pressure is attended with danger of overwhelming and fatally choking up the somewhat slowly enlarging collateral radicles.

4. The diminution of the amount of arterial blood which enters a limb whose chief venous outlets have become occluded, down to an amount not greatly in excess of that which can readily find an outlet from it through paths still remaining, is the first great indication to be fulfilled in the treatment.

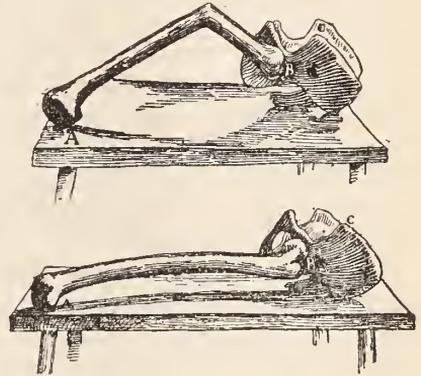
5. Whatever method is adopted to restrain the flooding of a limb with arterial blood, it must still permit the entrance of a supply sufficient for the nutrition of the limb. For this reason, in the lower limb, ligation of the common femoral is to be avoided, especially in the light of the disastrous results of such ligations already recorded.

6. Ligation of the axillary artery in the upper extremity and of the superficial femoral in the lower are safe expedients, and to be adopted as prophylactic measures, whenever occlusion of the venous outlets of a limb is so great as to hazard the integrity of the limb by reason of the circulatory stasis produced.

Methods of Measuring to Ascertain Amount of Shortening After Fractures of the Femur.

DR. U. C. LYNDE, in *Medical Press of Western New York* :

In every instance where there is an angle in the femur, the measurement taken from the anterior spinous process of the ilium is absolutely incorrect, and will give a false idea in regard to the amount of shortening. If the angle is anteriorly, the shortening shown will be too great. If the angle points posteriorly, the measurement from the anterior superior spinous process will not show the full amount of shortening. The reason for this arises from the fact that where the angle points anteriorly there are two angles, measuring from the an-



terior superior spinous process. One, formed by the bend in the femur itself; the other, formed by the upper fragments approaching the anterior superior spinous process.

In taking the measurement on the living subject, therefore, we should in these cases take as the points of measurement the *trochanter major* and the external or internal malleolus.

By reference to the first illustration it will be seen that the distance from the external condyle, A, to the point B, the *trochanter major*, is $14 \frac{1}{8}$ inches. The distance from the same point, A, to the anterior spinous process C, is $17 \frac{1}{8}$ inches.

By referring to the second illustration it will be seen that the true measurement has but *one angle*, while that from the anterior superior spinous process has *two*.

The distance from the external condyle, A, to the *trochanter major*, B, is $13\frac{4}{8}$ inches. The distance from the same point, A, to the anterior spinous process, is $15\frac{4}{8}$ inches.

It will be seen, therefore, that by the true measurement we have a shortening of only $1\frac{1}{2}$ inches; while that from the anterior superior spinous process gives a shortening of full two inches.

This was followed by a paper by Dr. A. M. Barker, of Buffalo, on the "Asymmetry of lower limbs and its relation to shortening after the fracture of the femur."

The term asymmetry, rather than normal inequality, was used, for the reason that it was difficult to determine whether the condition as found in a majority of individuals was a normal or an abnormal one. Comparative anatomy offers nothing in regard to the matter; the possibility of its being a freak of evolution, therefore, was suggested.

The investigation and original observation regarding the inequality in the length of lower limbs is due entirely to American surgeons, no mention of the subject being found in any foreign or home work on surgery. All that has been published regarding the matter has appeared in medical journals of this country.

Among the first to call attention to this matter was Dr. Wm. C. Cox, of Norristown, Pa. He had noticed that the pantaloons leg on one side became worn much sooner than that of the opposite side, and the possibility of a difference in the length of opposite lower limbs in persons who had never received

an injury to that part of the body suggested itself to him. Dr. Cox gave the result of his observation in a record of fifty-four cases.

The very extensive observations of Dr. Wight, of Brooklyn, were referred to.

A malpractice suit occurred several years ago in Perry Co., Pa., because of a shortened femur, after treatment, of five-eighths of an inch, in which the fact of the asymmetry of lower limbs was made so plain that the case was nonsuited without delay. Drs. Agnew and Hunt, of Philadelphia, testified that they had measured many limbs and found them unequal without any previous fracture. The brother of the plaintiff was measured and was found to have a normal inequality of three-eighths of an inch.

Two cases reported by Dr. Wight, of Brooklyn, were spoken of. Both received a fracture of the femur. One was in the *right* femur about the lower part of the middle third; the other, the *left* femur, about the middle.

An extending weight of *twelve* pounds was used for the second patient, and one of *sixteen* for the first patient. The left limb of the second patient (the injured one) measured one-half inch longer than the right, while the *right limb* of the first patient measured one inch shorter than the left. Both were oblique fractures, and the obliquity was considered to be greatest in the left fractured limb. It must be admitted that one of these patients had, before the injury, a right lower limb shorter than the left, and the other a left lower limb longer than the right.

A more general knowledge of the facts of asymmetrical development, not alone of the lower extremities, but of other corresponding parts of the body, would have a tendency to prevent suits at law for malpractice.

VENEREAL DISEASES.

Chronic Prostatitis.

DR. W. H. DANFORTH, in the *North-western Lancet*, says:—When an acute attack of prostatitis comes on during a gonorrhœa, it is announced by very frequent and painful micturition, weight and throbbing in the perineum, pain on defecation, and, perhaps, an act of retention. The symptoms of the chronic form, whether from an acute case or other cause, are as follows: (these will not all be seen in the same patient usually.)

1. Increased fluency of micturition, but much less than in the acute form. Ultzmann says:—Frequent micturition in disease of the posterior of the urethra is such a very characteristic symptom, that from the presence of this sign alone we can always conclude with certainty upon a lesion in the neck of the bladder.

2. Bearing down and uneasiness in the perineum and anus.

3. Slight pain or uneasiness at the end of micturition.

4. Tenderness around the prostate on passage of a sound. In long standing cases the urethra becomes anæsthetic, and this symptom is lost.

5. Inability to urinate on making the attempt is a prominent symptom.

6. Diminution in the force of the stream and dribbling after micturition.

7. Reflex spasm of the compressor urethræ; this is of common occurrence.

8. Frequent erections and erotic desires, as well as frequent seminal emissions at night are often complained of; but in cases of long duration the opposite extreme is found, and partial or complete impotence may be present, causing the utmost depression.

9. There may be a discharge of mucus from the urethra, showing the presence of inflammation anterior to the com-

pressor urethræ; when, however, the inflammation is confined to the prostatic urethra, the secretion only appears in the urine. This, of course, is due to the strength of the compressor, keeping back secretion posterior to it.

10. Mucus may be discharged from the urethra during straining at stool, simulating the discharge spermatorrhœa; the microscope settles this point.

11. When the urine is passed in two portions, characteristic appearances are seen. Ultzmann, says:—If only a little secretion has collected in the posterior urethra, the urine in the bladder remains uninfluenced, and if we have the patient urinate successively in two glasses, only the first portion of the urine passed will appear turbid, the second half remaining clear and transparent. If, however, the secretion in the posterior urethra is considerable in amount, it will flow back into the bladder, make the urine more or less turbid, and even irritate the bladder itself. In this case, both specimens of urine (passed in two glasses) will appear turbid. However, as a distinction from a primary cystitis, the first half of the urine will appear more turbid than the second, and will contain more compact flakes, which all come from the urethra, and which, accordingly, are absent from the second portion of urine passed.

12. These flakes are the so-called "prostatic shreds," and consist of short, thick, clumpy masses, which, under the microscope, are seen to be collections of pus, prostatic epithelium and mucus, with sometimes a few spermatozoa. They occupy the follicles of the prostate, and are washed out by the urine.

13. Shreds from the anterior urethra may also sometimes be seen in the first portion of the urine; these are longer and thinner, and consist of pus and urethral epithelium.

14. The urine contains mucus, prostatic epithelium, pus, often spermatozoa, and sometimes blood corpuscles. A trace of albumen is often seen, which disappears when a cure is effected.

15. On rectal examination, the prostate is usually found somewhat enlarged and tender; it may be normal in size and not tender, in which case the inflammation is probably mostly in the mucus membrane of the urethra. (With enlargement of the gland there may be residual urine.)

In long standing cases the prostate may be found atrophied, or losses of substance or cicatricial contraction from old suppuration may be detected.

16. Neuralgic pains in the back and groin are frequent subjective symptoms. Dr. F. S. Watson, says: These pains vary as to constancy and duration, and may be entirely absent. In regard to other general symptoms, he says: The patients are often hysterical; there is decided reflex irritability; they are easily alarmed and start at slight noises, or unexpected sights; the nervous system is unstable, they are emotional and volition is diminished. Changes in disposition are marked; the patients become morose, despondent, anxious and worried, or apathetic and unable to work or fix the attention. The appearance of the individual varies greatly; as a rule they wear a careworn, listless or anxious look.

Fracture of the Penis.

DR. CONKLING (*Pcoria Medical Monthly*):

I was called at midnight, November 1st, 1885, in haste, to attend Mr. W., a carpenter, aged 35, weight 215 pounds. The messenger would give no idea of the trouble I had to contend with. On entering the house I noticed a serio-comic expression on the countenance of

all, especially the wife. In a room adjacent lay the patient with a beautiful picture of despair on his face. I questioned his condition. He said that a short time before, while in a doze or half-sleep, he had an erection and in attempting to bend the organ down with his hand he said it suddenly broke with an audible sound. I found the following condition: The penis (*corpora cavernosa*) was fractured about mid-way in its length. In the upper and left two-thirds there was a decided separation of continuity, with great extravasation of blood, which filled the skin to its utmost distention, with considerable discoloration.

With regard to the treatment I would say that it was new with me. I made a neat pasteboard splint, well padded, and applied it, turned the organ up against and a little to the left of the abdomen, held in place by a T bandage. There was but little pain, two slight attacks of priapism. The same treatment was continued. At the end of two months there was a hardened ridge at the seat of the fracture, which gradually disappeared, and at this time, March 1st, is hardly noticeable, and he now says it is just as useful a member as there is in the family, although at one time he thought it would only do to stub around with.

The Radical Cure of Varicocele.

To the large number of operations which have been devised for the cure of varicocele, yet another has been added by M. RICHET, of the Hôtel Dieu. It is described in *Revue de Chirurgie* for April, by Mr. Picqué, who is disposed to laud it. The vas deferens is first separated from the bundle of veins to be obliterated and held out of the way by a thread of copper wire passed through the scrotum in an armed needle.

The veins and the fold of scrotum over them are then grasped by the blades of forceps heated to a red heat, such as M. Richet uses for the destruction of hæmorrhoids. A wound of some size is left, and cicatrization is obtained in about three weeks. M. Picqué argues that excision of the veins is the best of all the many operations for varicocele, but that it should only be undertaken by those who are quite familiar with the aseptic treatment of wounds. In cases where the surgeon is not confident of his ability to keep the wound aseptic he recommends Richet's operation. We cannot join in such advice. Richet's operation appears, from the description given of it, to be a very rude method of obtaining a result more easily, more quickly, and better obtained by other means. — *Lancet*. — *Journal American Medical Association*.

[The *Lancet* is right.] A. H. P. L.

Treatment of Varicocele.

MAYO ROBSON, in the *British Medical Journal*, favors treatment of varicocele by excision. The scrotum is shaved, the cord of the affected side caught between the left finger and thumb, the vas deferens being allowed to slip backwards. A vertical incision, three quarters of an inch long, through skin and fascia is then made. Through this the veins bulge and are caught between the finger and thumb of the right hand. A double catgut ligature is then passed round the bundle of veins and the two threads are tied an inch or so apart. The intermediate varicocele is completely cut away. No bleeding occurs; the wound may need no suture. A catgut drain may be left, but is not absolutely necessary. Ten successful cases are recorded.—*Weekly Medical Review*.

Treatment of Hydrocele.

DR. J. M. MCINTOSH, of Thomasville, Ga., writes to the *New York Medical Record* in regard to the paper of Dr. E. L. Keyes, appearing in the same journal of Feb. 20th, and on the above subject, that he practices a somewhat similar, but simpler operation. It consists in the injection of a hypodermic syringe full of iodine or carbolic acid into the contents of the hydrocele. No pain is felt except that caused by the puncture.

A Study of the Senile Testicle.

The modifications of age consist :

1. The calibre of the tubes, which dilate and thicken in the adult, contract, while their walls hypertrophy in age.
2. The connective tissue increases progressively from birth.
3. The epithelial element, itself, inactive in childhood, reaches its supreme activity in adult life and then undergoes degeneration corresponding to that of the individual.—*Gaz. Med. de Paris*.

For Gonorrhœa.

DR. J. H. STANLEY, in *Medical World*, gives the following :

℞. Balsam copaibæ, $\bar{\zeta}$ iij ; spt. nit. dulc., $\bar{\zeta}$ j ; spt. lavender, $\bar{\zeta}$ j ; olei terbinth, $\bar{\zeta}$ j. M. S. Take one teaspoonful twice a day.

For injection : ℞. Plumbi acetatis, gr. xl ; zinc sulphatis, gr. xl ; pulv. acaciæ, gr. xl ; tinct. opii, $\bar{\zeta}$ j ; aquæ dest., O. j. M. S. Inject morning and evening.

DISEASES OF THE EYE AND EAR.

Diseases of the Brain Caused by those of the Ear and Temporal Bone.

DR. ARTHUR MATTHEWSON, in the *New York Medical Journal* of June 12, 1886, concisely but elaborately discusses the above named subject. He first calls

attention to the thinness of the bone between the tympanum and brain and the natural fissuring often normally present in the part of the bone and the dipping down of the dura mater through these fissures. It thus becomes very easy for a middle ear disease to extend to the meninges of the brain and thence to this important organ itself, causing meningitis, encephalitis or cerebral abscess. Moreover, this thin segment of bone is often the seat of atrophic changes that make it cririform, or it may have been so congenitally. Many people die of intra-cranial disease complicating otitis media, and a large proportion of these cases are never properly diagnosed. Normally there is in children a set of connective tissue bands passing from the cranial to the tympanic cavities through a normal fissure between the squamous and petrous portions of the temporal. This is generally closed in later years. Many vessels find their way through the bone connecting the lining membrane of both cavities. Uncommon opportunities are thus afforded for the extension of an otitis media to the brain and its membranes. In some cases there may be no other symptom than the general one of a vague pain in the head to indicate cerebral complication. He says: Statistics of cases of intra-cranial abscess show that a large percentage (twenty-five to fifty-three) of them originate in diseases of the ear and its annexa.

The doctor also cites several interesting cases and gives many details which it is not our province to repeat. The question is one of intense interest, is so well treated in the paper, that we urge all to read it.

Iodol in Ocular Therapeutics.

TROUSSEAU (*Union Méd.*, May 22, 1886) suggests the following combina-

tions for use in phlyctenular conjunctivitis and old corneal ulcers:—

Vaseline, 2½ drachms; iodol, ½ drachm; as an ointment. Iodol, 45 grains; alcohol, 1 ounce; glycerin, 2 ounces, to be used as a lotion.—*New York Medical Journal*.

Treatment of Interstitial Keratitis from Delayed Hereditary Syphilis.

DR. ALFRED FOURNIER (*Revue d'Ophthalmologie*.) Local treatment, though by no means as important as general treatment, often renders useful service, and should consist in the following:—

1. Keep the eye shut out from all exterior excitation; for this, require the patient to wear glasses of dull tints surrounded with black veiling.

2. Use collyria of atropine.

3. Recourse to cold water. The temperature of the liquid should be about 40°, and used in the form of spray, or cloths steeped in an infusion (say of chamomile), and applied four to six times a day.—*Am. Pract. and News*.

The Use of Turpentine for the Removal of Insects from the Ear.

KÖHLER recommends (*Rev. de Thérap.*) that the external meatus be filled with oil of turpentine, which should be allowed to remain for five minutes. The ear is then washed out with a syringe, and in nearly every case the insect is brought away without further trouble.—*Weekly Medical Review*.

[A simple filling of the canal with luke-warm salt water is equally as efficacious in most instances and perfectly safe.]

A. H. P. L.

Some Aphorisms in Ophthalmology.

DR. M. F. COOMES (*Medical Herald*):

1. As a local anæsthetic to mucous surfaces and open wounds, the muriate

of cocaine is one of the most certain and effective agents that is known.

2. All surgical operations on the eye, except enucleation of the globe, may be performed under the influence of cocaine with as much or more safety than under other anæsthetics.

3. In all forms of iritis keep the pupil dilated.

4. In acute retinitis unaccompanied by iritis, keep the pupil contracted, in order to keep out as much light as possible.

5. The only relief for senile cataract is surgical interference.

6. The rule is that all acute purulent discharges from the conjunctiva are contagious.

7. The only proper method of testing the vision in persons possessing the power of accommodation, is to suspend that power by paralyzing it, and then pursue the usual method with the trial lenses.

8. Jequirity is a dangerous remedy as well as an unreliable one, and should not be used by unskilled persons.

9. All kinds of strong caustic applications are contraindicated in the treatment of acute purulent inflammations of the conjunctiva.

The best results are obtained by frequent cleansing with mild saline solutions, and the use of weak solutions of the vegetable or mineral astringents (excluding nitrate of silver), a solution containing five grains of tannic acid and three grains of carbolic acid to the ounce of water, or from one-half to one grain of the sulphate of copper to the ounce of water, will be found among the most efficient agents.

10. It is always good surgery to remove a foreign body from the eye, provided it is not entirely within the globe behind the iris. If a foreign body is between the iris and the cornea, prompt removal is urgently demanded.

Great care must be taken in order to avoid wounding the lens, as such an accident would be certain to result in the production of cataract. If the foreign body should be entirely within the globe behind the iris, or if it should be large and partially within the globe, the question to be settled is, whether it will be best to remove the eye or the foreign body.

If the laceration of the globe is not too great it will probably be best to remove the foreign body, and then if the globe becomes violently inflamed, or if sympathetic inflammation of the other eye should occur, remove the diseased member without delay.

11. An eye-ball that is destroyed for visual purposes, and is painful, should be removed without delay, as it may induce inflammation in the good eye, and result in its destruction.

12. Whenever there is one or more small nodules about the margin of the pupil or in the iris in cases of iritis, it is almost absolute evidence that the disease is syphilitic.

13. The operation of strabotomy should be performed, if possible, without general anesthesia, because its influence so thoroughly relaxes the muscular system that it is impossible to determine when the operation is completed.

14. When the iris is wounded and is protruding, it should be cut off, and the eye kept under the influence of a mydriatic until the inflammation has subsided.

15. An unskilled person should never attempt to replace a protruding iris, as such a procedure is difficult, and there is great danger of injuring the lens and inducing cataract.

16. Surgical interference is the only means of giving permanent relief to glaucoma. Eserine will give temporary

relief, and cocaine relieves the pain for a short time.

17. One of the most efficient agents in tenia-tarsi is an ointment composed of ten or fifteen grains of the yellow oxide of mercury to one-half ounce of simple cerate, or some other suitable vehicle. This is to be applied to the lids night and morning after thorough cleansing.

18. Poultices of every description are to be avoided in diseases of the eye, unless ordered by some one who is especially skilled in this line of practice.

19. Whenever there is great edema of the conjunctiva, and particularly when this is associated with excessive purulent discharge, the membrane should be snipped in numerous places so as to permit the pent up fluid to escape, and thus prevent destruction of the cornea, which is always in danger in such cases. Remember that there can be no harm done by this cutting, and if it does not give the desired relief, a tarsarophy should be done.

20. In the majority of cases of strabismus, glasses are necessary as well as tenotomy, inasmuch as the strabismus in most instances is dependent on an optical defect which, if uncorrected, would cause a return of the squint.

21. It is always better to correct squint by means of properly adjusted lens than by tenotomy.

DISEASES OF THE SKIN.

A New Skin Disease.

DR. J. E. CLARK, in *The Medical Age*, says: I recognize in it pathological conditions very similar to the disease so ably discussed in the *Age* by Dr. Morton and others, some two years ago. I believe the disease has received no classification in standard works, its victims alluding to it, however, as the "scratches,"

"the mange," "the Michigan itch," etc. It is quite prevalent throughout the State, my correspondence with a number of physicians showing it to be more common in the northern counties, and especially in lumber camps, where facilities for the spread of the contagion are numerous. It is not confined to the country, however, as my experience and that of various city practitioners prove its general distribution.

As a rule, there are no very apparent prodromata; some patients complain of fugitive pains in the limbs and joints, resembling rheumatism, accompanied by a slight elevation of temperature and some derangement of stomach and bowels, and, a few days previous to the eruption, yawning and stretching. From twenty-four to thirty-six hours after these manifestations the patient will have an eruption of minute solid elevations of the skin—papulæ—accompanied by an itching, which, as the disease advances, becomes almost intolerable. The eruption is quite minute and usually papular at first, although it may assume other forms, and if not aborted eventually becomes vesicular in places, the acuminate elevation of the cuticle giving way to the orbicular, which, with an accumulation of lymph clear and colorless, marks the vesicular stage. In this stage the severe itching is attended with considerable superficial heat and tingling of the part.

In some cases the local inflammation runs high, and the surrounding derma is of a bright scarlet color, with a feeling of tension in the part affected.

The eruption always occurs on a portion of the body covered with clothing, the hands and face, so far as I can discern, never being affected. It favors the arms, chest, abdomen and thighs, and is never general.

I do not look upon the disease as markedly contagious, but it is, beyond cavil, so to a certain extent, as eventually, unless the precaution of separate beds is observed, its spread in families is inevitable.

Its differential diagnosis is somewhat difficult to one who is not a specialist, as in some peculiarities it resembles either scabies, prurigo, lichen or a syphilitic dermatitis. The absence of the acarus and diffusion of the disease, differentiate from scabies; the history of the case and an absolute failure of anti-syphilitic medication to remove or alleviate the symptoms, removes the suspicion of syphilitic origin; if it were a local neurosis it would not be contagious, and if it were any variety of lichen, we should find transient papulæ, the affection extending to the arms and fingers (*lichen agrius dorsi manus*); would find it aggravated by heat; relieved by decreased temperature and non-contagious. It resembles prurigo somewhat, but prurigo is not contagious, its papules are not small and acuminate, but large, elevated, flat and isolated.

While making no arbitrary assertions as to its ætiology, I am impressed with the opinion that it should be classed with the dermatophytæ or vegetable parasitic skin diseases. I have treated a number of cases during the past year, successfully; two, however, after six weeks' ineffectual treatment, fell into the hands of some other practitioner. The majority yield, however, to the antiseptic treatment.

Internal medication has proven in my hands quite barren of results, though many physicians in the northern countries report in favor of it.

I have found the following very serviceable: \mathcal{R} . Hyd. bichlor., gr. iv; chloroformi, ʒ ss; glycerini, ʒ i; aquam

rosam q. s. ad. ʒ iv. M. Sig.—Shake. Apply four or five times a day.

It is best to wash with the following before applying the above: \mathcal{R} . Potas., caustic., gr. xv to xxx; glycerini, ʒ j; aquæ, ʒ i. M. Sig.—Add water sufficient to suit exigencies.

As an ointment the following is excellent: \mathcal{R} . Menthol., ʒ ss.; acid. carbolic., gtt. xxiv; olei rosæ. gtt. ii; adipis, ʒ ss; lanolin, ʒ iiss. M. Sig.—Apply three times a day.

Menthol in Urticaria and Pruritus.

Among the myriad of remedies for these troublesome afflictions we have no other which affords such complete and instantaneous relief as a solution of menthol. We have used this remedy for urticaria in three cases. Not only is the itching relieved for the time, but a cure seems to be effected. In pruritus ani, and in eczema, moistening the parts with menthol solution causes an immediate cessation of the pain. The solution should contain from 2 to 10 grains of menthol to the ounce of water.—*Buffalo Medical and Surgical Journal*.—*American Journal Pharmacy*.

The Treatment of Ring-Worm.

DR. SAERLIS recommends oil of turpentine for the cure of ring-worm of the scalp (*Medicina Contemporanea*). The hair should be closely cut over the affected part, and for a short distance around, and then turpentine is to be liberally applied, and rubbed in well with the finger. This is allowed to remain for about five minutes, and is then washed off with carbolic soap, and afterward with hot water, and the patch is then painted with dilute tincture of iodine, or with a two-per-cent. solution of iodine in turpentine. The application is to be made once or twice a day, and is not painful, though it causes a

slight smarting. The writer asserts that he has cured, in ten days, by this method, cases of ring-worm that have resisted all other modes of treatment.

Melanosis Lenticularis Progressiva.

DR. JAMES C. WHITE showed a case of this kind (the angioma pigmentosum et atrophicum of Kapposi) to the Boston Society for Medical Improvement. (*Boston Medical and Surgical Journal*.) Including this patient and his brother, it makes in all thirty-five cases that have been observed in thirteen families by nine observers. The disease first man-

ifested itself in infancy or childhood by the appearance of lenticular pigment spots which later on cover the whole body, being first confined to the hands and face. After a time new blood vessels form in the skin, having the appearance of small red points. Atrophy of the pigment takes place followed by thinning of the epidermis and of the corium. About one-half of the cases observed so far have ended in carcinoma and death, a hypertrophy of the papillæ having preceded the malignant process. The trouble does not appear to be hereditary. —*St. Louis Medical and Surgical Jour.*

Vitiligo.

DR. REED, in a paper published in *New England Medical Monthly*, gives the following differential diagnosis :

VITILIGO.

Chalky white or pinkish white spots varying from one to scores, of irregular shapes and sizes, surrounded with an areola of brownish yellow of varied intensity, which often coalesce.

The skin is smooth and the outlines of the spots well defined.

The skin feels normal to the touch, and the secretions of the derma unimpaired,

No pain nor irritation of any character.

Has little or no tendency to recovery spontaneously or otherwise.

With these few landmarks to guide us, and at the same time remembering that in vitiligo there is no structural changes in the derma, while in morphœa there are, there will be little or no danger of mistaking the one for the other.

I have in two instances seen vitiligo mistaken for chloasma, notwithstanding the following characteristics between these two diseases :

VITILIGO.

There is a loss of pigment in one place, with increase of pigment in another.

May occur in either sex and at any age or time.

The prognosis is usually unfavorable.

If there is any question existing between vitiligo and tinea versicolor, the microscope will readily clear that up ; for in tinea versicolor as in chloasma, there is no loss of the pigment and really no increase of the true pigment, but a brownish discoloration of the skin from the presence of patches of the *microsporion furfur*, which gives the skin a mottled appearance.

MORPHŒA.

Usually commencing with one or two isolated, round or elongated, pinkish or purplish spots, surrounded with a pinkish or violet border.

The skin in the early stages is elevated, later may be on a level, or still more advanced, depressed below the surrounding integument, and the outlines not well defined.

The skin becomes dry, has a polished look or is often shriveled, while the secretions of sweat are either diminished or suspended altogether.

Often associated with a tingling pain or numbness.

While of a chronic character has a tendency to spontaneous recovery.

CHLOASMA.

There is simply increase of pigment in one place but no loss in any other.

May occur in either sex, but much more common in the female than the male, and after puberty than before, and during pregnancy, or menstruation than at any other time.

The prognosis is more favorable and especially so when due to uterine disturbances.

DISEASES OF WOMEN.

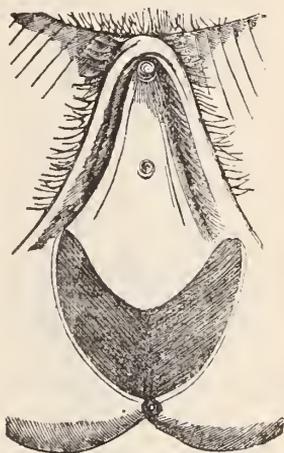
New Method for the Relief of Ruptured Perineum.

Dr. E. H. TRENHOLME (*The Canada Lancet*):

This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts by binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever lamented Dr. Sims introduced his silver suture. The operations of Baker Brown, and others, were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city of Montreal, and, I might say, of this country, endeavored to dissuade a confrere from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patient cured. This, occurring in our good city, speaks volumes. For my own part I think the evils resulting from severe lacerations are very great, and if anything, I may say, will direct more attention to the prevention of these evils, I will be satisfied. I feel confident that the sum total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of

the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and round ligaments share in the same mischief. It is a fruitful cause of relaxations of the uterus and prolapsus of the bladder.

Of all the marital misery and personal distress I need say nothing—these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well known preparation of the patient required, especially in extensive lacerations; you all know as to this and the

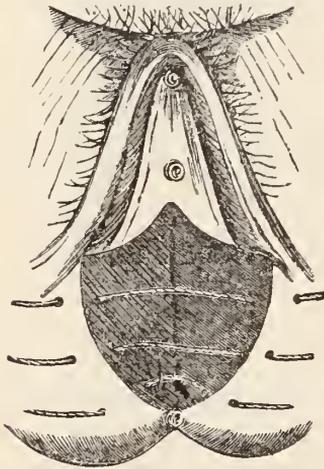


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after-treatment also. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable, and the restoration of this body is the one object of perineorrhaphy.

An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained—without it the natural support of the pelvic viscera is impossible—not only is there apt to be hernia of the anterior

rectal wall, but prolapsus of both bladder and uterus—and this in the order I have given them. The best success, heretofore, has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together, is based upon a right conception of the anatomy of the parts. The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil—each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place,



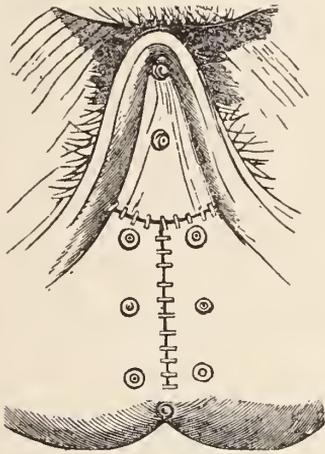
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the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded in the cicatricial surfaces in *one* piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface—the dotted line in

sketch No. 1 shows this—the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap—this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the sutures (which should be of catgut, as they cause very little irritation and usually come away in 6 or 8 days) and upon this point I would say a word in favor of the use of the clamp shield suture, which I adopt. It is by far the best one. This is because it gives the greatest possible extent of surface to surface—much greater than can be secured by any other means. Two deep sutures usually suffice, and these—whether silver, silk, or catgut—are passed in and secured by clamped shot upon an ivory shield. The first suture should be inserted low down, and about $\frac{3}{4}$ of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear, and brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up—the last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, while the upper part of the flap on the right and left side are secured by the running catgut suture—this leaves the united surfaces in the shape of the letter T. The vaginal surface of the wound is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by

first intention. There is very little pain, inasmuch as the deep sutures are clamped and allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum the flaps are carefully brought together by running catgut suture, and the operation completed as in this case.

The objection felt to all former modes of operating was that it left the vaginal incision open, which sometimes there-



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fore interfered with union by first intention. This, by my method, is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained 1, perfect union, 2, perfect restoration of the perineum, 3, no loss of substance, and 4, no after fever worthy of the name.

Sketch 3 shows the condition of the parts at the completion of the operation.

The Modern Treatment of Uterine Cancer.

The following is a portion of an editorial in the *Maryland Medical Journal*. In summing up the advantages of the high amputation, DR. BAKER offers the following :

1. That by it we are able to remove more of the uterus than by any other form of high amputation.

2. The opening of the peritoneal cavity is not necessarily involved in its performance.

3. The practicability of using the touch in determining the extent of the disease as the operation proceeds is retained, which cannot be practiced when the galvano-caustic wire is used.

4. All the advantages of the galvano-cautery are retained by the application of the thermo-cautery, at a red heat, to all the denuded surfaces, and made more effectual even by previously being sure that the disease, as evidenced by the touch, had been removed.

5. It is more practicable for the general surgeon than total extirpation.

6. The length of respite from the disease is greater than in any reported cases of total extirpation, and the percentage of recoveries from the operation greater than by any other method of high amputation.

Turning now to the method of total extirpation we are able to record results equally creditable to surgical boldness and skill. That this operation has its appropriate field no one can doubt, but a practical question must arise in determining the method of procedure to be adopted in any case under consideration. In comparing the results of the high amputation with those of total extirpation, due consideration must be given to the location of the cancerous growth. It is not fair to place these methods upon an equal footing. Each has its limits of application and must be viewed from its respective standpoint. The mortality of total vaginal extirpation of the uterus is undoubtedly high. Gusserow has collected 253 cases with a mortality of 23.3 per cent. Olshausen, out of 25 cases of complete extirpation,

had seven deaths; two on the day of operation, three from septicæmia on the second and third day, one from carbolic acid poisoning on the second day, and one from iodoform poisoning on the sixth day. Since this report was made in 1884, he is reported to have had nine cases without a single death. As statistics accumulate and the experience of the most frequent operators grows the mortality from total vaginal extirpation shows a most striking decrease. With these facts in view the advocates of the methods of partial and of total extirpation do not agree in respect to the respective merits of the two procedures.

The object of surgical interference is undoubtedly to effect a radical cure with the least danger to life by the procedure adopted. The high amputation has thus far a mortality one-fourth less than the method of total extirpation, but it is claimed by those who favor the latter procedure that though the death rate following this operation is high, the chance of immunity from recurrence is small. Upon this point, however, statistics are not yet available. It seems to us that the results of all operative methods must depend upon the conditions present in a given case rather than upon the choice of the method to be adopted. We must doubt the justifiability of an attempt at total extirpation with its attendant risks in a case of cancer limited to the cervix, even though this method promises a greater immunity from recurrence. On the other hand, high amputation can scarcely be deemed a radical procedure when the cancerous growth has extended to the fundus and involves the entire organ. To advocate one procedure to the exclusion of the other without regard to the extent and location of the malignant growth is about as radical as it is illogical.

The Treatment of Cicatrices in the Collum Uteri and in the Roof of the Vagina.

DR. A. MARTIN (*Journal American Medical Association*):

When, as long ago as 1862, and then more fully in 1874, Emmet indicated the operative treatment of rents in the cervix, which he considered as the sources of a whole series of gynecological maladies, these conditions had, up to this time, been very little observed. They had been recognized as the cause of a relatively infrequent eversion (E. Martin) or of an ectopium (Roser).

Emmet, on the other hand, regarded these rents as the sources of catarrhs of the cervix and of the *corpus uteri*. He emphasized the difficulty and even occasional impossibility of healing these catarrhs as long as the rent exists. He further pointed out that these scars are the source of long-continuing, ever-spreading irritation in the pelvis. Finally, he very particularly insisted that such rents hinder the proper development of the uterus, if it become pregnant, and that in consequence, in a great number of cases, abortion is occasioned by them, and that many women who habitually abort suffer from rents in the cervix. His proposition to heal these by operation, to perform trachelorrhaphy, excited very extraordinary notice at that time, since it occurred just when far more attention was being given to securing a widely gaping aperture of the uterus, and the influence of the bilateral discussion was supreme.

Emmet's propositions made progress among Americans very rapidly considering all things; in Europe, however, it was quite the contrary, and this operation was received very doubtfully, especially in Germany, although at that time operative gynecology was in a state of active development. First, there was opposed to the method of Emmet the general

disinclination in Germany to favor operative interference with the *portio vaginalis*. Then the attempts which were made to perform trachelorrhaphy were not seldom followed by imperfect results ; the old cicatricial formation soon showed itself again more or less, or on the other hand, there was formed a stenosis, an evil which just at that time it seemed to be a duty to zealously overcome by discissions.

But even when, in Germany, the plastic operations on the *portio vaginalis* in great numbers were well received, and authors like Breisky, Spiegelberg, and Schröder, and among others the writer, busied themselves with this operation, the operation of Emmet remained a rarity. Although, perhaps not least by the recommendation of amputation of the *portio vaginalis*, which I warmly advised in 1878, at the meeting of German physicians and naturalists in Cassel, as imperatively indicated for wider fields of usefulness, gynecology was led so far that excision and amputation of the lips of the *os uteri* were undertaken not solely on account of chronic metritis and malignant degeneration, and in Germany this operation became very frequent ; yet, notwithstanding all this, strangely enough Emmet's operation did not come into the class of the frequent gynecological procedures. This seems somewhat strange to American authors, especially if, after a prolonged sojourn in Germany, they observe our daily work ; and this impression is fully expressed in the late work by Bigelow. ("Berlin a Medical Centre.")

The cause of this peculiar state of things, however, is not at all that we do not recognize the importance of the cicatrices, that we regard the removal of the latter as anything difficult, or that the permanent results of our operative interference on the cervix were

unsatisfactory ; but the question was first considered whether the cervical rents are really the essential cause of the troubles on which Emmet insisted. The answer to this question is that we see cervical rents causing no symptoms too often to permit us to reply affirmatively. There are either, (1) *Catarrhal complications, i. e., affections of the mucous membrane* ; or, (2) *Peculiar and rare cicatricial formations*, which give importance to the cervical rents, and in such cases these should be attacked.

There is not the least doubt that we frequently find *catarrhs as complications of cervical rents*. But in such cases the catarrh is not dependent on the rent as such. It has either originated as an independent disease simultaneously with the injury of the cervix, or it has occurred there later. Doubtless, then, the symptoms of catarrh are much more prominent. The development of the glands of the area affected, and the increase in volume connected therewith, cause a protrusion of the diseased mucous membrane ; the torn *os uteri* gapes, the cervical mucous membrane protrudes swollen, and with its hypersecretion and its hemorrhages shows the well known and very typical appearance. The glandular new formation which we must recognize as the anatomical foundation of the erosions, according to C. Ruge's very significant investigations, also keeps spreading on the surface of the rent of the cicatricial tissue here developed, as it may also cover the whole surface of the *portio vaginalis*. (See plates LIX of E. Martin's Hand Atlas, edit. II of A. Martin.) Undoubtedly these complications resist obstinately any therapeutic measures. This form of catarrh can only be healed by a careful treatment, so that such patients must frequently suffer very severely, and become chronic invalids.

Emmet prefers to cure this affection of the mucous membrane by patient local treatment, and then performing trachelorrhaphy. In Germany it is generally preferred, as it appears, to use a more energetic treatment of the affection of the mucous membrane, after some trial of what treatment with medicaments for a reasonable period can accomplish. In such a case, however, there is no object in making also a trachelorrhaphy as such. For it is better to combine the excision of the mucous membrane with that of the cervical cicatrices; amputate the vaginal portion. By this means, as a rule, a very well shaped new *portio* will be formed in place of the torn, everted, diseased one. The majority of cases of amputation, according to the method of Hegar or Schröder, or as I do it as a rule, according to a plan combining both of these (see A. Martin's Pathology, Treatment and Diseases of Women, 1885, p. 285), gives a stump where, after completion of involution, very frequently the previous operation can be as little discovered as the alterations which led to the operation.

But in the few cases which heal thus typically there is moreover a proper aperture of the orifice with the lips of the *os uteri*, and a covering of flat epithelium. I have repeatedly endeavored to combine the typical Emmet's operation with excision of the diseased mucous membrane, and Schröder has also attempted this. For my part, however, I have given up this method completely, and in these cases I practice simply the typical amputation.

The cicatricial formation of rents in the cervix goes on and terminates in very different ways. It may so heal, corresponding to the quick changes in the cervical tissues, that scarcely any hardness and scarcely any cicatricial

tissue can be distinguished, either by palpation or by the microscope. In other cases the cicatricial ramifications extend far beyond the immediate vicinity of the rent. Thence arises a displacement by contraction of the cervix, and also of the body of the uterus, which may disturb the physiological position and shape of these parts of the uterus in connection with respiration, and motion and fullness of the adjacent organs, in connection with their changes during menstruation and pregnancy.

Severe consequences occur when the rent has extended into the *perimetrium*, reaching the base of broad ligament and the roof of the vagina, and drawing them out of shape, and, in a unilateral affection, drawing the uterus as far as the wall of the pelvis, or in cases of bilateral cicatricial formation, fixes it in the middle of the floor of the pelvis. Such fixation shows its presence at every jar of the body, at every change of position of the uterus. On this account severe distress is occasioned in almost all stages of the development of the malady, frequently defying treatment by medicaments. Operative interference is called for in these cases, and with such indications we practice it with the best results.

Cicatricial formation limited to the cervix is commonly treated by us by the typical trachelorrhaphy of Emmet. The results of this operation correspond to the good success which Emmet himself reports from it. When the mucous membrane is healthy a good scar is formed, which in case of subsequent pregnancy neither shows itself as a hindrance to the development of the body of the uterus or cervix, nor during delivery is found to be a weak spot, easily torn in the external os.

In cases of extension of the cicatrices in the roof of the vagina, I am accus-

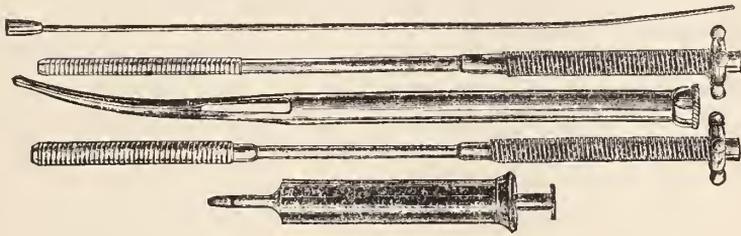
tomed to use a somewhat different procedure. I first separate the cicatricial tissue of the roof of the vagina and of the floor of the pelvis from the cervix uteri, and excise the former completely from its environment. Then, if the cervical mucous membrane be healthy, I refresh the scar in the cervix, and here also I remove thoroughly all cicatricial tissue. Then the sutures are put in such a way that the wound, which was first round or even gaping parallel to the median line of the floor of the pelvis, is united to form a scar running transversely through the roof of the vagina. This scar, running transversely through the roof of the vagina, terminates in the end of the cervical rent; the latter is closed either according to Emmet's plan, or, if there be at the same time disease of the mucous membrane, an amputation of the lips, excision of the erosions, and curetting of the mucous membrane of the uterine

falls away from the wound by its own weight towards the median line in cases in which it has been distorted towards the side.

After sewing up the wound a normal configuration of the roof of the vagina is generally attained. Convalescence in the cases observed by me was attended by no difficulties. The final result, however, was surprising in the completeness of the removal of the severe symptoms which had accompanied these cicatricial contractions. One of my former assistants, Dr. Czempin, has undertaken the presentation of the detailed histories of the cases observed by me, so that I can refer to this work, which will soon appear concerning the various particulars of the cases.

Dilator and Intra-Uterine Syringe.

DR. W. MOLESWORTH, of New York, has devised this instrument for dilating the os and cervix uteri, female urethra,



body is performed. The dissection of the cicatrix from the cervix is made with a pointed two-edged knife, and seems easy to perform when the parts are put properly on the stretch with the patient on her back and the vagina held well open by a Simon's speculum and Hegar's holders. (See A. Martin's "Diseases of Women," p. 24, fig. 15.) The wound gapes, often large arteries spurt (branches of the uterine artery), and require quick action in controlling the hemorrhage; or on the other hand temporary ligation at the sides. The womb

sinus, etc., etc., and as an injecting and suction syringe, drainage tube and applicator.

It is the only bladed dilator of the os and cervix uteri, etc., that produces circular dilation with the gentleness and force of screw and wedge power, with a drainage tube and injecting and suction syringe combined. By this instrument you can dilate the cervix up to half an inch in diameter with the positive assurance that the internal os is as fully dilated as the external, and whilst in position, if desired, wash out

the cavity by injection and drainage or suction, at pleasure, without fear of over distention of the uterus, injecting the fallopian tubes, or the retention of fluid by spasmodic contraction of the cervix.

As an applicator you are enabled to deposit your medicine anywhere along the cervical canal, without its being pressed out by the external os.

Oophorectomy for Ovaralgia.

DR. WILLIAM GOODELL, in his remarks before the Philadelphia Obstetrical Society, said :

The patient, an unmarried woman, aged 30, when she first consulted him, weighed 236 lbs., but at the same time she was very weak and could barely walk. She suffered excessive pain at her catamenial periods, which appeared only at long intervals. She had cataleptic and hystero-epileptic fits, and complained of very constant and acute ovarian pains. Her urine was passed but once a day and this act was attended with much suffering. The womb was enlarged and the ovaries were very tender indeed, but nothing else abnormal was discovered. Assafœtida and the bromides were prescribed in large doses, and she was advised to try the rest treatment. Fourteen months later she was again brought by her physician to consult Goodell. She now weighed only 120 pounds, having lost 116 pounds, and she was in every respect worse, her ovarian pains being now constant and very acute, requiring large doses of morphia to control them. Her catamenia had not appeared for nigh four months, and tonics seemed to have no effect whatever on her. Her physician was compelled to be in constant attendance on her and was liable to be summoned at any hour of the day or night to give her a hypodermic injection.

Masturbation was suspected, but she denied practising this habit. Nothing further could be done than the operation of oophorectomy, which was accordingly performed a few days later at the hospital of the university. The ovaries were found much enlarged from cystic and interstitial degeneration, but there were found no evidences of peritonitis or of cellulitis, which had been suspected. A corpus luteum existed in one ovary, a rectal hemorrhage or vicarious menstruation having taken place a few days before the operation. Her ovarian pains at once left her; she needed but very few doses of opium, which was given by rectal suppositories. Her convalescence was prompt, and she returned home in less than four weeks free from all pain, and in a fair way to get perfectly well. The case was a typical one of the advantages of oophorectomy, yet he (Dr. G.) thought that the operation was being performed altogether too frequently.—*Weekly Medical Review.*

Oophorectomy for Bleeding Fibroid of the Womb.

DR. WILLIAM GOODELL, in his remarks before the Philadelphia Obstetrical Society, said :

In this case the lady was 37 years of age and had been married eleven years. She gave birth to a child about seven years ago, and since then has had one premature birth at seven months and one miscarriage. She first noticed an abdominal tumor nine years ago, but her catamenia began to be free some time before this. Late in the year 1881, the catamenia began to be excessive, and as nothing served to check them, early in the following year Dr. Goodell was consulted. He found multiple fibroid of the womb. Six tumors could be readily made out, of which two seemed pedunculated; the sound gave

a measurement of 4.5 inches. Under ergot and ammonium chloride the patient improved for several months, then menorrhagia became worse and finally a dribbling of blood kept up between the periods. In May of the present year, she again consulted Dr. Goodell. She had been dribbling continuously from January and was much reduced in strength. Being a brunette, she exhibited the facies uterina in a most marked degree, the pigmentation being very dark and extensive. The womb now measured 7.5 inches. She was admitted into Dr. Goodell's private hospital and on May 24th both ovaries were, without difficulty, removed. They were greatly enlarged by follicular degeneration, a condition which Dr. G. had repeatedly seen in cases of fibroid tumors. The effect of the operation on the tumors, and especially on the main one, was astonishing. After two weeks the fibroid had diminished in length nearly a hands-breadth. Her recovery was prompt and she was sent to Atlantic City to recruit. On July 10th, just forty-seven days after the operation, she called on Dr. G., who found the tumors very greatly reduced in size and the uterine cavity measuring only 3.25 inches, a diminution of 4.25 inches. This extraordinary amount of diminution, in spite of the fact that the obliteration of the ovarian blood vessels cut off only a small portion of the blood supply to the womb, drove him to the conclusion that the ovaries were the important factors in inviting the blood to the womb. Every successful case in which he had removed the ovaries for fibroid tumor of the womb has been followed by the menopause and by rapid diminution in the size of the tumor. But in his hands, and in those of others, this operation was more fatal than that of ovariectomy. During the ten months

of the present year he had had twenty-five cases of ovariectomy with but one death, and that one in a lady operated on at her home, two hundred miles from Philadelphia. For simple cases of oophorectomy the mortality should not be greater than that of ovariectomy. But when complicated with the presence of a large or an adherent fibroid tumor, the operation is often one of great difficulty. Twice during the past year he was unable to reach the ovaries and was compelled to abandon the operation, because in neither case was the woman willing to undergo the risk of having hysterectomy performed. Each case recovered, and while the women were under observation the tumors appreciably lessened in size, as if the shock of the exploratory incision had temporarily suspended the ovarian influence.—*Ibid.*

Manganese as an Emmenagogue.

PROF. THOMAS considers two-grain doses of the bimodide of manganese, in pill form, three times a day throughout the month and including the menstrual period, as the best means to regulate the monthly flow. As to time and amount, he also believes it to be superior to iron in chlorosis and anæmia.

Fibroids of Uterus and Abscess of Cellular Tissue.

In a clinical lecture published in the *Medical and Surgical Reporter*, DR. PARISH said :

This woman has been before you on a previous occasion. She is thirty-eight years old, has been married six or eight years, but has had no children. She has a large protuberance in the abdomen, which very much resembles a hernia. In 1883 she was admitted to the medical wards of the hospital with a tumor filling the lower half of the abdomen— which, at the time, was diagnosed as an

inflammatory tumor, a pelvic peritonitis and cellulitis. In a few months it began rapidly to enlarge, and fever and chills warned us of the formation of pus. Nothing was done, and in a short time there was an escape of a quart of pus from a point near the umbilicus. She was then transferred to the wards for diseases of women. While the opening existed it continued to discharge pus; it would occasionally close, when she would have an elevation of temperature and recurrent chills; she became exhausted, and was bed-ridden. We now diagnosed fibroid tumor of the uterus, with inflammation and abscess in the superjacent tissues. The woman was an ironer by occupation, which brought her abdomen constantly into contact with the edge of a table, and this friction caused inflammation in the cellular tissue about the fibroid. Whether the inflammation was intra or extra-peritoneal, we could not then determine. I made an incision in the median line and came upon a suppurating track, the entire length of which I cut up. As there was a tumor, I was urged to open the peritoneal cavity and explore. This is a dangerous procedure, because you make a communication between the suppurating track and the peritoneal cavity. However, it was done, and tumors were found adherent to everything—to have removed them would have been almost necessarily fatal. The abdominal viscera were all glued together. So the external wound was brought together, and for a few days union went on nicely. Then there was a chill, and the union that had taken place broke down, the wound gaped, and there were evidences of constitutional sepsis. Under stimulation, an abundance of quinine, and disinfection with carbolic acid, she got well, but, as the healing was by granulation, the

resulting scar was broad and liable to stretch. The abscess was found to be in the loose areolar tissue. I have seen the pus in extra-peritoneal abscesses get up almost to the diaphragm. When the pus accumulates rapidly, and extends laterally and posteriorly up towards the kidneys, we may be quite sure that it is extra-peritoneal; but even in these cases it may extend up in the median line, but to do so it must have some other guide than the normal anatomy of the part, which is furnished in this case by the adhesions caused by the tumor. The obliterated hypogastric artery and the urachus offer tracks to determine the direction of the pus. This woman is now very comfortable, using a binder to support the abdomen, and she does not want anything done. In making an examination, we must handle the abdomen gently, else we may excite inflammation. There is also, in this case, a hernia, due to the stretching of the cicatricial tissue. Her menses are regular, though occasionally she has pain. As a surgical procedure, we might remove these tumors, with the consent of the patient, after having fully explained to her the risk. When the abdomen was open, I looked for the ovaries, but they were so imbedded in the inflammatory mass that I could not isolate them.

Cardiac Neuroses with Ovarian and Uterine Disease.

DR. H. J. BOLDT, in a paper read before the New York Academy of Medicine (*Medical Record*), refers to functional disturbances of the heart unaccompanied by organic changes. These might arise from disorders of the cardiac ganglia, or might be of reflex origin, and to the latter class of cases attention was directed. According to Dr. Boldt's observations, cardiac neuroses were found to be present to a greater or

less degree in about 8 per cent. of the cases of uterine and ovarian disease, and occasionally cases were met with which presented symptoms that were referred to the heart alone ; but disturbances of the uterus or its adnexa were associated, and the symptoms were removed by treatment of the pelvic organs.

The most frequent neuroses were palpitation, disturbance of rhythm or irregularity, intermittency or distinct loss of a beat, and angina pectoris.

The first was by far the most common, and might be more or less constant, or occur in paroxysms. Well marked intermittency was very likely to be accompanied by palpitation, and if permanent was probably indicative of organic cardiac disease ; yet such cases occurred in which organic disease of the heart was absent.

With regard to angina pectoris, there existed a difference of opinion as to whether or not it could occur independently of organic disease of the heart.

Dr. E. H. Grandin said that there seemed to be, at first sight, a clear connection, in Dr. Boldt's cases, between the cardiac symptoms and the disorders of the pelvic organs. He had frequently met with cases in which cardiac palpitation, intermittent pulse, etc., had been associated with uterine and ovarian disease ; but he had not felt quite certain that they bore the relation to each other of effect and cause, for the reason that he had encountered the same symptoms in cases where the uterus and ovaries were healthy. Ordinarily he had found that these cardiac disturbances were associated with gastro-intestinal derangements. There were cases, however, in which cardiac symptoms, such as had been mentioned by Dr. Boldt, existed, and doubtless were due to the fact that the patients were suffering from uterine and ovarian disease. But he did not

think that one was justified in making an examination of the reproductive organs, if no other evidence of disease of these organs could be obtained than that referable to the cardiac disorders. The particular point which he wished to make was that the stomach and intestines were more frequently at fault in this class of cases than either the uterus or the ovaries.

DISEASES OF CHILDREN.

Prematurely-Born Children and Their Diseases.

MÜLLER (*Arbeiten der Phys. Med. Geselleschaft*), from his investigations in the foundling hospitals of Moscow, finds that prematurely-born children are more subject to disease than those carried to full term. They also lose more heat, partly because their body surface is larger in comparison to their weight, and also because less fat has been formed. The temperature may fall to 30° C., and it is often impossible by artificial heat to raise it higher than 35°.

For this reason acute diseases, such as croupous pneumonia, may run their course without fever or cough ; and this, therefore, may be easily confused with atelectasis, in which the physical signs are similar. Septic fever may pass unrecognized, since a yellow hue of the skin is not infrequent in children, and aphthæ, and somnolence ordinarily observed in premature infants.

As a result of the uncoagulability of the blood umbilical hæmorrhage and hæmaturia frequently occur.

On account of the undeveloped condition of the thoracic walls the lungs collapse. This circumstance, with the difficulty of coughing up substances which may have entered them, as mucus, liquor amnii, milk, etc., tends to the development of pneumonia. All vita

processes are slower ; often the children cannot nurse, and there is a tendency to enteritis and constipation.

As the result of the low temperature, difficult breathing, and feeble heart, uric acid infarctions are often formed in the kidneys, which from their irritation may produce nephritis.

Sclerosis of the skin is not uncommon. Here the temperature may sink to 22° C., with a pulse beat of 40. The nervous system is defective, the reflexes weak, and the brain anatomically undeveloped, its substance being still jelly-like, the ventricles very large, etc.

The loss of weight during the first few days amounts to about 6½ per cent.

According to (Esterlen, the per centage of premature births is about 5 ; in the foundling asylums in Moscow, the ratio is about 10 per cent. The mortality in these asylums reaches 80 per cent., and is greatest during the first few days.

The first to die are those infants weighing less than 1000 grammes, and measuring less than 27 C. M. in length. The head circumference is less than 25 C. M., and that of the thorax over 2½ C. M.

The prognosis is bad when the temperature cannot be raised to over 35°, when the cord does not fall off for a long time. when, at the end of the first week, the original weight has not been increased, when the aphthæ in the mouth have spread.

By means of improved "warming baskets," the mortality has been reduced in some institutions to 33 per cent.

If the children survive for two weeks, and begin to nurse, they develop relatively quickly, gaining from 30 to 50 grammes a day, but for a long time they remain less developed than infants carried to term.—(*Centralbl. f. Gynakologie.*
—*American Lancet.*

Maladies of the Mouth in Infants.

DR. DE SAINT-GERMAIN (*Journal de Médecine et de Chirurgie*) :

Among the tumors observed in the mouths of infants, we meet not infrequently with the excrescence on the gum known as epulis. This partakes, at the same time, of the nature both of the papilloma and the sarcoma. The greatest trouble usually found with them is that they constantly recur. We generally find them situated between two teeth in the form of a small round, red swelling. This should be completely extirpated, and to prevent its return, the whole surface of the implantation should be scraped and cauterized with the thermo-cautery.

There is in infants a so-called affection of the mouth about which we are frequently consulted, but which for the most part does not exist outside of the imagination of parents. I refer to a supposed abnormal development of the frænum linguæ. It was formerly believed that all infants had this tendency from birth, and it was the habit to cut the false ligament, or to make believe cut it—for in a majority of cases it has no existence. In the very rare cases where it does exist it may appear under one of two forms. If it consists merely of a membranous and pellucid substance, and contains no vascular element, there is no harm in cutting it. But if the frænum is short, fleshy, or of a dull, whitish character, it must not be cut, as such action might give rise to mortal hemorrhage. When section is thought desirable, it should be made with the scissors, using the fingers of the left hand as directors and dividing a little at a time. Performed in this way we need not fear hemorrhages or a tearing of the membrane. But we must remember that the cases in which the operation is necessary are rare, and we

must learn how to resist parents who demand its performance. It is usually done out of pure complaisance.

The teeth, which are sometimes found in the mouths of infants at birth, are also a frequent cause of the unwise solicitations of parents, who always demand that they be extracted. Such operations are dangerous. In one case an accoucheur, having extracted two teeth from a newly-born child, brought about a hemorrhage which resisted all treatment and caused death in 21 days. In such cases, however, the mistake may be remedied, as in other dental hemorrhages, by forcing soft wax into the alveola and keeping the substance in place as long as may be necessary. I have used this method for arresting hemorrhages in hare-lip after excision of the superior maxillary.

Two kinds of ranula appear in the mouths of infants—the ordinary and the sanguineous tumor. The latter is rare, and the greater part of the excrescences so described are simple erectile tumors. Ordinary ranula does not usually become large, because parents take great care of infants who are troubled with it. It frequently remains stationary, and it is best in operating, to take advantage of the moment when it is at its maximum size, for it should be treated before it has a chance to break. The best procedure is excision, followed by cauterization with nitrate of silver. The walls of the cyst should be seized and drawn outwardly, and a segmentary section made of the upper surface. An orifice is thus obtained, through which the interior may be reached with the caustic which should be spread over the entire internal wall.

Wounds of the tongue are frequent accidents in infantile pathology and, at first sight, seem to be important. The tongue is in fact sometimes cut through

by the teeth. In certain cases doctors consider it necessary to put in sutures; but there is no utility in the operation. It is a difficult and painful procedure and may well be avoided. These wounds end by healing spontaneously and almost without leaving traces, while they give no trouble either in masticating or speaking. Means should be used simply to keep the organ as quiet as possible for a few days. It is much the same with wounds of the palatine arch. There may exist what seem to be frightful lacerations, but in these cases there is nothing to be done. The cicatrization is very rapid and complete, even when the wounds are large.

The uvula has, in certain cases, an unusual length and volume. It has been thought that certain coughs of a chronic character were due to the permanent contact of this organ with the base of the tongue. This state of things has certainly been much exaggerated, and the cutting of the uvula has been resorted to in very many cases where the operation was valueless. But there are cases in which the procedure is necessary. The operation is not, however, as easy as might at first sight appear. The uvula in such cases is much thicker than is supposed, and if undertaken without due precaution there is risk of an incomplete operation. It should be seized bodily in an open clamp, or forceps (*pince à cadre*), and the section made with exactitude.—*Medical Abstract.*

OBSTETRICS.

A Case of External Version.

DR. A. H. BUCKMASTER, of Brooklyn, N. Y., kindly sends us the following notes:

The following case illustrates the importance of early abdominal palpation

in obstetric cases. Mrs. S., multipara, had suffered from strong uterine contractions for several hours, when seen by the writer. On abdominal palpation, the head was found above the umbilicus and to its right side, and a soft, boggy mass felt in front, was supposed to be placenta. The abdomen was much distended by a large amount of amniotic fluid. External version succeeded in bringing the cephalic extremity into the pelvis. This was done without causing the mother any discomfort. Vaginal examination now resorted to for the first time, revealed the os dilated about five cm., and easily distensible. The position was R. O. A. Rupture of the membranes was followed by a perfectly normal labor, except that a portion of the

abdominal palpation cannot be credited. In the present case, the patient and her husband both recognized the position of the head by palpation, for at least two weeks before labor.

Those who practise obstetrics should be thoroughly familiar with abdominal palpation, and its general and timely employment will decrease both the mortality of the mother and of the child.

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An Axis-Traction Attachment which may be Applied to any Forceps.

DR. BROOKS H. WELLS (*Maryland Medical Journal*):

The attachment consists essentially of a traction-rod, having at the end a notched hook, which fits into the angle made by the blades of the forceps, and

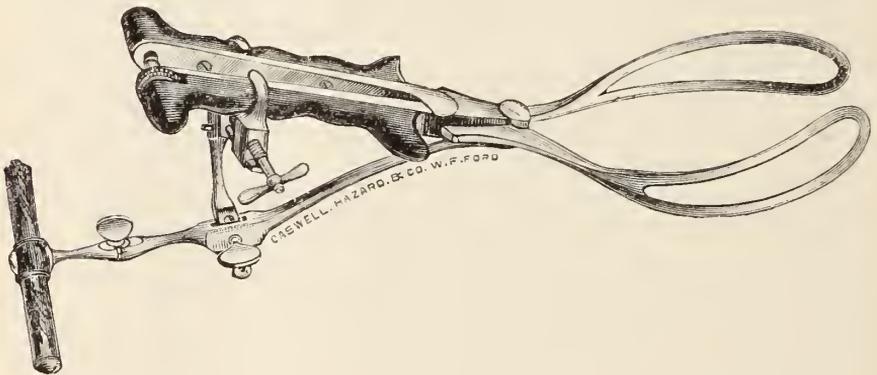


Fig. 1.

placenta was so firmly attached, that introduction of the fingers into the uterus became necessary to effect its removal. This procedure confirmed the diagnosis of the site of placental attachment. The presentation, with its mortality of 10 per cent., was changed by a manœuvre unattended with danger, to one the mortality of which is less than one per cent.

To one unaccustomed to practise the methods of Pinard, the ease and accuracy with which the diagnosis of presentation and position can be made by

provided with a transverse handle. To this rod is attached a movable arm with a clamp by which the handles of the forceps may be compressed and held at any desired distance from the traction-rod, thus allowing the line of traction to be adjusted to the varying pelvic curves of different instruments. This tractor is designed to be attached after the forceps is applied and locked, and can be slipped into place in a few seconds.

Two forms of the attachment are made; one (that shown in the cuts) to

fit any forceps in which the divergence of the blades forms an angle, as in the Elliot; the other, with a differently shaped hook, is adapted to instruments where the intersection forms the arc of a circle, as in the Simpson.

The attachment was shown at a meeting of the New York Obstetrical Society, and was approved as being more simple, while possessing the advantages of more complicated instruments. Its use by myself and others has demonstrated its efficiency, power, and ease of application, not only with the head at the brim, but in the cavity of the pelvis. Tarnier's application of the theorem of the paral-

might do damage with it; but would not the same men be as apt to do damage with the ordinary forceps as with an instrument designed so that, with less force but greater ease, it could accomplish the same end? No obstetrical instrument has yet been devised which does not require a sentient power to guide it. The dread of possessing too great power in an obstetric forceps is a fallacy. As Barnes graphically expresses it, "Violence is the result of struggling feebleness, not of conscious power. Moderation must emanate from the will of the operator; it must not be looked for in the imperfection of his instru-

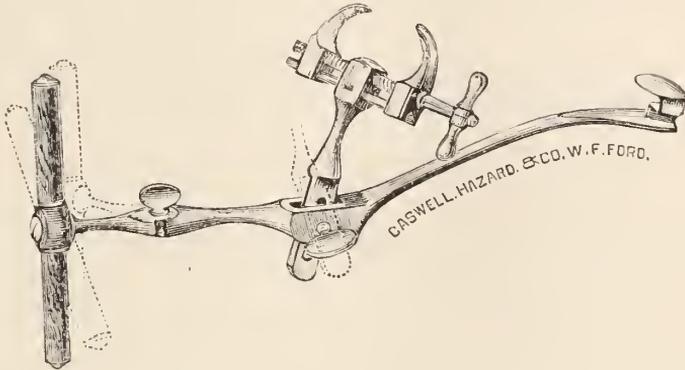


Fig. 2.

lelogram of forces—by which he demonstrates that with the head at the brim, in pulling upon the handles of an ordinary forceps with a force of forty kilogrammes, one tends to lower the head in the direction of the pelvic axis with a force of thirty only, while the pubes is subjected to a pressure of twenty-six, in round numbers—may be applied to a somewhat less extent to any part of the pelvic canal, and is a strong plea in favor of the more common use of axis-traction instruments.

It has been said by a prominent obstetrician of this city that an attachment of this kind placed too powerful an instrument in the hands of those who

ments. It is sometimes necessary to exert a considerable force for some time, often in a constrained position, and (especially with a weak instrument) the operator's muscles become fatigued and unsteady, the hand losing the delicacy of diagnostic touch and that exactly balanced control over its movements which it is all-important to preserve. The faculty of accurate gradation of power depends upon having a reserve of force," and this the attachment insures, the direction of the force being where it will do the most good, and the transverse handle enabling it to be applied in the manner most easy to the operator.

The advantages alleged for it are :

1. That with it traction can be easily made in the axis of the brim.

2. That it may be used with the forceps which one prefers and with which one is already familiar.

3. That it is simple and easy to apply.

4. That it does away with the necessity of grooves or slots in the blades of the forceps, which are difficult to keep clean and apt to carry septic material.

5. That where much traction is necessary its use greatly economizes the strength of the operator, even where the head is well down in the pelvic cavity.

6. That the compression force exerted can be easily regulated, being made as slight or great as may be desired.

Sudden Death in Pregnancy, Parturition and the Puerperal State.

In a paper read before the Harveian Society (*Lancet*), DR. M. HANDFIELD JONES briefly traced the history of the evidence on which hypertrophy of the left ventricle in pregnancy rests, and raised the question whether this hypertrophy was ever wanting, and if so, what were the results. Cases were detailed in which clinical investigation showed apparently absence of all hypertrophy, and in such patients signs of cardiac failure and insufficiency were observable; the possibility of repeated miscarriage being also referred to, this cause was shortly touched upon. Attention was drawn to the close tie existing between the heart and the uterus, and the extreme probability that the return of the heart to its normal size after delivery was, as in the case of the womb, due to a gradual process of fatty metamorphosis. While under healthy conditions this process was devoid of danger, arguments were adduced to show that in some patients this process of fatty change might overstep the normal

boundary, and by weakening the cardiac muscle leave the heart to be overwhelmed by secondary conditions insufficient in themselves to bring about a fatal issue. Cases were read in support of this view. In conclusion, some of the cases quoted in the literature of sudden death in and after pregnancy were brought forward, and the explanation given of death in the various cases criticised, with the purpose of showing that in the most of these the fatal result could be more scientifically accounted for under the view already enunciated than by referring them to such obscure conditions as idiopathic asphyxia, etc. Dr. John Phillips mentioned a case in which albuminuria and œdema had been present, but no hypertrophy of heart or evidence of actual renal inflammation. Premature labor had therefore not been induced. Was it always advisable to induce it where there was reason to suspect fatty degeneration during the later months of pregnancy? Dr. Champneys thought that the changes in the vascular conditions before and after pregnancy were not fully understood. Cases of true cardiac insufficiency from rheumatism were often unsuspected until pregnancy occurred. In 75 per cent. of the cases recorded by Dr. Angel Money, there were murmurs of some kind, but mostly transient. Fainting and sudden death were liable to occur even without hemorrhage, and for this reason especial care was necessary for many hours after delivery when there had been much loss of blood. Mr. George Eastes referred to clotting of blood in the pelvic veins and pulmonary embolism, and to ruptured uterus and post-partum syncope, as other causes of sudden death. Dr. Morton believed that the alteration in the character of the blood had much to do with the formation of the clots.

CONSTITUTIONAL DISEASES.

Some of the Complications of Typhoid Fever.

In the course of his remarks on the pneumonia complications, published in *Medical and Surgical Reporter*, DR. WALKER said :

Pneumonia, either croupal or catarrhal, has fallen under my observation a number of times. The most markedly severe as well as successful case was that of R. C., about twenty years of age, unmarried. In convalescence, a bronchial catarrh, which had existed throughout a decidedly severe attack of typhoid fever, involved the lobules of the lungs, especially the right, in a quite extensive though diffuse secondary inflammation. Drs. Wm. Pepper, Hanna T. Croasdale and Amy S. Barton, united with the author in this diagnosis, and a very grave prognosis, considering all the elements of the case, was the result of our deliberations. The patient, however, survived, his lungs cleared up entirely, and he has since successively passed rigid examinations in old line life insurance companies. In this case, turpentine gtt. xv.—xx. of the oil, repeated every three or four hours, was the especial stimulant resorted to. This has long been my favorite pulmonary stimulant in typhoid fever. The reason for its choice was, I admit, pure theory. If the delirium, typhoid state, hebetude, etc., of typhoid fever be due, as claimed by Murchison, to the presence of the results of nitrogenous waste in the blood, I argue, why add to the nitrogenous waste by administering ammonia in any form? I may say that in the above, as in many other cases of typhoid fever with catarrhal complications of the lungs, the result of a resort to turpentine as a substitute for carbonate of

ammonia has proven its usefulness. But when at the present day carbonate of ammonia is vaunted as of specific virtue in typhoid fever, Simon pure or complicated, my theory may prove mythical, although the results of my experience with turpentine remain the same. In, however, the croupous variety, the case is different. Here, from the inception of the crepitant r le to the disappearance of all evidence of solidification, I believe carbonate of ammonia to be our sheet anchor, whether the explanation of its benefit rests on its prevention of solidification of the exudate, as claimed by Bartholow, or on its influence on the heart, the vaso-motors and the respiratory centres, or on all combined. In doses of gtt. viij. in syrup or mucilage of acacia, well diluted to rob it of its acidity to throat and stomach, and repeated every two or three hours, it furnishes with whisky, liquid food and jacket poultices, an aid which is worthy of great confidence and praise.

The onset of croupous pneumonia is sometimes so insidious that its approach should be seduously anticipated in cases of decided severity. It will not do to expect marked changes in the course of the disease by its occurrence, as the temperature chart which I now show you will testify. The onset of croupous pneumonia, as a primary disease, is marked by most decided symptoms, which are usually pathognomonic. But in its stealthy approach as a secondary phenomenon, it is sometimes not suspected until well advanced. The respiratory difficulty, combined or not with more or less marked cyanosis, due to circulatory disturbance, is more suggestive than any rise of temperature, and should suggest the examination of the lung which the position of the patient has placed lowest and most

inaccessible, as well as that which can be examined without disturbing him. In this form carbonate of ammonia is the remedy of remedies. It should be given in full doses, repeated at least every two hours. Alcoholic stimulants are usually also required.

Inhalations of Cold Air in Typhoid Fever.

DR. ALEXANDER M. SOKOLOFF, searching for some means of intensifying the antipyretic action of cold air, resolved upon undertaking a series of experiments on inhalation—that is, on introducing this cooling agent into the lungs, into “one of the regions of maximal heat-formation.” His observations were made in twenty-three cases of enteric fever, five of which were of an abortive type, the remaining eighteen being moderately or very severe (two ended fatally). The patients were made to inhale from a Niemeyer’s cold air inhaler (see P. Niemeyer’s *Aertzl. Sprechts.*, vol. vi., part 3, p. 129), slightly modified by the author. About 510 inhalations were made in twenty-three cases, the number of sittings in an individual case varying from six to forty-two; the number of sittings daily from one to three; the duration of a sitting from five to thirty minutes; and the temperature of the air from -2° to 10° R. From these observations the author draws the following conclusions:

1. Inhalations of cold air produce a greater or less depression of febrile temperature; but, contrary to the author’s expectations, their effect is comparatively weaker and more fleeting than that of cold water baths, and even of cold air baths. The antipyretic effect of the inhalations varies according to certain conditions. (a) The time of the day. The least decrease of the febrile temperature, varying from $0^{\circ}.2$ to $0^{\circ}.5$ C.,

is observed when the inhalations are made between noon and 6 P. M. The strongest effect, varying from $0^{\circ}.5$ to $1^{\circ}.3$ C. (after a single sitting), is observed between 7 P. M. and 10 P. M. (b) The stage of the disease. The slightest and shortest effects are observed during the two first weeks of enteric fever, when the average daily decrease (after several sittings) falls short of 1° C., and when the effect of an individual sitting does not last longer than one and one-half to two hours. During the next weeks of the disease the effects are stronger (often 1° C., after a sitting), and last several hours. (c) The duration of the inhalation is of but slight importance. A sitting of five to ten minutes’ duration gives the same decrease of the febrile temperature as a sitting of twenty minutes’ duration. [The author attempts to explain this rather strange circumstance by fatigue of the lungs, in consequence of which the patient makes accelerated and superficial respiratory movements.] At all events, the greatest antipyretic effects are obtained from sittings of twelve to fifteen minutes duration. (d) The temperature of the air inhaled. A temperature of -2° or -3° R. gives almost the same decrease of the febrile temperature as the temperature of -4° , -5° , or -6° R. Relatively stronger effects are obtained from temperature of -8° , -9° , -10° R. [It would seem natural to expect *à priori* that the antipyretic effect ought to be greater, the lower the temperature is inhaled. It proved, however, otherwise. The relatively small effect of lower temperature is attributed by the author to a comparatively shorter duration of the sittings, the patients being unable to perform prolonged inhalations on account of unbearable toothache occurring in consequence of intense cooling of the mouth and teeth.]

(e) The mental state of the patient. Both depression and excitement (often observed in typhus patients) diminish or even entirely suppress the antipyretic effect of the inhalations.

2. The inhalations produce retardation of respiration (in average, four a minute) and pulse (in average, six beats a minute). At the same time, breathing becomes deeper, and the pulse fuller.

3. The inhalations relieve dryness of the mucous membranes and skin.

4. Inhalations of cold air promote resolution of the bronchitis which often complicates enteric fever, and increase the process of ventilation in the lungs.

5. Hence the inhalations lead to an improvement in the patient's general state, sleep, and appetite.

6. Inhalations of cold air act antiphlogistically on the inflamed respiratory tracts, and hence may be employed as a rational therapeutic agent in the treatment of pulmonary inflammation.

7. Systematic inhalations of cold air may prove of use also in chronic bronchitis, asthma, and emphysema.

[In the *Meditzinskoie Obozrenie*, No. 13, 1884, p. 12, Dr. V. F. Sprimon points to the disadvantage of the use of the cumbrous and heavy Niemeier's inhaler, and advises a trial, in winter time, of inhalations of cold air conducted from a window through a piece of tubing, the patient inhaling the air by means of a mouthpiece from a Waldenburg's apparatus. In the *Vratch*, No. 14, 1884, p. 242, Professor V. A. Manassein points out that Sokoloff's observations are important as a new illustration of the fact that cool air in itself is harmless to the febrile patient, and that the well-known fears entertained as yet by the public at large, and even by medical men, in regard to "chilling the patient" are entirely groundless. Like Sprimon,

Manassein also finds any special cooling apparatus superfluous.]

Indications for Arsenic in Malaria.

DR. JAMES CRAIG, of Llandudno, writes: The antiperiodic properties of arsenic are well known, but, so far as I am aware, no one has pointed out any symptom usually found in the cases in which it is successful, which distinguishes them from those, perhaps the greater number, in which it fails to prevent a recurrence of the malarial symptoms. The cases in which arsenic is beneficial have one symptom in common, viz., at one period of the twenty-four hours, sometimes several times daily, but most frequently only in the morning after rising, the patient experiences a sensation of coldness, most marked in the hands and feet, and combined with this chilliness there is a decided fall in the temperature. In India I have frequently seen the temperature, during one of these seizures, under 96° F. And in this country I have, on several occasions, seen the temperature fall to 94.5°. The low temperature continues for about half an hour, and then gradually rises to about 97.8°, which in these cases is the usual average temperature. The severity of the symptoms experienced during the seizures, varies in different cases, and also on different days. Some days there is no attack, on other days only a very mild one. These seizures of low temperature often continue for months after the last attack of ague, and quinine has little influence on them; but small doses of arsenic quickly, "often in nine or ten days," prevent, or at least modify them, and if the arsenic is persevered in for a long period (with occasional intermissions), and the patient is not again exposed to malarial poison, it prevents their

recurrence, and also prevents a return of intermittent fever. The attack of chilliness is not the cold stage of an aguish attack. (Although I find that if the temperature is taken at the commencement of the cold stage of an aguish attack, there is, at least in many cases, an actual fall in the temperature.) But in these attacks of chilliness the feelings experienced by the patient differ from those felt during the cold stage of ague; and as these patients usually have considerable experience of both symptoms, they can predict whether or not the chilliness will be followed by an attack of ague. Examination shows that although the temperature is so much reduced in the attacks of chilliness which are not followed by the usual symptoms of intermittent fever, still there is never so much prostration or nervous disturbance as there is in the cold stage of an attack of ague. I have found arsenic equally useful in attacks of hemoglobinuria of malarial origin when accompanied with similar seizures of low temperature. The seizures of low temperature are not abortive attacks of hemoglobinuria; and when occurring in persons suffering from this disease are distinguished from the abortive attacks by the greater lowering of temperature, by not being accompanied with disintegration of the blood-cells, nor by draining of the coloring matter out of the red blood corpuscles—both of which changes I have seen in a drop of blood taken from the finger during an attack of abortive hemoglobinuria.—*Lancet*.—*American Practitioner and News*.

Antipyrin in Pernicious Form of Malarial Fevers.

JOHN HOPE POTTER writes to *The Lancet* (April 10, 1886): Whilst in charge of the Police Hospital of Bombay, during my tenure of office as Acting

Police Surgeon I had considerable opportunities of testing the effects of different kinds of treatment in malarial fevers, of a remitting as well as of an intermitting type. In common with most men who have had much experience of these fevers, I met many cases of a remittent type which were not amenable to the ordinary treatment, whether by quinine, arsenic, or diaphoretics with aconite. I determined to try the effect in such cases of administering antipyrin in sufficiently large and repeated doses, to ensure a reduction of the temperature to the normal standard. The result was most satisfactory, so much so that during the last five months of my tenure of office I found no case that was not amenable to this treatment. Many cases that for weeks had been quite unaffected by the ordinary remedies were instantly cured by the exhibition of antipyrin followed by quinine. The few cases in which I found the effects unsatisfactory eventually showed other complications, such as abscess of the liver or phthisis. I am of opinion that in pernicious forms of uncomplicated remittent fever we have a most valuable aid to treatment in antipyrin.

As I am not aware that this treatment has been advocated in the malarial fevers of the tropics, I write to give you the result of my experience, in the hope that it may prove of use to those who have to contend with this common and only too fatal disease.—*Maryland Medical Journal*.

Acute Articular Rheumatism in a Mother and her New-Born Child.

DR. SCHAFER, of Pankow (Berlin), reports in the *Berliner Klinische Wochenschrift*, of February 1, 1886, the following interesting case of a simultaneous rheumatic attack in a mother and her new-born child: Mrs. N., æt. 35, was

seized a few days previous to her confinement with inflammatory rheumatism, attacking the left hip joint and the right wrist. The child was born while the mother was still feverish, and fully under the influence of the rheumatic intoxication. Three days after birth a rheumatic swelling of both ankle joints was noted in the child, together with a rise of temperature. Later the hip and finger joints became likewise affected, leaving no doubt as to the correct diagnosis. The child was treated with minute doses of salicylate of sodium, but without success; the medicine besides had to be soon discontinued on account of the gastric irritation it produced. After three to four weeks both mother and child improved.

There can be not the slightest doubt that we have to deal here with a case of acute articular rheumatism in a new born child, contracted by infection from the mother in intra-uterine life. This case of infection is particularly interesting, as it tends to confirm the assumption, first pronounced by Edlefsen (Wiesbaden Congress), April, 1885, that rheumatism must be classed with the affections of an infectious nature. Neither in Hensch's nor in Gerhardt's text books on diseases of children can we find a single case of this kind reported, which is proof enough of its exceptional nature. In the *Lancet*, however (1882, p. 804), Ernest Pocock reports a case resembling very closely the one published by Schafer.—*Therapeutic Gazette*.

Salol, a New Antirheumatic and Antiseptic.

The *Medical News* contains the following, reported in the *Wiener Medicinische Presse*.

VON NENCKI and SAHLI have discovered and made use of a new combina-

tion of salicylic acid, which presents certain advantages over the salts at present in use. In the new compound the acid is chemically combined with phenol, and forms a white, tasteless powder nearly insoluble in water, but quite soluble in alcohol. Experiments show that this compound, called salol by Nencki, is unaffected by gastric digestion, but is, in pancreatic digestion, decomposed into its component parts, which are absorbed and excreted unchanged.

Under its use the urine becomes very dark, but no disagreeable constitutional effects are produced. Sahli has himself taken the drug in doses of from 90 to 120 grains without producing ringing in the ears, and in other individuals experimented upon this symptom was always less marked than in the case of an equivalent amount of the ordinary salicylic salts.

The efficient dose is found to be thirty grains, given three or four times daily. Thus administered, its effects in acute, subacute and chronic polyarthritis and muscular rheumatism were found to be fully as advantageous as those of the exhibition of sodium salicylate, while the fever appeared to be more rapidly diminished.

A case of chronic urticaria, which had resisted treatment for several months, was rapidly cured by this agent, as were also several cases of supra-orbital neuralgia.

The fact that the urine of patients thus treated remains unchanged, even when kept at body temperature for weeks, suggests the possibility of the usefulness of this treatment in vesical catarrh.

Nencki has obtained good results from the local application of the drug in ozena, otorrhœa and gonorrhœa.—*Weekly Medical Review*.

An Ointment for Acute Rheumatism.

GRINEVITSKI (*Russkaya Meditsina—Lancet*) uses the following: Oil of hyoscyamus, 1 ̄; mercurial ointment, 2 3; extract of aconite, 1 3.—*New York Medical Journal*.

The Action of Bichromate of Potassium.

DR. ALFRED DRYSDALE publishes in the *Medical Press*, April 21 and 28, 1886, an elaborate paper on the sphere of action of bichromate of potassium. When given to animals, 10 grains injected into the jugular vein is capable of producing rapid death in a dog, death being preceded by spasms and retchings, followed by motor paralysis. At first the blood pressure rises, but in a minute or two begins to fall, and continues to do so until death, the slowing of the pulse evidently being due to stimulation of the inhibitory fibres of the vagus. Post-mortem examination shows congestion throughout the large and small intestine, with the membrane reddened or perhaps inflamed. When the drug is given internally in poisonous doses it acts as a violent irritant, produces incessant vomiting and purging of mucus and blood, quick pulse, salivation, rapid emaciation, great weakness and death within a period of twelve hours to three weeks, sometimes preceded by convulsions. On post-mortem examination, ulcers are found on the mouth and tongue; the mucous membrane of the entire alimentary canal is more or less destroyed, with extensive superficial ulcerations, especially in the stomach. The kidneys are always severely congested. In workmen engaged in the manufactory of this salt very serious symptoms may also be produced. In many of the workers the septum of the nose will have been destroyed by ulceration. In fact, this perforation and

destruction of the septum is as characteristic of chrome workers' disease as is necrosis of the jaw of phosphorus match makers. The eyes are frequently inflamed and the alimentary canal disturbed in its functions, while the skin is the seat of a papular eruption, which becomes pustular, and which leaves small dry ulcers, healing with a depressed cicatrix. Used as a remedy, bichromate of potassium may be reasonably hoped to modify pathological processes in tissues which are specifically acted on by the drug, such as the respiratory passages and alimentary canal, the liver, kidneys, skin and bones. It therefore has been used, and with a certain amount of success, in scrofulous eczema, farcy and digestive disorders, marasmus and syphilis. Polypi of the nose, after repeated removal with the forceps, will often yield to topical application of a snuff composed of 9 parts of sugar of milk to 1 part of powdered bichromate of potassium. It also promises success in the treatment of hay asthma, and as a gargle, 2 grains to the ounce of water, with ½ ounce of glycerin, in acute ulcerated sore throat, as well as in cases of indolent enlargement of the tonsils. When given internally, as in the treatment of certain forms of dyspepsia and chronic intestinal catarrh and in syphilis, the dose should not be more than a ¼ grain daily, though sometimes ½ grain will be sufficient to produce violent emesis.—*Therapeutic Gazette*.

Camphor Intoxication.

The *Quarterly Journal of Inebriety* tells us that in a late number of the *Annales Medico-psychologiques*, a long account is given of unusual symptoms following an overdose of camphor, which lasted months after. The close resemblance in many cases where, after the first profound intoxication, the nerve

and brain disturbance continued for months, will be apparent to all our readers. The case was a young man with no heredity of nerve disease, and in apparent good health, who for a slight catarrh and insomnia, took, by mistake, 300 grains of camphor. Soon after, he seated himself at the dining table, felt chilly, lost power of speech, was bewildered, and finally cried out that he was crazy. A physician was called and an emetic given, which brought up much of the camphor. He was taken to his room, and, excepting some chills and hallucinations of vision and sensations of trembling, he recovered and was out in two days at his work again. Three weeks later, he suffered from severe headache, and had a well marked hysteric sensation of choking, and, when in bed, suffered from a sickening sensation of swinging. Later, exact ideas of time were lost, everything seemed new and at the beginning. Although able to work, all events seemed new and strange. Sensation of his height became perverted. He thought he was higher than the house, and suffered at the thought of the great disadvantage of his height. By striking himself on the head, he felt better. He went to an asylum, and was better at first, but finally fell into a mechanical state of existence. Was contented with everything, had no care for himself or any one, would talk and seemed to realize what was said, but had no interest, or continued memory of events. Two weeks later, he recovered and went about as usual. After six weeks' residence, went home, and, on greeting his family, was thrown into a trance state, in which he could not talk or act, but yet fully realized what was said and done about him. Two weeks after, from some excitement in his family, he had another trance state, and came out

of it very weak and trembling. For a long time after, he was conscious of an unstable brain, which seemed balanced on a very slight point, likely any moment to turn over. Fragments of conversation went whirling through his mind, and at times his surroundings were all perverted. He would walk round and never remember what he was doing or where he was; was somnambulistic. From this time the case continued to recover. The disorders of sensation, and hallucinations of the senses, which he seemed to partially realize, pointed to central brain disturbance, that was undoubtedly the beginning of very grave lesions. This poisonous dose of camphor either kindled into activity a latent nerve defect, that was a legacy from the past, or it produced some cell changes in the great centres. This emotional instability, with disordered and changing sensations and hallucinations, presenting the most diverse and complex symptoms, are often seen in inebriates, although they have been months free from spirits. In other cases it follows a single paroxysm of intoxication, and lasts for months or years.—*Medical and Surgical Reporter.*

Cider and Rheumatism.

The question has been several times discussed as to a supposed antagonism between the use of cider and rheumatism. Apropos of the question, Dr. T. REUEL ATKINSON thus writes to the *British Medical Journal* :

Having lived for the last three years in this cider drinking county par excellence, will you allow me to say that, in my opinion, instead of there being any antagonism between cider and rheumatism, I am inclined to think that the one has a tendency, if anything, to cause the other. At any rate, rheumatism is,

in this neighborhood, in one or other of its many varieties, a very common complaint; and the amount of cider consumed by the British workman about here is, especially in hot weather, something fabulous; many a man drinking his three or four gallons a day, and thinking nothing of it. Apropos of this matter I have just come upon a passage taken from an old author who, writing of Herefordshire cider, says, after extolling its many virtues: "Lastly, for it excites the appetite, clears the stomach, strengthens the digestion, frees the kidneys from gravel and the bladder from stone. That which is made from pippins, duly ripened and well fermented, is an excellent remedy for consumption." So it is very evident that cider is a remedy not to be despised, although not to be found in the British Pharmacopœia.—*Medical and Surgical Reporter*.

Dover's Solution and Red Drops.

A preparation known as Liquor Doveri, Dover's solution (liquor ipecacuanhæ et morphinæ), which originated with Dr. J. D. COLEMAN, of Juliustown, and afterwards of Trenton, N. J., and is quite popular in several localities, is prepared as follows: ℞. Acetate of morphine, 60 grains; diluted acetic acid, fl. ʒ i.; dilute alcohol, fl. ʒ vij.; wine of ipecac, fl. ʒ ij. Dissolve the acetate of morphine in the acid, add the diluted alcohol and wine of ipecac, and mix the whole thoroughly. Set aside for twenty-four hours, then filter through paper.—*Ibid*.

Morrhual.

According to the *Therapeutic Gazette*, this substance, the active principle of cod-liver oil, was first isolated by Chapatteau. It appears in the form of crystals, having an aromatic odor and a sharp,

bitter taste. It is administered most conveniently in capsules, three drops representing a drachm of the oil. Morrhual does not cause nausea, but rather improves the appetite. It is highly recommended in early tuberculosis, scrofula, and rickets.—*New York Medical Journal*.

Ptychotis Ajowan.

Le Progrès, February 20, 1886 (*Therapeutic Gazette*, May, 1886), furnishes the following facts regarding the medicinal properties of this Indian plant: The seeds possess marked carminative properties, combining the stimulating effects of capsicum with the anti-spasmodic action of assafœtida. The drug is very useful in the treatment of dipsomania. The officinal preparations are the ethereal oil and a watery extract.—*Ibid*.

The Bullous Form of Iodic Eruption.

From a careful study of the bullous form of eruption produced by the administration of iodine, DR. PRINCE A. MORROW draws the following conclusions (*Journal of Cutaneous and Venereal Diseases*). 1. The bullous form of iodic eruption is comparatively infrequent. 2. It has for its seat of predilection the face, neck, forearms and hands; exceptionally it may occur upon trunk and lower extremities. 3. There seems to be no definite relation between the amount of the drug ingested and the production of the eruptive accidents; they may follow, indifferently, a single insignificant dose, or may appear only after the long-continued use of large doses. 4. In the former case, the incidental effects of the drug upon the skin depend upon idiosyncrasy, in the latter class of cases the pathogenesis is more obscure. 5. The proneness of this

eruption to develop in connection with cardiac and renal disorders would seem to indicate that these conditions stand in the relation of a determining cause, rather than a mere coincidence. 6. The practical inference may be drawn that caution should be observed in the administration of iodide of potassium when these complications are found to exist. —*Therapeutic Gazette.*

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DISEASES OF THE NERVOUS SYSTEM.

Sleeplessness.

DR. J. MILNER FOTHERGILL, writing on this subject to the *Medical Brief*, says :

One good broad rule to bear in mind is this : Opium is the agent where insomnia is due to pain ; chloral where it is due to a high blood pressure in the arterial system ; the bromides where there is any peripheral irritation. Opium having a pronounced effect upon the sensory portion of the brain as an analgesic, is the drug *par excellence* in sleeplessness due to pain, and especially osteal and periosteal pain. Whenever there is a morbid condition in tense tissues, as a syphilitic node, for instance, pain on going off to sleep is set up by that dilatation of the blood vessels of the system generally which is essential to brain depletion. The effect of the pain is to rouse the brain into wakefulness. Where such a complication exists it is well to combine the opiate with some potent depressant of the circulation, as antimony or aconite. In many cases a full dose of alcohol is sufficient for the attainment of the desired end.

Graves, of Dublin, laid down a sound and wise rule as to the administration of opium. He gave it about half an hour before the usual time of falling asleep, so that its primary stimulant

effect gets over, and its secondary narcotic action is in play synchronous with the force of habit in going to sleep. By observing this rule it is often possible to secure sleep with a minimum of the drug.

In the high blood pressure of gout and Bright's disease chloral gives the best results. In sleeplessness from excitement, too, chloral is of great service.

In peripheral irritation, as in the reproductive organs for instance, the bromides are specially indicated.

There is one matter to be ever borne in mind about narcotics and it is this : Opium and alcohol do not produce such pronounced cerebral anæmia as follows the resort to chloral and the bromides. The brain-bloodlessness set up by chloral and the bromides lasts into the next day, and the sleepless man who takes either (in order to get some sleep) pays the penalty next day in impaired brain capacity. They are consequently deadly agents to adopt. The alcoholic "night-cap" of our forefathers was infinitely less injurious than the toxic sleep-bringing drugs of their teetotal descendants. Indeed, the preliminary stage of excitement is often the means of procuring refreshing sleep. Sometimes tonics which fill the brain with blood in the day are followed by a corresponding anæmia of the brain at night, and thus act as narcotics. This was well seen recently in the case of an in-patient at Victoria Park Hospital. She had been taking a mixture to soothe her stomach, with a mild narcotic pill at bedtime. One day my clinical assistant drew my attention to the fact that she was sleeping badly. My remark was : We will not increase the dose of the narcotic, but flood her brain with blood in the day by some quinine and strychnine, as her stomach is now getting all right. And this heightened brain

vascularity in the day will be followed by a corresponding reaction at night. Again the desired result was attained.

Not uncommonly a patient, often a person convalescing from some debilitating malady, will complain of feeling sleepy when going about in the day; but as soon as the head is laid upon the pillow the opposite condition of wakefulness sets in. The brain perched at the top of the organism is depleted when the patient is upright, the blood falling away into the slack and unfilled blood vessels, and so is lethargic and sleepy. When the head is laid down on the pillow the blood flows into it freely and sleepiness gives place to wakefulness. In such conditions it is well to tone up the blood vessels by the administration of digitalis along with the tonics in the day, after which the sleepiness in the day disappears; while sleep comes on naturally on lying down, especially if a high pillow be used.

A much more frequent matter is sleeplessness due to cold feet, and especially common is this with women. On inquiring it will be found that they have cold feet, and very often this coldness extends far up the lower extremities. The consequence of this arterial contraction in the vascular area of the legs is sleeplessness. The arteries and arterioles of this area do not dilate, and consequently the brain is not depleted. It is impossible to woo "nature's sweet restorer" without remedying the vascular condition of the lower limbs. To warm the feet at the fire simply leaves them more icy cold than before when they come into contact with the chilly bed clothes. A warm bottle in bed is a comfort; but if the feet be rubbed (with a rough towel or bath gloves) till they glow with natural heat, then the hot bottle becomes trebly effective.

The Value of the Knee-Phenomenon.

DR. PHILIP ZINNER, in an article published in the *Journal of the American Medical Association*, among other things says :

But Jendrassik has quite recently suggested a method of examination which reduces this relatively large percentage to almost zero. This method enabled him to find the phenomenon in all of 1000 persons except one; it was the means of obtaining the phenomenon in the one child of the 2403 children examined by Pelizaeus, in whom it could not otherwise be obtained, and it enabled me to obtain the results reported in this paper. The method is as follows: The individual, seated as above, is requested to link the bent fingers of one hand into those of the other and pull energetically. During this effort the examiner strikes the patellar tendon. The effort heightens the muscular tonus, or increases the tension of the muscle and tendon, and makes the knee-jerk more marked. In sixteen of the 1000 examined by Jendrassik he was unable to obtain the phenomenon by the ordinary method, in fifteen of whom he easily obtained it by his own method. In my own examinations I succeeded in quite a number of instances in getting the knee-jerk with Jendrassik's method when I could not do so otherwise. Indeed, so striking was the difference in some instances that it occurred to me that this method might enable us to get the phenomenon in locomotor ataxia. For that reason I again examined a number of cases of that disease in which I had previously pronounced it absent, but in all of them, notwithstanding Jendrassik's method, the phenomenon still remained absent.

Jendrassik states that in 999 cases he obtained the knee-jerk easily by his method. This was not my experience.

In some instances it was very slight and obtained with difficulty. Whether such a result always has a pathological significance, I cannot say. In some of these instances the persons examined seemed to be in perfect health; in others there were other manifestations of disease. The latter is especially true of some cases in my case book and not included in this report, in some of whom there is undoubted locomotor ataxia in its early stages; in others there is some reason for suspecting the presence of the disease.

Is the knee-jerk always absent in locomotor ataxia? Westphal stated in his earliest publication that it is always absent in typical cases, at least when the disease involves the lumbar portion of the cord. As the disease generally begins in this part, the loss of the phenomenon is usually its first manifestation. Since Westphal's publication, various cases have been reported in which the phenomenon remained present. Hirt recently reported a case in which the phenomenon remained during life, and the post-mortem examination revealed the characteristic changes in the cord; but he was unable to state from the examination of the fresh specimen whether those parts were affected, whose disease Westphal believes to be accountable for the absence of this phenomenon. Westphal has shown in a case of his own that a skin reflex action may sometimes simulate the patellar tendon reflex, and cause us to suppose the latter is present when it is really absent; but he also has reported two cases in which the phenomenon was still present after the ataxic gait was fully developed, and only disappeared in a very late stage of the disease. But such instances are rare, so rare as to very little invalidate the worth of the phenomenon. I have seen quite a num-

ber of cases of this disease, and in only one of them was the knee-jerk in its normal condition. This case (which I reported in the *Journal of Mental and Nervous Diseases*, 1884), was not one of typical locomotor ataxia. There was considerable muscular atrophy, and the whole appearance of the case was that of a diffused myelitis, rather than of a systematic disease of the posterior column. In several other cases now under observation the phenomenon can be obtained slightly on one side, but in none of these has the disease advanced to the stage of ataxia.

In conclusion, we may summarize our results by saying that if, in any person, with no other assignable cause, we find an entire absence of the knee-phenomenon, we should look for other symptoms of locomotor ataxia, and if any other symptoms are presented the diagnosis is assured. But before pronouncing it absent the patient should be carefully examined, especially by the aid of Jendrassik's method. In some instances it would even be well to examine several times before pronouncing a final verdict, partly because there is sometimes such difference in the degree of response at different times in the same individual, partly because an unrecognized attack of diphtheria, or the like, may have caused its temporary disappearance.

DIGESTIVE TRACT.

The Etiology of Dysentery.

DRS. CORDORELLI, MARGHERI and ARADAS have recently published, in the *Rivista Int. di Med. e Chirurg.*, the results of their investigations of the causes of epidemic dysentery.

In the faces of patients affected with dysentery, were found various micro-organisms, which were discovered to

belong to four classes—two known, the *bacterium termo* and *bacterium lineolum*, and two unknown. Their studies were confined to the two latter. Both formed round colonies of a yellowish color, and developed rapidly under a temperature of from 30° to 35° cent. (86 to 95 Fahr.) One of these bacteria is smaller than the *b. termo*, has no spores, and, besides the Brownian movement, has a motion of its own. It may be stained by an aqueous solution of Fuchsin, or by methylene violet. The other may be colored in the same way, only the red of the Fuchsin becomes violet in about twenty-four hours. The form of the latter is rod-like, the larger ones having a spore at the extremity.

A small portion of microbes of the first variety was injected into rabbits. This was uniformly followed by a rise of temperature lasting twenty-four hours, but no lesion was discovered in any case. They accordingly called this micro-organism the *bacterium pyrogenum*.

In six rabbits, a cultivation of the other bacteria were injected. All died in from one to thirteen days. The intestines were found completely filled with a thick mucus, the bladder full of urine, the spleen black, and the intestinal vessels filled with dark blood. The six rabbits presented a clinical picture of acute epidemic dysentery.

The bacilli were not found in the blood, nor in the intestinal walls, but only in the secretion around ulcerated points. With a specially prepared apparatus, they sought for this microbe, which they have named the *bacillus dysentericus*, in the air of rooms in which dysenteric patients were lying, but failed to find it. But they did succeed in discovering it in water. This was cultivated, injected into rabbits, and produced the same symptoms as were developed in the six rabbits mentioned above.

These important discoveries will undoubtedly be applied in therapeutics. A reliable germicide must be obtained, which, if thoroughly applied, will work an infallible cure.—*St. Louis Medical and Surgical Journal*.

Dietetic Fallacies.

1. That there is any nutriment in beef-tea made from extracts. There is none whatever.

2. That gelatine is nutritious. It will not keep a cat alive. Beef-tea and gelatine, however, possess a certain reparative power, we know not what.

3. That an egg is equal to a pound of meat, and that every sick person can eat them. Many, especially those of nervous or bilious temperament, cannot eat them; and to such, eggs are injurious.

4. That because milk is an important article of food, it must be forced upon a patient. Food that a person cannot endure, will not cure.

5. That arrow root is nutritious. It is simply starch and water, useful as a restorative, quickly prepared.

6. That cheese is injurious in all cases. It is, as a rule, contra-indicated, being usually indigestible; but it is concentrated nutriment and a waste-repairer, and often craved.

7. That the cravings of a patient are whims and should be denied. The stomach often needs, craves for, and digests articles not laid down in any dietary. Such are, for example, fruit, pickles, jam, cake, ham, or bacon with fat, cheese, butter and milk.

8. That an inflexible diet may be marked out, which shall apply to every case. Choice of a given list of articles allowable in a given case must be decided by the opinion of the stomach. The stomach is right, and theory wrong, and the judgment admits no appeal.

A diet which would keep a healthy man healthy, might kill a sick man ; and a diet sufficient to sustain a sick man, would not keep a well man alive. Increased quantity of food, especially of liquids, does not mean increased nutriment ; rather, decrease, since the digestion is over taxed and weakened. Strive to give the food in as concentrated a form as possible. Consult the patient's stomach in preference to his cravings ; and, if the stomach rejects a certain article, do not force it.—*Technics.*

DISEASES OF THE URINARY ORGANS.

Commencement of Dropsy as a Point in Diagnosis.

Apropos of the subject of dropsy, there has seemed to me to be one very good mechanical indication for distinguishing whether dropsical effusion springs from disease of the heart, or from disease of the liver, or the first local seat of the effusion. If dropsical effusion begins in the lower extremities, and proceeds to the abdomen, the evidence is fairly sound that the obstruction is direct from the heart, and that the liver is free, the stagnation and transudation being due to a failure of the return column of blood from the extreme parts. If, on the other hand, the accumulation of fluid begins in the abdomen, and extends to the lower limbs, the evidence is equally good that the arrest of the circulation is in the hepatic system. This distinction may be of moment sometimes in deciding on the question of tapping. In a case where the dropsy occurred first in the extremities, and afterward in the abdomen, it would be good practice to delay the tapping until the effect of removing fluid by puncture of the lower limbs had been carried out. But in a case where the effusion is, primarily, into the peritoneum, and afterward into the extremities,

tapping the abdomen would have a prior place to puncture. The rule would run, in cases where there are ascites and anasarca : Tap for primary ascites, puncture for primary anasarca. I refer, of course, in this note to chronic ascites and chronic anasarca uncomplicated ; not to special dropsies of local origin, like ovarian cysts, and not to dropsy from renal disease.—*Asclepiad.*—*Journal American Medical Association.*

A Simple Test for Sugar.

The simplest test for diabetic urine is to place a little on a piece of bright tin, which is held over a spirit lamp until the urine is evaporated. If sugar be present, the last portion of the urine will give the characteristic appearance and odor of burnt molasses.

DISEASES OF RESPIRATORY ORGANS.

Tubercular and Fibroid Phthisis.

The following differential diagnosis appears in the *Medical World*.

<i>Tubercular Phthisis.</i>	<i>Fibroid Phthisis.</i>
1. Of constitutional origin.	1. Of local origin.
2. Usually affects both sides.	2. Usually affects one side.
3. Usually attacks youth.	3. Usually attacks middle age.
4. Elevation of temperature.	4. No elevation of temperature.
5. Elevated circulation.	5. Normal circulation.
6. Loss of flesh.	6. Little or no loss of flesh.
7. General exhaustion.	7. Little or no exhaustion.
8. No albumen in urine.	8. Always albumen in urine.
9. Edema unusual.	9. Edema always present.
10. Death usually within three years.	10. Death unusual before five years.

A Mixture for Nervous Cough.

GRAEFFER (*Nouveaux Remèdes*) recommends the following : Hydrochlorate of cocaine, gr. i ; chlorate of potassium, gr. x ; bitter almond water, ℥ x ; distilled water, ℥ iss. To be used in the form of spray.

Intubation of the Larynx.

DR. A. R. DAVIDSON, in the *Buffalo Medical and Surgical Journal*, gives the following description of the instruments employed in this operation.

The set of instruments consists of five laryngeal tubes with obturators, an applicator, an extractor, a gauge and a gag. The tubes vary in length from $1\frac{3}{4}$

Dr. O'Dwyer points out, the epiglottis is only an accessory to the closure of the larynx, and the other more important factor, the action of its constrictor muscles is presented by the presence of the cannula, it is evident that the deglutition of fluids can never be perfect with a tube in the glottis. The lower end of the tube is about half an inch from the

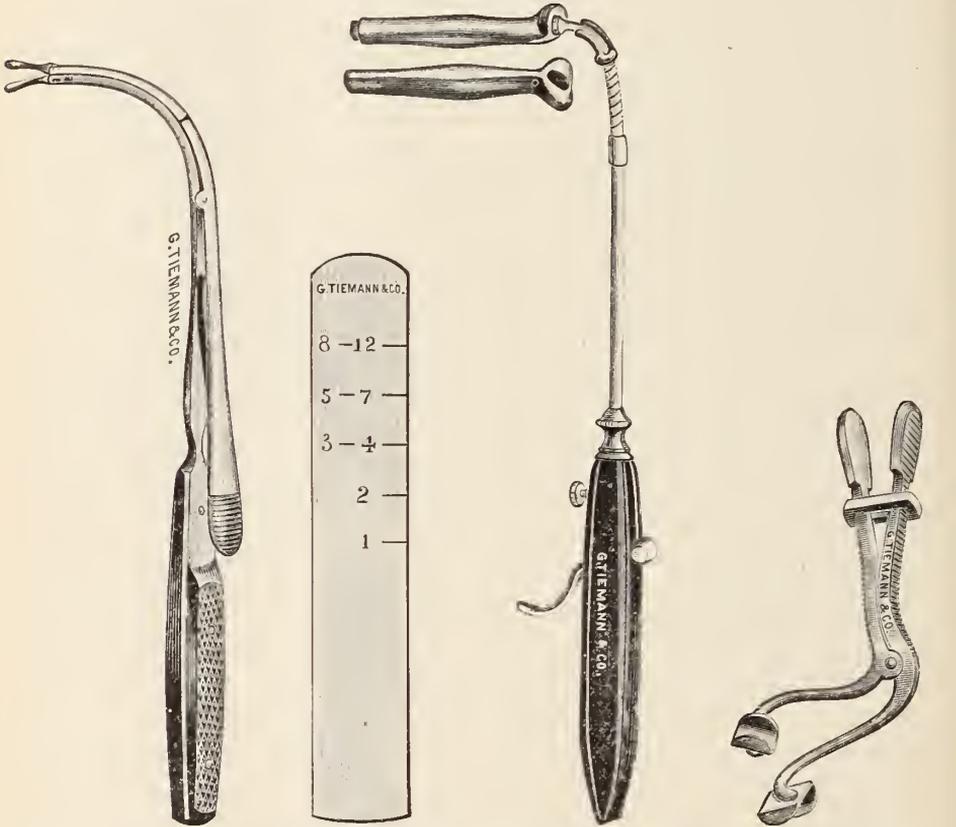


Fig. 1.—Extractor for removing Tube from Larynx.

Fig. 2.—Scale showing the length of tube required for different aged children.

Fig. 3.—Dr. O'Dwyer's Intubation Tube and Tube with Introducer attached.

Fig. 4.—Mouth Gag, as used by Dr. O'Dwyer.

to $2\frac{1}{2}$ inches, suitable for cases from a few months to ten or twelve years of age. They are of metal, plated with gold. When inserted the entire tube is within the larynx and trachea; the upper end, resting upon the ventricular bands, is supposed not to interfere with the functions of the epiglottis; but as

bifurcation of the trachea. The swell of the tube, from the neck to a little above the centre, is designed to prevent its expulsion by coughing, or expectoration. Each tube has, at its upper extremity, an eye for a silk thread by which the operator can quickly remove it if not properly introduced. Each

tube is provided with an obturator, which serves the double purpose of being the point of attachment for the applicator, and also giving to the extremity of the cannula a rounded and smooth surface. The applicator is shown in the cut with the tube attached. By means of a thumb piece upon the handle of this instrument, the tube can be held in place while the obturator is withdrawn. The instrument for removing the tube has a jointed point, which, after insertion into the orifice of the tube, can be made to expand, giving a firm hold upon the tube. The gauge is designed to determine the length of tube to be used for any given age.

In performing the operation, Dr. Ingalls gives the following suggestion: The child should be wrapped in a sheet or shawl, which will pinion the arms, and then held upright in the nurse's lap; an assistant holds the child's head. The gag is then introduced between the jaws, and opened as wide as need be, but not with great force. Dr. O'Dwyer says that it is unnecessary to use the gag with infants who have no back teeth. The physician, sitting in front of the patient, passes his left index finger over the base of the tongue and down behind the epiglottis, and with it guides the end of the tube into the glottis. The handle of the applicator should be held near the child's sternum until the end of the tube has reached the pharyngeal wall, when the handle is rapidly elevated, and tube directed downward and forward along the index finger into the larynx. This will not be found difficult, but the infant's epiglottis is so small and flaccid, that the operator may not be able to recognize it, though he will have no difficulty in recognizing the larynx as a whole, which, except that it is slightly irregular, feels much like the end of one's little finger. The

operator should not expect to detect the opening of the glottis, but must be guided by his anatomical knowledge to pass the tube into the centre of the larynx. Unless he is careful to carry the handle of his instrument high and thus bring the tube as far forward towards the base of the tongue as possible, the tube will pass into the œsophagus. While it is desirable to accomplish this portion of the operation as quickly as possible, it should not be done with too great haste. Ten or twenty seconds, which is a long time for this portion of the operation, may be taken without danger. If the tube is not then introduced, it should be removed for a minute or two, to allow the child to breathe, and then the operation may be repeated; but if the tube seems to be in the proper position, whether the operator is certain of it or not, the slide upon the handle should be crowded forward, so as to disengage the obturator, which is then withdrawn. Some cough will occur at once, and if the tube has not been inserted into the larynx, or if it has not been passed down so that the rim rests on the vocal cords, it is likely to be expelled, and may be seen or felt in the back part of the mouth. If the tube has been properly inserted, respiration will become easier, and after a few minutes the operator cuts one end of the silk thread, passes his finger behind the epiglottis, and holds the tube while the thread is withdrawn.

It has been demonstrated that the constant irritation produced by the contact of the thread with the epiglottis and base of the tongue, is in some cases unendurable, and also it is difficult to prevent the child from pulling at it; therefore, the thread is always to be removed. The removal of the tube is more difficult than its introduction, according

to the experience of all the operators, it being no easy task, with a struggling child, to guide the extracting instrument into the narrow aperture of the tube, and in many cases an anæsthetic is needed.

The advantages which intubation possess over tracheotomy are thus summarized by Dr. Waxham, who has had by far the largest number of operations up to the present time :

1. No opposition is met with on the part of parents—quite a contrast with the difficulty which we usually meet with in obtaining the consent to tracheotomy.

2. It relieves the urgent dyspnœa as promptly and as effectually as tracheotomy, and if the child dies, there is no regret that the operation was performed, and no discredit attached to the physician.

3. There is less irritation from the laryngeal tube than from the tracheal cannula. As the tube is considerably smaller than the trachea, it does not press upon it firmly at any portion, excepting at the chink of the glottis.

4. Expectoration occurs more readily than through the tracheal tube.

5. As the tube terminates in the throat, the air that enters the lungs is warm and moist from its course through the upper air passages, and there is less danger of pneumonia.

6. It is a bloodless operation.

7. It is more quickly performed, and with less danger.

8. There is no open wound, which may be the source of constitutional infection.

9. Convalescence is more rapid, and there is no ghastly wound to heal by slow granulations.

10. The patient does not require the unremitting care of the surgeon as in tracheotomy.

11. I believe it to be a more successful method of treating croup, either diphtheritic or membranous, than tracheotomy.

The above list gives the advantages of intubation, but let us consider, too, the objections.

1. The difficulty of inserting the tube.

This, though admitted, is certainly less than tracheotomy.

2. That the tube may become blocked with mucus or membrane. The recorded experience in thirty-seven cases would indicate that this does not occur, because—and this is one of the marked advantages of tubage over tracheotomy, the patient has the ability to compress the air in the lungs and expel it with an explosive force; in other words, to cough—thereby clearing the tube.

3. That the tube may slip through into the trachea. If too small a tube is used, this may happen, but from the length of the tube, it cannot sink out of reach, and may be removed by the mouth, or by tracheotomy.

4. That the child cannot swallow well. This is true only of fluids, and it is necessary to avoid giving liquids by the mouth. A few drops will trickle into the trachea and cause violent coughing, and this irritation will often lead to pneumonia. Dr. Waxham has devised a feeding-bottle for young infants: and it may be necessary to use a small sized œsophageal tube in some cases.

5. The cannula may be coughed out in the absence of the physician, and death ensues before he can be summoned to re-introduce it. This danger is not nearly so great as that which attends the wearing of the tracheal tube.

[Dr. Waxham's success, we trust, will encourage others to adopt intubation, as it seems to be preferable to tracheotomy.]

ED.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Successful Extirpation of the Spleen.

La Gazzetta degli Ospitali reports a case from the surgical clinique of the University of Genoa, in which Professor A. CECI removed a greatly enlarged spleen. The patient, an imperfectly developed and very thin girl, aged 17, weighing 40 kilogrammes, and 1.40 metre in height, with very small pulse, had had an abdominal tumor from birth. The transverse diameter of the tumor was 34 centim., the vertical 23 centim., and the circumference about 64 centim. The anterior surface was smooth and convex, the margins sharp and fissured. The posterior surface presented a large lobe on the left. The abdominal walls were very flaccid, so that the tumor could be completely rotated vertically and transversely, and also be pushed into the left hypochondrium, whence, however, the respiratory movements soon caused it to advance to the front of the abdomen. The liver was in normal position. The enormous size of the floating spleen interfered with the patient's movement and nutrition, and was an occasional source of very severe attacks of pain, radiating from the left hypochondrium to the præcordial region and the left upper limb, and attended with violent dyspnœa and insensibility. Extirpation having been resolved upon, it was performed on March 20, with strict antiseptic precautions. The incision in the linea alba from above downwards through the umbilicus was 23 centim. ($9\frac{1}{4}$ inches) in length. On opening the abdomen, serious signs of suffocation compelled the suspension of the operation for nearly thirty minutes. Anæsthesia having been commenced with bichloride of methylene, chloroform was substituted

for it. A triple catgut and carbolized silk ligature having been applied to the pedicle, it was dropped in. The peritoneum was sutured separately. The abdominal walls were brought together by three metallic points, after Billroth's method. The splenic artery was larger than the subclavian. The whole operation, including the interruption, lasted an hour and a quarter. Violent delirium and nervous phenomena simulating angina pectoris soon followed. For two days the pulse could not be counted, and the respiration varied from 70 to 80 per minute. The treatment was by oxygen and nutritive clysters. The wound was first dressed on the eighth day, and almost the whole of the wound tract suppurated. In spite of strict antiseptic treatment erysipelas supervened and yet the patient recovered. On April 22 (thirty-one days after the operation) her condition was reported as excellent, only a small superficial wound remaining. The extirpated spleen, with the contained blood, weighed 2400 grammes, equal to 37,036.8 grains, or 77.16 ounces. A courteous note just received from Professor Ceci states the patient is in good health; pulse 80; respiration 22; weight increasing rapidly; complexion florid. — *Lancet*. — *Therapeutic Gazette*.

[This is one of those cases that demonstrate the possibilities of surgery. Interesting to note is the size of the spleen and of its artery. This case is also one of those wounds that refuse to heal without suppuration and "in spite of strict antiseptic treatment erysipelas supervened, and yet the patient recovered." We have elsewhere maintained that antiseptic treatment was not everything, but there are many surgeons now, unfortunately, whose idea of surgery is embodied in these words—cutting, sewing, and antiseptics. The

antiseptic may have benefited this girl or not, but a closer attention to her general requirements would have been of certain advantage.]

A. H. P. L.

Lanolin; A New Basis for Ointments.

The *Medical News* says: In the *Berliner klin. Wochenschrift*, No. 47, 1885, LIEBREICHT describes, under the term of Lanolin, a new basis for salves, for which are claimed certain advantages over the glycerine fats and mineral oils, such as vaseline. In the various keratin tissues—skin, hair, hoof and feathers—the fatty acids are united with cholesterin, forming a peculiar fat, to which the name lanolin is given, as it can be most readily prepared from wool. One of its most remarkable properties is the power of taking up an equal bulk of water, but the difficulty with which it decomposes, and the rapidity with which it is absorbed, are the qualities which make it specially valuable in comparison with the neutral glycerine fats and vaseline. The readiness with which lanolin is absorbed by the skin is explained by the fact that it is the natural fat of epidermic tissues. Rubbing the hands with a 5 per cent. carbolic acid ointment made with it produces a sensation of numbness, without any irritation, in from one to two minutes, and a sublimate salve, 1:1000, will give the characteristic metallic taste a few minutes after inunction. The addition of 5 or 10 per cent. of fat or glycerine to lanolin is recommended as giving a better consistence to the ointment.—*Weekly Medical Review*.

Simple Method of Removing Wens.

DR. C. LAUENSTEIN, in *Centralblatt für Chirurgie*:

After shaving and cleaning the neighborhood of the wen, I make a radical

cut, 1—1½ cm. long through the skin where it is separated from the capsule of the wen, for instance, on the back of the head at the lowest point of the base of the tumor; through this slit I introduce the slender handle of the scalpel used, or a similar instrument, between the skin and the sac, more or less deeply according to the size of the tumor; this is very easily accomplished, and I then make several sweeping movements of the scalpel handle to the right and left, thereby separating with ease the sac from the skin. The elasticity of the skin allows almost the whole circumference of the wen to be separated in this way in a few seconds. I then cut with one snip of the scissors the skin over the crown of the tumor as far back as is necessary, and shell it out whole from its seat. There is often no bleeding because of the division of the vessels of the sac by a blunt instrument. The rest of the treatment, sutures, drainage—is not affected by this procedure; nevertheless, I would add that any crushing or tearing of the edges of the wound is completely avoided.

I believe that any one who has once removed in this manner a wen lying under very thin skin, will never again begin the little operation with a free incision over the convexity of the tumor.

—*Northwestern Lancet*.

Ointment Pencils.

Ointments and salves are being employed in Europe in the form of pencils, about in the same way as the familiar nitrate of silver stick. The pencils are of varying lengths and thickness, and are specially medicated or not, as desired. They are cleaner, more economical and convenient than the usual form of these applications. When applied to the skin they may be dusted over with a light powder or covered with a

protective, as for instance, collodion, thus preventing the annoyance of soiling wearing apparel.

Pianist's Finger.

DR. V. P. GIBNEY, in the *New York Medical Journal*, of April 3d, reports an excision of the accessory tendons of the extensor communis digitorum of the ring finger in a pianist. The operation was done without either a local or general anæsthetic, and proved a complete success, although a former tenotomy had made the patient worse than before.

Transplantation of Large Pieces of Skin in Recent Wounds.

According to ESMARCH, the conditions necessary for success are—that all the subcutaneous tissue should be cut away, and the flaps laid flat on the raw surface, where they should be firmly secured by a few stitches and a bandage.

Pilocarpine in Toothache.

MR. A. P. KURZAKOFF, according to the *Medical Press*, states that hypodermic injections of pilocarpine will relieve toothache. A solution of two grains of the salt in half-ounce of distilled water was used, the injection being made into the temporal region on the side of the odontalgia. In two of the cases one-eighth, and in a third case one-quarter of a grain of the salt was injected. In all the cases pain disappeared permanently in about an hour after the injection; about the same time salivation and perspiration (caused by the drug) also ceased. In one of the cases, in that of a man, æt. 46, with rheumatic periodontitis associated with agonizing earache, the injections (of a quarter of a grain) produced profuse vomiting, with cyanosis, general weakness and drowsiness, all of which symptoms dis-

appeared in about an hour and a half after taking twenty drops of tincture of valerian. The author thinks that this simple plan of treatment fully deserves a further and more extensive trial.—*Therapeutic Gazette*.

[It is important to recollect that plain water injections, and even simple acupuncture relieve pain. Five per cent. solution of carbolic acid was once the fashion with many. Lancing the gums, slapping the cheek, and various other similar modes of temporary relief are well known. We fear that pilocarpine has no special virtues in this direction.]

A. H. P. L.

The Palliative or Mechanical Treatment of Hernia.

DR. W. B. DE GARMO (*New York Medical Record*):

The adjustment of a splint to an insignificant fracture receives the surgeon's most careful personal attention, but in a case of hernia the entire responsibility is transferred by that same surgeon to a mechanic wholly ignorant of the first principles which should govern its proper treatment.

All past and present literature is almost barren of practical instructions as to how the palliative treatment of hernia should be conducted.

The palliative treatment of hernia does not consist of mere truss-fitting, the selection and adaptation of an appliance is only preliminary to the proper treatment of the case.

The condition of every person suffering from hernia can be improved. As the patient improves, the truss must be altered to meet the changed requirements.

Experience condemns the use of any truss for day wear that is not made with springs. Objection is made to all trusses with springs which are applied

from the same side upon which the hernia exists. He is equally opposed to any truss that has an arm descending from the spring upon which the pad is carried. To secure the best possible results from mechanical means, the closure of the upper part of the canal is an absolute necessity. Hard rubber is the cleanest and most durable and comfortable covering for the springs and pads.

Fitting of the truss is accomplished by getting the shape of the pelvis by closely fitting around it a lead tape, transferring this to paper with a lead pencil, run along the inner side of the lead, and then conforming the steel spring to this pencil tracing. It is always better to protect both sides with a double truss, although only a single hernia exists.

The after management of an ordinary case of inguinal hernia is, after having it under perfect control for two or three months, to reduce the pressure gradually, as the case improves, getting the truss off entirely, if a complete recovery has taken place. The treatment of a large scrotal hernia is begun with a so-called radical cure truss, having a small, prominent, hard centre, surrounded by a ring of softer material, and supplanted by an ordinary wood or lighter truss. Because of the shortening of the canal in old cases, the truss must at first be placed over the pelvis and later shifted higher up, when the canal has regained its normal length. Large hernias should be supported at night as well as by day, but not by the same truss. The night truss should be lighter.

Irreducible hernias can often be reduced by making firm pressure on the neck of the sack with a strong truss and having the patient make proper taxis every night for fifteen or twenty minutes, while in bed. He has had four

successful cases of this kind, and a number improved. Hernia, complicated by a retained or undeveloped testicle, is of far more frequent occurrence than generally supposed. During the past two years, he has met with ten such cases. Light pressure, in such cases over the internal ring, will promote the descent of the testicle and prevent any protrusion through the dilated canal. Great claims are also made for the high efficiency of injections of the extract of white oak bark into the hernial sack. The quantity is $\pi v-x$ of Heaton's formula in intervals of two weeks. A suitable truss, with diminishing pressure must be worn day and night.

[There can be no doubt about the wide spread ignorance and neglect concerning the non-operative treatment of irreducible hernia. The recommendations of Dr. De Garmo, though by no means entirely original, should commend themselves at once to every practitioner, especially as a promising means of relief to persons residing in localities too distant from competent surgeons to be relieved by operation]. A. H. P. L.

Albuminuria in Strangulated Hernia.

J. ENGLISCH, in the *Centralbl. für Chir.*, publishes the history of twenty-nine cases of strangulated hernia treated by taxis, and of twenty-five operated on. In the first series he found albuminuria ten times in the urine, in the second, twenty-two times, in thirteen cases of hernia, accompanied by inflammation, albuminuria appeared twice. Albuminuria appears as soon as intestinal occlusion reaches a certain period, and presents certain lesions; the more marked is strangulation, the more evident is albuminuria. In partially strangulated hernia it is barely present. When the

omentum and appendices are strangulated, or a filled hernial sac is inflamed, albuminuria is altogether absent. When there is gangrene of the intestine, albuminuria is very evident; it decreases slightly after operation. In fatal cases it is more abundant. Urine decreases in proportion as albumin increases. Englisch attributes death in strangulated hernia to renal disturbance, in those cases where the necropsy does not furnish any indication. The albumin precludes any but a slight attempt at taxis, and herniotomy ought to be preferred.—*London Medical Record*.—*Journal American Medical Association*.

Iodol—A New Antiseptic.

Those of us who use iodoform in the consulting room must frequently have been seriously annoyed by its powerful and persistent smell. Drs. Silber and Ciammician, of Rome, have found an admirable substitute which has all the advantages of iodoform without its odor, or, it is said, its poisonous properties. This substance is iodol, which occurs as a dark powder with a slight scent, reminding one of thymol. It is very slightly soluble, and is best used either in substance or suspended in glycerine, or made into an ointment with vaseline. A lotion can also be made by dissolving 1 gramme of iodol in 16 grammes of alcohol and adding 34 grammes of glycerine. Most brilliant results have been obtained by the use of the substance itself on chancres and syphilitic adenitis. In simple indolent ulcers, too, the use of the iodol lotion has been very beneficial. A spot of lupus on the leg was treated by injections of iodol solution into the surrounding subcutaneous tissue with the result of preventing the disease from spreading. Iodol has also proved useful in fungating joint diseases. Over 200 observations have been made,

and neither erysipelas nor a diphtheritic condition of wounds has occurred.—*Wiener Medicinisches Blatt*.—*Medical Times and Gazette*.

Salol.

PROFESSOR VON NENCKI, of Berne (*Philadelphia Medical Times*), has discovered a new antiseptic, to which he has applied this name. It is a whitish aromatic substance, insoluble in water, but soluble in alcohol. It is highly recommended as a substitute for the salicylate of sodium in the treatment of acute rheumatism, as it is alleged that it does not cause the nausea and other unpleasant effects of the latter salt, and is more rapid in its action. It is a valuable antipyretic in phthisis. As an antiseptic it is said to be of value in the treatment of intestinal catarrh, typhoid fever and cholera. From the fact that it prevents urine from decomposing, it is suggested as a local application in vesical catarrh. As a powder suitable for sprinkling over wounded and ulcerated surfaces it is said to possess all the antiseptic properties of iodoform without its disagreeable odor.—*New York Medical Journal*.

[In reference to the last statement, we would call attention to the paragraph on iodol and also another on the use of coffee with iodoform in the preceding number.]

A. H. P. L.

Treatment of Cicatrices of the Face.

In the treatment of cicatrices of the face, particularly of the lower jaw, all unsightly scars may be avoided by using a dressing of perchloride of iron, ʒi; collodion, ʒij. Let the cicatrix be cut clear off and the dressing applied every day, and a barely perceptible line will be the result.—*Med. Medical Journal*.

[We cannot say that this is a fact, and if it is, are unable to explain it, but,

nevertheless, our readers are invited to write us the results of their experience in this treatment, should they try it.]

A. H. P. L.

Fissura Ani, or Fissure or Irritable Ulcer of the Bowel.

ARCHER ATKINSON concludes an article in *Journal American Medical Association*, as follows :

In any plan of treatment, perfect cleanliness is all important, the patient being especially careful against rough handling. He should dry the part by patting with a soft linen or a velvety sponge. One of the mildest applications would be the simple or the benzoated ointment of the oxide of zinc, into which the aqueous extract of opium has been incorporated; or to this may be added equal parts of Hebra's ointment of litharge, very finely rubbed down. Allingham's ointment, consisting of calomel, extract of opium and of belladonna, rubbed up with the ointment of sambucus or elder, is also useful. The gentlest handling should be exercised in these cases. The pile ointment of Prof. N. R. Smith, of Baltimore, is also useful, and indeed is soothing in pruritus ani, with or without fissure. Lead washes give temporary relief, with or without the extract of opium. Occasionally the solution of nitrate of silver does well to stimulate the indolent base of the fissure, provided the bowel be first emptied above and below, and then well splinted with opium, and the patient be kept on fluid food. An ounce injection of cold water, with 40 drops of tinct. opii, and a little starch, will wonderfully assuage the sufferings from spasm of the sphincter, cautioning against contracting the opium habit, for the relief afforded is so great that the patient is attempted to repeat it each night. Two things should be insisted on in beginning the treat-

ment: Regulation of the bowels and perfect cleanliness of the part. To accomplish the former, some measures must be adopted to secure a soft action each day. Some prefer the morning for this, but night is the best time, as the patient may bathe and anoint, and then be quiet.

Often an anodyne suppository is very useful, containing two grains of the watery extract of opium, or the same with two to five grains of iodoform and balsam Peru. If the patient is robust, it is well to open the bowels with the pil. hydrarg., or the mild chloride, in dose sufficient to arouse the duodenum and gall bladder. This may or may not be followed by castor oil mixture. Once the motions are softish it is quite easy to keep them so with the compound liquorice powder, the electuary of sulphur or of senna, by the Buckthorn cordial, the cascara fluid extract in gentle doses, or by the saline aperients, or any of the purgative waters, of which so many are now on the market. Unless we have to deal with a fissure resulting from secondary syphilitic abrasion, the constitutional action of mercury is not to be thought of.

It is wonderful how a cold water injection now and then lessens the occurrence of spasm of the bowel by aiding the passage of fecal matter, which, without the injection, would remain hard and distend the tender part. Besides, the tonic action of the cold water does good itself. Care must be taken, however, not to destroy the tone of the bowel by injections. Sometimes warm, again cold ablutions, will give most relief to the pain. Mr. Ashton praises an ointment composed of gr. vi. of acetate of lead, ʒi. of extract of belladonna, and ʒi. of spermaceti ointment, as well as an ointment of the oxide of zinc and extract of belladonna;

applying them on a bit of lint, and gently packing it into the fissure. When the fissure is due to or is kept up by an ulcerated internal hæmorrhoid, the only hope of relief is to destroy the pile. The extract of rhatany (*krameria*) has long been reputed a curative agent for fissure, on account of its astringent properties. It appears to restrict the flow of blood to the irritable part, and thus to promote healing; ℥i. of the extract may be dissolved in ℥v. of water, and this used as an injection night and morning; the patient retaining the injection as long as possible. The extract of rhatany, rubbed up with water, was a favorite application with Nélaton. The fluid extract, either pure or mixed with glycerine or ergot, is often used as an injection. Gibson used injections of rhatany and caustic applications with success.

Dupuytren successfully used an ointment made of extra. belladon. ℥ij., lard ℥ij., honey and water, āā f. ℥j.; this was introduced into the bowel by means of a mop, the size of the mop being gradually increased until the resistance of the sphincter was overcome. The pain is quite severe at first, but soon ceases. Valpeau said that when medication failed, the most efficacious measures are cauterization, dilatation, and division of the sphincter and excision of the ulcer. Nysten claims that cauterization with nitrate of silver should always be tried before the resort to the knife; the caustic should be applied thoroughly to the bottom and sides. Beclard claims to have succeeded with this plan in all cases, though other operators have been disappointed by it. The stick caustic acts, as does the heated wire, by changing the irritable ulcer into a simple fresh wound.

Simple dilatation of the anal orifice s given good results in very many

cases. Dubois, of Paris, always succeeded with this plan, but the process is long, tedious and painful. Valpeau found that it succeeded well with or without the use of ointments. Boyer suggested division of the sphincter as the best and only method of curing fissure of the anus; a plan which is now followed by the greater number of surgeons. In some cases he cut through the fissure, in others to the right or left, his theory being that the constriction caused the fissure and not the fissure the constriction. He first emptied the bowel by injection or by a mild purgative, so that the patient would not be called upon to go to stool for a few days, and then cut entirely through the thickness of the sphincter muscle. Some surgeons have modified this method by cutting only through half of the muscle, which seems to have the same good effect without the risk of causing paralysis of the bowel. Syme conceived the idea of cutting through the base of the fissure, thus relaxing the part without causing paralysis of the bowel, leaving the greater portion of the muscle undivided. Velpeau recorded two cases which died from section of the sphincter. A few cases recover after forcible dilatation with the thumbs, but the tearing process is to be deprecated as cruel practice.

Etherization of the rectum might be resorted to in these cases in order to facilitate dilatation just short of actual tearing; the rectal pouch being brought under the influence of the ether sufficiently to thoroughly benumb the part. Rectal etherization has been followed by death, however, and the same object may be obtained by using the five per cent. solution of cocaine. But whatever plan of treatment be adopted, the patient should, when practicable, call each day at the surgeon's office.

If the ulcer is to be divided, a blunt pointed bistoury should be used, with a very sharp cutting edge; it should be placed vertically in the base of the ulcer and firmly pushed forwards or backwards, the part being kept moderately tense so as to facilitate the division of the muscular fibres. The base of the ulcer may be thoroughly transixed from below with the sharp point of a keen curved bistoury, and cutting upwards so as not to wound the opposite side of the bowel. Should the fissure be located in the anterior commissure, great care should be taken not to injure the bulb. Redundant tabs and polypoid growths should be removed in order to lessen the irritation and moisture, which serve to keep up the fissured condition.

A suppository of the watery extract of opium with the extract of rhatany, will serve to alleviate pain after the operation, and will assist in promoting healing. As with other ulcers, iodoform, with or without opium, made into suppositories with balsam of Peru and cocoa butter, is of good service. Tannin, iodoform and balsam of Peru also make a useful suppository for promoting healing. Absolute rest should be enjoined so long as the means of the patient will allow. When an opportunity offers, I shall use iodoform with collodion and opium, hoping to hasten the healing process by the first, and to prevent re-opening of the fissure by the second.

The advantages to be gained by excision, are: In not injuring the sphincter muscle, in not causing much of a wound, and in requiring only rest with a simple dressing to insure speedy healing.

To recapitulate, then, the essentials for successful treatment of irritable ulcer of the rectum, there should be perfect rest of the bowel and of the entire body, when possible, for the few days necessary for the cure.

Sound sleep should be secured by the use of opium, administered either by the mouth or hypodermatically, or preferably by an opium suppository each night. When it is necessary that the bowels should move, the action should be facilitated by a cold water enema, containing laudanum if required, to wash out the mass and give tone to the parts. The food should be such as will cause but little roughness in the bowel, and which will not produce fæces of such mass and consistency as to cause distension and tearing of the healing fissure.

Brooke on a Cleanly and Economical Method of Applying Ointments.

A number of ointments, prepared with a solid base, composed of cacao-butter, wax, and oil, or lanolin, are cast into the form of sticks ("salve-sticks"). The writer had found them particularly useful in making applications to the face and hands, since, their melting point being high, they did not run at the temperature of the body, as did ointments prepared with the ordinary bases; and, when dusted over with powder, they were practically invisible. When covered with Mather's or Seabury and Johnson's adhesive rubber (water proof) plaster, they offered a mode of applying remedies to the skin which was more durable than the Unna-Beiersdorf plasters, and less expensive. With this protecting covering they were especially applicable to the treatment of psoriasis by chryso-robin, and possessed several advantages over the methods of Pick, Auspitz, and Besnier, in that the fatty menstruum was preserved; they did not need such frequent renewal; they were more readily applied, and did not cause any disagreeable dragging on the skin and hairs. The fear of staining the clothing was completely removed, and the patient

might, moreover, bathe without disturbing the dressing. They were supplied enclosed in small cases, like those used for cosmetics, so that they could be conveniently carried in the pocket.—*British Medical Journal*.—*Maryland Medical Journal*.

Two New Bursæ at the Knee-joint.

M. PORIER demonstrated, at a recent session of the Paris Anatomical Society, the existence of two new serous bursæ at the knee. They are situated, the one between the internal lateral ligament and the femur, the other between this same ligament and the tibia, and are separated from each other by the insertion of the internal ligament into the inter-articular cartilage. There is generally considered to be a prolongation of the articular synovial membrane at this point.—*Lancet*.—*Maryland Medical Journal*.

Shock and Its Treatment.

In a critical study of shock intended to elucidate its pathological relations (*Therapeutic Gazette*), GRONINGER, of Berlin, defines shock as an exhaustion of the medulla oblongata and the spinal cord produced by violent excitation. This definition is no doubt perfectly proper, though it strikes us as if the term "exhaustion" is not sufficiently clear for defining purposes.

He recognizes the following varieties: 1. The lowest grade of shock, which causes no appreciable effects. 2. A middle grade, which weakens sensation. 3. A high grade, which extinguishes qualitative sensation. 4. A highest grade, which eradicates both passing and permanent sensations of every kind.

His views of the treatment are noteworthy. Energetic counter-irritations of the skin are to be excluded as useless and even dangerous. Abstraction of

blood is contra-indicated. Transfusion of blood can only be thought of in cases of great loss of blood. Opium and chloroform are of no value whatever in shock, while digitalis is worthy of further study. Alcoholic stimulants and subcutaneous excitation are useful. Horizontal posture, application of warmth, perfect rest, and subcutaneous injection of strychnine are the most recommendable factors of treatment.—*Weekly Medical Review*.

Sutures in the Heart.

A paper of BLOCK, communicated to the eleventh congress of the German Surgical Society, 1883, on Wounds of the Heart and their Cure by Sutures, having attracted the attention of Dr. Phillippoff, of Kharkoff, he determined to make a series of experiments on dogs and rabbits for the purpose of satisfying himself of the truth of Block's assertion that sutures may, under certain circumstances, be applied to the walls of the heart. Though the Russian observer has not as yet concluded his investigations, he has published a preliminary note in the *Russkaya Meditsina* (No. 11) in which he states that the hearts of some animals will bear transfixion with a fine trocar or a needle, also that wounds of the heart in animals may be cured by means of sutures, but by no means always. He found, too, that the pericardium might be opened in dogs without any serious effects, but that wounds of the large vessels at their exit from the heart were invariably fatal.—*Lancet*.—*Journal American Medical Association*.

Hemostatic Powder.

PROFESSOR BONAFoux, at a recent meeting of the Academy of Medicine, at Paris, read a paper upon a powder

which possesses great hemostatic powers, and is capable, it is said, of arresting the bleeding of large arteries, so that it will prove serviceable in important surgical operations. The powder is prepared by mixing equal parts of colophony, carbon and gum arabic.—*Medical and Surgical Reporter*.

Charcoal and Camphor in Chronic Ulcer.

A mixture of equal parts of camphor and animal charcoal is recommended by Barbocci as an application to prevent the offensive odor and remove the pain of old excavated ulcers. The camphor acts as a disinfectant, and the charcoal absorbs and destroys the offensive odors.—*British Medical Journal*.

Oil of Peppermint for Burns.

It is suggested that oil of peppermint is very useful for burns. The oil is painted on the affected part with a camel's-hair brush, and the pain is said to be immediately relieved.—*Australian Chemist and Druggist*.

The Treatment of Nævus by Ethylate of Sodium.

For some months past ethylate of sodium has been extensively employed by me in the treatment of cases of nævus occurring in children, and up to the present I have every reason to be satisfied with its use. I paint over the nævus two coatings of the ethylate on two consecutive days, taking care to protect the surrounding skin before the application, and in all instances of superficial nævi thus treated, have found them cured on the separation of the scab. Those cases affecting the subcutaneous tissues generally require a second, or even in some cases a third, repetition of the remedy.

It seems to leave less scar than nitric acid, to cause less pain to the child,

and, undoubtedly, of all applications, is the one least dreaded by the mother.—*British Medical Journal*.

Odorless Iodoform.

OPPLER (*Centralb. fuer Chir.*) states that he has accidentally found that coffee completely masks the odor of iodoform. Roasted coffee should be very finely powdered, and mixed with the iodoform in the proportion of thirty, forty, or fifty per cent. The following formulæ are given: Iodoform, 2 parts; coffee, 1 part; mix, with the aid of a few drops of Hoffman's anodyne. [It is stated that the addition of the latter is not essential.] Iodoform, 3 parts; paraffin ointment, 30 parts; coffee, 1 part; mix; make an ointment. The antiseptic power of coffee is mentioned as in itself an advantage.—*New York Medical Journal*.

Compound Iodoform Powder.

DR. L. CHAMPIONNIERE, of a French surgical society, recommended the following as an antiseptic dressing: Equal parts of powdered iodoform, cinchona, benzoin, and carbonate of magnesium, the latter having previously been saturated with oil eucalyptus.—*American Druggist*.

VENEREAL DISEASES.

Treatment of Gonorrhœa by Antiseptics.

Gonorrhœa is by no means a trivial disease, and when due consideration is not paid to its frequent sequelæ, it really becomes a serious complaint. However, like many other diseases, if competently treated in its early stage, its seriousness is much modified. We all know that gonorrhœa is caused by a specific virus which excites a specific inflammation of the urethra, together with certain specific inflammations of

adjacent parts, and is often followed by a form of blood-poisoning known as gonorrhœal rheumatism. It is evident that if the initial lesion of the specific inflammation of the urethra is sufficiently combated the secondary lesions are hardly likely to occur. Since a micro-organism has been found in the discharge of all cases under twenty-one days' standing, which is by many believed to be a specific cause of the disease, it is evident that agents which will destroy this micro-organism will hold out the greatest hope of being cures for the disease itself. It is evident, therefore, that antiseptics are the drugs which are indicated under this view of the pathology of gonorrhœa, and the report of the treatment of four hundred and thirteen cases by Mr. R. H. FIRTH, in the *Indian Medical Gazette*, which shows that corrosive sublimate furnished the best results, furnishes confirmatory evidence as to the truth of this view. Mr. Firth's results are appended in tabular form, as follows :

Treatment.	No. of cases treated.	Average No. of days of disease.
Zinc sulphate, 5 gr. to 1 oz.	40	24.3
Zinc Chloride, 1-3 gr. to 1 oz.	44	27.3
Tannic acid, 5 grs. to 1 oz.	10	29.7
Potassium permanganate, 1 gr. to 1 oz.	30	19.9
Carbolic acid, 1 part to 40.	29	23.6
Iodoform, 30 grs. to 1 oz.	11	29.
Silver nitrate, ¼ gr. to 1 oz.	14	28.4
Corrosive sublimate, ⅙ gr. to 1 oz. .	51	20.1
Corrosive sublim. warm. ⅙ gr. to 1 oz	49	17.5
Chloral, 3 grs. to 1 oz.	7	31.8
Boracic acid, 5 grs. to 1 oz.	25	30.2
Quinine sulphate, 2 grs. to 1 oz.	26	26.3
Sodium salicylate, 5 grs. to 1 oz. .	13	31.
Lead acetate, 3 grs. to 1 oz.	20	26.1
Bismuth and glycerin, 2 to 10 parts.	21	25.5
Warm water.	23	26.6

Total number of cases. 413

From the foregoing it will be observed that Mr. Firth has tried sixteen varieties of injection. Of these, the corrosive sublimate, when exhibited

warm, gave the best results, followed closely by the potassium permanganate, and then by the cold injections of corrosive sublimate. For the majority of these injections he has employed tragacanth mucilage as the basis, particularly for iodoform, bismuth, chloral, lead and borax, and he thinks the method of injecting the drug in a warm solution to be a point of the highest importance in the treatment of gonorrhœa.

The warm water is very soothing, and Mr. Firth thinks it enables the drug more readily to get at the mucous follicles of the urethra which are the chief seat of disease. He has always been very careful to see that patients understand how to inject properly. In the above cases no one of them received internally copaiba or cubebs. The only medicines given were an initial purge, and the maintenance for ten days on a simple diet. One case under treatment at Manchester with carbolic acid, received marked benefit from hourly administration of 8 drops of antimonial wine. In no other case was medicine given, except it were purgative. Mr. Firth has recently been trying the effect of the ordinary zinc lotion, both sulphate and chloride, used warm. From the few observations he has made, he thinks the results will be nearly as good as those from warm corrosive sublimate. In conclusion he advises medical officers to try the warm corrosive injection, or at least for them to see that the injection they happen to prefer is used *warm*. By so doing he thinks they will cure their patients more effectively and more quickly, too, than heretofore. He advises the keeping gonorrhœal patients in bed for at least eight days ; but that is a point which depends upon the degree of local inflammations.

In using the corrosive injections, it is as well after the acute stage is over to

increase the strength of sublimate to 1-6 grain to the ounce of water. Such, Mr. Firth says, has been his practice.—*Therapeutic Gazette.*

Treatment of Varicocele.

DR. ROBERT F. WEIR, in the *Medical Record*, of March 20th, concludes a paper on the above subject, as follows:

Since my experience does not proceed beyond the operations recorded in the foregoing remarks, I beg forthwith to sum up in these concluding words:

1. That for small varicoceles, there is nothing better than the single (or double) subcutaneous catgut ligature. 2. That for medium sized varicoceles, or for cases declining a more heroic operation, excision, in careful hands, is to be advised. 3. That for large varicoceles, for relapsed cases, and for those not very large, but with a much elongated scrotum, ablation of the scrotum with ligation of the veins is preferable.

Ready Treatment of Gleet.

DR. ROBERT T. MORRIS, in the *New York Medical Monthly*, recommends for gleet: 1st. Equalization of the calibre of the urethral canal throughout its length, either by section or dilatation of those parts which are narrowed; and 2d. An injection composed of one ounce of glycerine, one ounce of subnitrate of bismuth, and two ounces of water. Three or four drachms should be injected just before retiring to bed, and the fluid passed as far back as possible, by rubbing the finger backward along the urethra, while the meatus is kept closed. The larger part escapes, and a wad of cotton is placed over the meatus. The urethra is dry and uncomfortable the succeeding day, and the injection is continued nightly until no more discharge is noticed at bed time. This

may disappear after the third injection, which must be repeated two or three times, at intervals of a week or ten days.

Santal Oil in Urinary Affections.

DR. A. P. GIPOULOU gives the following as the results of his use of the oil of yellow sandal wood: 1. In chronic and obstinate gonorrhœa no especially remarkable effects were produced. 2. In acute gonorrhœa accompanied by severe vesical tenesmus, frequent and painful micturition, etc., the acute symptoms were speedily relieved, though the discharge diminished only gradually in quantity. 3. In a case of suppurative nephritis of the left kidney, in which there was frequent micturition, and the urine was loaded with pus, an improvement was noted within twenty-four hours, and at the end of a fortnight the pus had entirely disappeared from the urine. 4. A railway employé was suffering from acute cystitis, accompanied by tenesmus and bloody urine, which had resisted the action of ordinary remedies for over a month; he was relieved permanently in a few days by the use of yellow sandal wood oil. 5. In a number of cases of vesical catarrh equally rapid and permanent results were obtained. 6. In three cases of simple acute unilateral nephritis speedy relief was afforded by the same remedy. 7. In two cases of nephritic colic excellent results followed the administration of santal oil; the attacks were promptly cut short, and an apparent cure was the result. 8. Finally, he relates a case of acute Bright's disease following scarlet fever, in which there was general anasarca and the urine was heavily loaded with albumin. During a treatment of four or five days with diuretics, the œdema increased, but within two days after giving santal oil the improvement was marked, and at the end of a week

the anasarca had disappeared and no more albumin could be found in the urine.—*Journal de Médecine de Paris.*—*Journal American Medical Association.*

Deformed Penis.

In the *Virginia Medical Monthly*, DR. R. H. BAYLOR says that he was called to visit an infant child. The child was two weeks old and had a very healthy look, and was as large as children at that age. The privates of the child, he found a very uncommon deformity. He had never, in an active practice for thirty-five years, read of or seen a case like it. The root of the penis was attached firmly to the ossa pubis, but the body of the penis could not be seen, being deeply buried under a continuation of the abdominal skin and muscles. The scrotum was not divided into two lateral halves by the raphé, but the scrotum resembled a large bag and was sinuous. After examining the scrotum carefully, the two testes were found, and between them the penis could be distinctly felt. The glans penis made its exit about the middle of the scrotum, between the testes. The glans penis had its usual appearance and was covered with the prepuce, and at the apex the meatus urinarius was seen. The child passed water freely while he was making the examination. An operation will relieve the deformity.—*Medical and Surgical Reporter.*

Operation for Stone in the Bladder.

At the conclusion of a series of three lectures on "The Surgical Treatment of Stone in the Bladder," by WILLIAM CADGE, F. R. C. S., contributed to the *British Medical Journal*, the author summarizes his views as to the choice of the operation as follows :

1. In children litholapaxy should be more adopted than has hitherto been the custom.

2. In male children, when the stone is at all large, the suprapubic will probably prove to be easier to do, and safer, than the perineal operation.

3. In female children, litholapaxy should be the rule for small stones, and the high operation for all the large ones

4. In adult females, litholapaxy or dilatation and extraction should be adopted for stones of moderate size ; vaginal lithotomy for those somewhat larger, and the high operation for those of decidedly large size.

5. In adult males litholapaxy should be the rule for stones up to an ounce or an ounce and a half ; above that size lateral, or possibly suprapubic lithotomy—certainly the latter for all stones over three ounces.

6. In the aged, the same rules apply when the urinary organs are healthy, but when the prostate is enlarged and the bladder atonic, suprapubic lithotomy should be more adopted until its success or failure is demonstrated.

In conclusion, the authors refer to the prophecy of those fully entitled to guide professional opinion, who hold the opinion that the old historic, time-honored lateral operation will shortly disappear and become obsolete, giving place to newer methods, or older ones in a new form.

Respecting the suprapubic operation, the writer says its advantages are considerable, in this, that :

1. It is easier of performance than perineal lithotomy, or, in many cases, than litholapaxy.

2. By it stones of the greatest magnitude can be removed. Two instances are recorded in which stones weighing twenty-three and twenty-five ounces respectively were so removed.

3. Infiltration of urine, it is said, should not occur after the high operation. However, some deaths from this

cause have already been reported, while, by the old method of operating, fatal infiltration is by no means uncommon.

4. Freedom from troublesome bleeding ought to be, and probably will be, found to be greater than after perineal lithotomy.

5. The suprapubic is certainly less liable than the lateral operation to various subsequent drawbacks, such as fistula, wound of the rectum, impotence, etc.

6. There should be but little risk of leaving stones or fragments of stones undetected.

The risks and disadvantages of the operation are stated to be not great. The chief one is that of opening the peritoneum, leading to infiltration, peritonitis, or to hernial protrusion of the intestine. The methods of tamponade of the rectum and injection of the bladder almost wholly obviate the danger. If the peritoneum should be opened, it is suggested that a good plan would be to close the wound and postpone further steps. This was done in one case by M. Polaillon. Dr. Tremaine, of Buffalo, is reported to have stitched the anterior wall of the bladder to the abdominal wall, in a case where prolapse of the intestines had occurred. Rupture of the bladder from over distension is not likely to occur. The writer says in children a few ounces suffice as an injection, and in old men, with atonic bladder, twelve to fifteen ounces may be introduced.

For the rectum the author thinks the quantity of water introduced into the bag should be limited to twelve or fourteen ounces. Larger quantities he considers neither necessary nor safe. Greater quantities may so distend the rectum as to cause laceration or rupture. The report of published cases shows that the recovery is slower after

suprapubic than after lateral lithotomy. The urine resumes its natural route more tardily, and the wound heals slowly. However, this is more than set off by the certainty and completeness of the cure. One thing must be admitted, and that is, the more unfavorable position of the suprapubic wound for thorough drainage of the bladder.—*Weekly Medical Review.*

Treatment of Vesical Calculi.

DR. N. P. DANDRIDGE, in a paper read before the Ohio State Medical Society, in June, 1886, thus formulates his experience in the treatment of stone.

Every case demands

1. An examination of the urethra, to determine its calibre and its tolerance of instruments.

2. A careful estimate of the size and composition of the stone.

3. A careful examination of the urine, to determine the character of the stone and the presence of Bright's disease or diabetes.

The present aspect of the treatment of vesical calculi justifies, in his opinion, the following conclusions:

1. In children, all cases should be submitted to lateral lithotomy, except in very rare cases where the size of the stone demands the high operation.

2. In adult cases rapid lithotrity should be the rule, and is capable of dealing with about nine-tenths of all the cases met with.

3. Stones of unusual size, from one and one-half ounces upwards, should be submitted to suprapubic lithotomy.

4. Stones formed round a foreign body can be safely removed by median lithotomy, even when of large size.

5. Stricture, simple and uncomplicated, should be first relieved by dilatation or internal urethrotomy, and the stone subsequently crushed.

6. Stricture, when indurated, or complicated by fistula or marked cystitis, should be submitted to a perineal lithotomy, and, by preference, the median operation should be chosen.

7. In hypertrophy of the prostate, the question of operation is to be largely determined by the necessity for drainage of the bladder.

8. The same can be said of the influence of cystitis in deciding upon the choice of operation.

9. In case of uncertain diagnosis, the median operation is indicated in order to permit of digital exploration of the bladder cavity.—*The Cincinnati Lancet and Clinic*.—*Maryland Medical Journal*.

DISEASES OF THE SKIN.

The Value of Lanolin.

DR. GEO. HENRY FOX, in the June No. of the *Journal of Cutaneous and Venereal Diseases*, concludes an article on the above subject as follows: 1. Lanolin is more readily absorbed by the skin than any other fatty substance. 2. As a basis for ointments, it is useful when an effect upon the deeper skin or upon the whole system is desired. 3. On account of its firm consistency, it is advisable to mix with it a certain amount of lard, especially in cold weather. 4. When applied to a highly inflamed skin, lanolin may not prove as bland as *fresh* lard or *pure* vaseline. 5. Considering its recent introduction, its questionable superiority, and its present cost, it cannot be recommended as yet as the best basis for all ointments.

Araroba in the Treatment of Psoriasis.

DR. BOROGODITSKY has used with success an ointment composed of one part each of araroba and acetic acid, in thirty parts of lard. The ointment is to

be rubbed upon the affected parts two or three times a day. The author speaks highly of the good results obtained by him by this method.—*Centralblatt für Chirurgie*.

Differential Diagnosis of Alopecia Areata from Trichophytosis Capitis.

DR. GEO. THOS. JACKSON, in the *New York Medical Journal*, offers the following differentiation:

Alopecia Areata.

1. Occurs suddenly without antecedent lesion, and the patches often attain their full size at once.

2. Patch usually perfectly circular and does not contain gnawed-off hairs, nor scales, nor crusts, but is perfectly smooth and shiny.

3. Hairs about patch unaltered, though at times they may be easily extracted.

4. Occurs only on hairy parts of the body.

5. No parasite found, or at least not readily detected.

Trichophytosis Capitis.

1. Begins usually at one point by a small erythematous papule or patch, and spreads from it more or less slowly.

2. Patch more or less circular, with broken and gnawed-off hairs in it, and floor covered with thick, grayish crusts or abundant scales.

3. Hairs in and about patch are brittle. break easily when pulled on, and bend at an angle.

4. Occurs both on hairy and non-hairy parts of the body, and patch will sometimes spread from non hairy to hairy parts, or *vice versa*.

5. Fungus found abundantly in hair and scales.

Treatment of Freckles with Carbolic Acid.

DR. HALKIN'S procedure is as follows: The skin being washed and dried, is put on the stretch with two fingers of the left hand, and a drop of pure carbolic acid is applied exactly over the patch. When it dries the operation is completed. The skin becomes white, and the slight sensation of burning disappears in a few minutes. The thin crust which forms after the cauterization, should not be disturbed; it detaches itself spontaneously in eight or ten days, leaving a rosy coloration,

which is soon replaced by the normal color of the skin.—*American Prac.*

[Very simple, and admits of easy trial.]

A. H. P. L.

Treatment of Acne.

DR. MAHLON HUTCHINSON claims that ninety per cent. of all forms of acne are due to some hyperæmic condition of the sexual apparatus, and his main reason for this belief consists in the fact that it almost invariably makes its appearance at puberty. A fair experience seems to prove him right. He treated his patient so affected with local applications and internal medication, as is customary. Very little or no relief resulting at the end of three weeks, he began the use of the cold urethral sound in the male and the hot vaginal douche in the female. This was conjoined with a placebo. Benefit was derived in one or two weeks, and a cure in a month or two. We believe Dr. H. right.

Alopecia.

DUJARDIN BEAUMETZ recommends: \mathcal{R} . Chloral, gram. 5; distilled water, gram. 100. Apply to scalp at night. In two weeks great relief is produced. In ordinary amenorrhœa, Professor Parvin recommends the following pill, which he learned from his teacher: \mathcal{R} . Ferri sulph., pulv. aloes, terebinthinæ, āā gr. j. M.—*Med. Medical Journal*.

Herpes of the Larynx.

E. M. STEPANOIR, of MOSCOW (*Monatssch. f. Ohrenheilkunde*.) reports two cases of this rare disease. In one there existed herpetic history of a concurrent herpes of the face and nose. The parts involved were the left side of the epiglottis and apex of left arytenoid. In the other case both cords were involved as well as the left ary-epiglottic fold and superior posterior surface of the left arytenoid.

I have seen but one case. It was limited to the left lingual surface of the epiglottis and was an exquisitely painful affection, so much so that the patient could not be induced to swallow anything but warm milk. There was no co-existent herpetic disease. Recovery ensued in ten days. Cocaine, locally, only gave ease for an hour or two.—*St. Louis Medical and Surgical Journal*.

Cutaneous Anodyne.

DR. R. G. GOUGH, in the *Virginia Medical Monthly*, recommends the following prescription as one of the best he has ever found, as a lotion for itching cutaneous surfaces, whether the skin is broken or not. He has used it with invariable success, and it has now become a popular application with the local physicians: \mathcal{R} . Sodæ biborat., \mathfrak{z} j.; acid carbol., gtt. xv.; glycerin, \mathfrak{z} j. M. Sig.—Apply as lotion with camel's hair brush, or by dropping from bottle on the itching surfaces.

[Signal success has also almost invariably accompanied the following: \mathcal{R} . Sodii hyposulphitis, \mathfrak{z} ss.; morphine sulphatis, gr. v.; aquæ rosæ, \mathfrak{z} i.; aquæ q. s. ad. \mathfrak{z} iij. M. S. Apply as often as required.]

A. H. P. L.

Winter Prurigo.

DR. CORLETT (*Cleveland Med. Jour.*) says: In the treatment internal medication avails but little, excepting in severe cases where the paroxysms of itching occur several times during the four and twenty hours, when hydrobromic acid may be used with marked benefit. At the outset of a paroxysm apply caustic potash in strength varying from x to xxx grains to the ounce of water, to which a drachm of glycerine may be added, after which the following should be added: \mathcal{R} . Menthol \mathfrak{z} ss, acidi carbolici \mathfrak{z} ss, sodii benzoati \mathfrak{z} ij, ung. aq. ros. \mathfrak{z} iij, ceræ alba q. s. Misce.

DISEASES OF WOMEN.

The Influence from a Clinical Standpoint of Cicatricial Tissue in the Angles of the Lacerated Cervix.

DR. WILLIAM E. MOSELEY, of Baltimore, in an article read before the Alumni Association of the Woman's Hospital, and published in the *New York Medical Journal*, after quoting the various writers on this subject, says:

That any experienced gynæcologist should doubt that a mass of hard, fibrous, in this case, cicatricial tissue (the "cicatricial plug" of Emmet) is to be found deep in the angles of many cases of neglected lacerated cervixes, seems to me strange, as frequently it is perfectly easy of demonstration. In a number of cases I have removed tissue as characteristic as that reported upon by Dr. Garrigues (Emmet's "Principles and Practice of Gynæcology," 1880, p. 491), hard and gristly to the feel, which, when dissected out, left a bed of smooth, apparently normal, uterine tissue. This plug always, so far as my experience goes, extends much more deeply on the inner surface of the uterus, often quite to the internal os, the original laceration extending obliquely outward and involving the whole thickness of the cervical wall only in its lower or outer portion. This makes its complete removal, without marked danger of serious hemorrhage, much easier than would be possible did it extend farther out toward the attachments of the broad ligaments. I think a principal cause of misunderstanding in regard to this "cicatricial plug" is, that we do not distinguish between those cases of deep laceration in which the healing process has taken place, as described by Dr. Emmet, and subsequent contraction of the cicatricial tissue has drawn the cervix into a comparatively natural shape, leaving the tissues

of the anterior and posterior lips in a practically normal condition, and those in which the changes subsequent to the laceration have so altered the tissues of the whole cervix as to render it a hard, fibrous mass.

We see that opinions on this subject differ very widely, ranging from a denial of the existence of anything like a cicatricial mass to a very positive affirmation, not only of its existence, but of its direct causative influence in bringing about the numerous neuroses mentioned, and it occurred to me that, in this very mixed state of affairs, you might feel an interest in the recital of a few cases which seemed to my mind, to demonstrate that this same "cicatricial plug" or mass of hard, fibrous tissue was, not only the offending member, but the only factor playing the part of a *direct* cause which could be found, and that its removal was followed by a change in the nervous symptoms, too sudden to be accounted for by the slow changes which would result from simply an improved state of nutrition.

Here follow several interesting and instructive histories of patients on whom the doctor has operated, who gave all the characteristic symptoms of chronic uterine disease and all of whom were either benefited markedly, or entirely cured by the removal of the "cicatricial plug" and restoration of the cervix, he concludes :

My records would furnish me with many more cases in which there were present hard, fibrous masses in the angles of old lacerations and in which their removal was marked by relief of the same set of symptoms as in these cases cited, yet, although I am personally thoroughly convinced of the part the cicatricial tissue played as an actual irritant, there were, accompanying this one factor, too many other pathological

conditions to allow one to demonstrate just what rôle the hard tissue filled. Still we have four cases in which the principal symptoms were decided irritation of the nervous system, the so-called reflex neuroses, and anæmia. Thorough examination failed to reveal any abnormal local condition other than the mass of cicatricial tissue which, to my mind, would serve to explain the symptoms. In every case the operation was done with great thoroughness, the removal of all the hard tissue in the angles being the first object (and this was accomplished in all except the case of Mrs. W., her whole cervix being hard and fibrous). In every case the relief to symptoms was prompt and marked, dating from the day of operation.

[The above article, by Dr. Moseley, will help to settle the question of the effect of scar tissue in lacerations of the cervix uteri; not because the doctor offers any new argument on his side of the subject discussed, but because his cases show that the great advocates of the beneficial character of scar tissue are not quite able to manage it in all cases. The facts that he gives about cases, namely, that Emmet operated three times on a case, and the doctor himself twice on another before getting out all the cicatricial tissue, shows that it is impossible to tell when it is all removed while operating. This we have often claimed, and now find evidence that the highest advocates of the evils of "the cicatricial plug" fail to be sure.

In fact much of the digging after this plug results in leaving more scar tissue after healing from the operation than there was before.

Perhaps it would be well if those who are divided in their opinions on this subject would give up a little on both sides.]

A. J. C. S.

Gradual Dilatation of the Uterus.

DR. CHAS. MEIGS WILSON, in a clinical lecture published in *Coll. and Clin. Record*, says :

The method of introducing the uterine dilator will require some little attention. Frequently, students grasp the instrument roughly and without reference to what they desire to accomplish; they grasp it firmly and attempt to push it rapidly into the uterus. It is impossible to introduce the instrument in that way, and this is one reason why the so-called exaggerated curve has caused the instrument to be severely criticised by some operators. Let me describe the details of the operation. The patient should be in the lithotomy position, the one usually employed in this country for examinations. The cervix is then exposed with a modified Nott speculum, in which the anterior blades are shorter than in the original instrument. If the os does not present in full view, the posterior lip of the cervix is grasped with a tenaculum. The operator should always have a good strong light, so that the os may be found without difficulty. Sometimes in mechanical dysmenorrhœa, in those rare forms where there is more or less occlusion of the external os as a result of gonorrhœal inflammation, or from applications such as iodine, carbolic acid and nitrate of silver, it is difficult to find the os. In my office, I frequently use the Trouve electric light to locate the os at night and on dark, cloudy days. Previous to introducing the dilator, it is passed through the flame of an alcohol lamp in order to warm it. If not warmed, its introduction is apt to be followed immediately or in a short time by uterine colic. In determining the proper degree of heat, we can use the same test employed by the laryngologist in testing the heat of his mirror, that is, by placing the instrument against the

skin of the face, where it is delicate and readily appreciates the degree of heat. The dilator is then anointed with carbolyzed petroleum jelly or a moderately aseptized preparation of oil, as carbolyzed oil, one to sixty. The instrument is then grasped like a pen, lightly, without any force, resting on the distal end of the second finger and steadied by the thumb and index finger of the right hand. By a previous digital examination, we determine approximately the position of the uterus, whether ante-flexed, retroflexed or latero-flexed. The beak of the instrument is carried through the speculum until it reaches the external os. We then make the instrument follow the inclination of the uterus, as determined by the previous examination. If there is a lateral flexion, the instrument will be made to conform with the displacement. If there is marked retroflexion, the instrument will be reversed. If there is anteflexion, the handles must be depressed. We first make use of the smaller instrument, which is an explorer. This can often be introduced where the smallest probe cannot pass the external or internal os. As the beak of the instrument reaches the internal os, it will generally be halted. In order to overcome this spasm of the internal os, the blades are separated to a slight extent and withdrawn one-fourth or one-half an inch. They are then brought together and pushed forward. After one or two attempts of this kind, the beak of the instrument will slip into the uterus. As a rule, the introduction of this explorer, with the passage of the second size, without opening the blades, is all that is done at the first sitting. The patient is told to return in three or four days, as the case may be. The second sized instrument is then prepared and carried into the uterus and expanded as far as the patient can bear.

If you proceed in this manner, you establish a tolerance to traumatism, and are less apt to have perimetritis or other forms of peri-uterine inflammation. That it does occur where rapid dilatation or divulsion is done at one sitting, is well established. This accident is frequently complained of under such circumstances, and this is one reason why dilatation is so unpopular with some operators.

The extent to which the dilatation is to be carried, and the length of time during which the dilator is to be allowed to remain, is to be determined by the tolerance of the patient. She will often cry out that she cannot stand it any longer. You will then let up for a few minutes, and while talking to her and explaining the necessity for the operation, you can make a few turns of the screw, and by turning up the screw very slowly you can, as a rule, get half an inch or more without causing the patient excessive or unbearable pain.

Besides its use in overcoming mechanical or obstructive dysmenorrhœa, the dilator has other uses. It is probably the best and safest uterine repositior that we have. We can overcome flexions or versions, whether anterior, posterior or lateral, with greater facility and safety by the introduction of this instrument than by any other that I know of.

One disadvantage of rapid dilatation is the traumatism which it causes to the uterus. Just as rapid dilatation or divulsion of the urethra may be followed by chill and the other evidences of shock, and by sympathetic fever, so, rapid dilatation or divulsion of the uterus is often followed by evidences of peri-uterine inflammation, often of sufficient severity to jeopardize the life of the patient. Again, in regard to dilatation, some operators make a great thing of it, give ether, bring in two or three assistants,

and charge a proportionately greater fee, although the patient is subjected to a much greater risk, and seldom receives the same benefit as when gradual dilatation is performed. It is always best to be honest and explain what you are going to do, especially if the patient be intelligent and can comprehend the advantages of the proposed method of treatment, and to whose judgment and good sense you can appeal. It is infinitely safer to employ gradual dilatation, just as it is infinitely safer to overcome a constriction of the male urethra by gradual dilatation, than it is by rapid divulsion.

I have now described the method of operating. Let me now say a word about the time, with reference to the periods, at which the operation should be done. It is best to see that the last dilatation takes place within three or four days of the expected period. Not within one or two days, but within three or four days. The introduction of the dilator should not occur immediately after the period, for then the uterus is engorged with blood. During menstruation the womb becomes much enlarged. Some of you may have had an opportunity of making a post mortem on the body of a woman who was menstruating at the time of death. Under such circumstances, the uterus will be found to be as large as the fist and thoroughly engorged with blood. It requires four or five days after the cessation of the period for this congestion to disappear. The proper way is to commence one week after menstruation has ceased, and to dilate twice a week up to three or four days before the anticipated date of the next period.

Having secured full dilatation, what are you going to do? Are you going to discharge the patient, and tell her that she need not return? You must tell her

to return every three or four weeks for the next four or five months, if you want to effect a perfect cure. Having opened the uterus, it must be kept open until nature's cure takes place, viz. : until the woman becomes pregnant.

There are cases of rudimentary uteri, of malformed or defective uteri, in which you will find that dilatation will do possibly more good than in any other class of cases. You will see a little uterus, measuring, perhaps, one and one-half, or one and three-quarter inches, with a conical cervix and a pin-hole os. There may be moderate ante flexion. The woman suffers a good deal from ovarian neuralgia, possibly due to the defective development of the ovary, and excessive congestion of the ovary during the catamenial periods. In such a case, you will find that moderate dilatation acts as physiological exercise to the uterus. You dilate three or four times a month for a year, often, before you obtain a thoroughly good result. The uterus will increase in size under this treatment. The advance from week to week may not be apparent, but at the end of four or five months the uterus will measure two inches or two and one-fourth inches, it will become larger and approach the normal size, the cervix will become broader and less conical, and the mucous membrane will become redder. The disappearance of the conical cervix is explained by the fact that the uterus is a highly elastic organ, and lateral distention must shorten it. For example, if you take a rubber glove finger and stretch it laterally, you shorten its depth.

You will sometimes find it necessary to introduce the dilator without the aid of the speculum. In young unmarried women, it is desirable to avoid the use of the speculum, which would be likely to rupture the hymen, and thus might

expose the woman to suspicion in later life.

There is another point to which you, perhaps, may not have had your attention called. The uterine dilator is of equal efficiency as an urethral dilator. Where there is a stone in the female bladder, the urethra may be dilated with this instrument. Also in cases of urethritis, due to gonorrhœal infection, you will find oftentimes after the vaginal discharge has ceased, there will still be a great deal of urethral and vesical irritation. There may be a good deal of discharge attended with the formation of little excoriated surfaces and tubercles about the mouth of the urethra. In these cases of chronic urethritis in the female, the introduction of the dilator will be of great service, and will have a good effect in modifying the character of, and finally controlling, the discharge. Just as we make use of dilatation by bougies for the relief of chronic urethritis in the male.

The instrument is also useful in cases of catarrhal endometritis, cases which have been swabbed with iodine, carbolic acid and nitrate of silver for years with very little benefit. In such cases, the presence of the dilator in the cavity of the uterus will often have a beneficial effect.

The dilators are usually made in sets by the instrument makers. I care nothing who makes them, so long as they are made properly. Ordinarily, you will find that you do not need more than two dilators, the large and the small size. You can nearly always get sufficient expansion with the small dilator to admit the introduction of the large one. The large size is so firmly and strongly made that you can secure a dilatation of one and one-fourth inches, which is sufficient for all cases. Dilatation to a greater extent is dangerous and is apt to be followed by grievous results.

Another point with reference to gradual and rapid dilatation is, that with rapid dilatation the uterus often contracts down to its previous size in a brief period of time, whereas, with gradual dilatation, the uterus does not contract, and you rarely experience this difficulty.

In performing this operation, I never give ether, I never use a tenaculum, and it can be done with as much facility without the speculum as with it. It is wise to swab the uterus before and after the operation with some mild antiseptic, such as a solution of boracic acid, or carbolic acid, or a mild solution of corrosive sublimate (1 to 5,000 or 7,000). It is best always to advise the patient to lie down and rest quietly for at least the balance of the day upon which the dilatation is performed. When the dilator is used as a repositor in a case of retroflexion or retroversion, a little cotton pledget, with a string attached to facilitate removal, saturated with glycerine or boro-glyceride, or glycerole of tannin, should be carried into the posterior fornix of the vagina, to hold the uterus in place and prolong the advantage which has been gained by restoring the uterus with the dilator. In cases of anteflexion and anteversion, it is rarely necessary to make use of these cotton pledgets. In regard to latero-flexions, I think that they make no more difference to the woman than the mere fact of her nose being turned more to one side than the other. I do not believe that you gain anything by the introduction of pessaries after restoring the uterus to its normal position. If the woman has any vesical or rectal trouble, the pressure of a pessary augments it. I am speaking now of my own experience, simply. In the clinic, where I see ten or twelve new cases every week, I have, in two years, used but two pessaries, and I do

not feel that I did those patients any good. After restoring the uterus, I use these pledgets, and have abandoned entirely the use of pessaries.

The Exploration of the Uterine Cavity in Cases of Metrorrhagia.

At the meeting of the British Gynecological Society (*British Medical Journal*), DR. EDIS read a paper on this subject. The author desired to draw attention to the urgent necessity of this proceeding when dealing with cases of severe persistent or recurrent uterine hemorrhage. The subject was one of great interest, and often one of great anxiety to the practitioner. There was a tendency to treat metrorrhagia as if it were a special disease, in place of regarding it merely as a symptom of many and various conditions. A correct diagnosis was the first and most important element of successful treatment, which otherwise was mere guess-work. Speaking generally, there was almost invariably some local cause when the hemorrhage was really severe. Cardiac, hepatic, or renal disease might be present as a complication, or independently, and should always be taken into consideration. Uterine hemorrhage might be aggravated by the injudicious use of alcoholic stimulants; more especially was this the case about the time of the menopause. The author had repeatedly witnessed cases where the mere abstinence from alcohol had been sufficient to arrest a profuse hemorrhage, which had been going on for months, and threatened even the patient's life. In attempting to form a rational diagnosis, it was of great importance to get a careful and exact history of the details of the case. Before proceeding to local investigation, the heart, lungs, liver and other organs should be carefully examined, and inquiry made into the habits of the

patient. A careful pelvic exploration should follow. Then if, after consideration of all the facts of the case, the presumptions were, everything else being excluded, that there was some intra-uterine complication, the practitioner was not justified in allowing the patient to go on bleeding indefinitely without giving her the benefit of further assistance. The author, in general, effected dilatation by dividing the cervix with the metrotome or scissors, either alone, or in conjunction with the employment of tents or other dilators. It was advisable, after operation, to irrigate with some appropriate antiseptic lotion, morning and evening, for a few days. In cases of persistent hemorrhage, due to retention of the placenta, following a miscarriage, the cervix generally remained sufficiently patulous, or was so readily dilatable, that no difficulty was experienced. Where, however, only a small portion of the placenta had been retained, and the case allowed to go on for several successive weeks, or even months, the cervix might be found so contracted as to necessitate the introduction of laminaria tents over night. In such cases, incision should never be resorted to, this method being reserved exclusively for cases of small fibroid or fibroid polypi in the interior of the uterus. The author related several interesting cases to exemplify his meaning, and to show that, until the cavity of the uterus had been explored, a correct opinion could not be formed as to what method of treatment should be adopted. He would lay stress upon the importance of dilating the cervix and exploring the interior of the uterus in all cases where hemorrhage from the organ persisted unnaturally, and where the ordinary medicinal agents failed in affording relief, and there was no evidence of any condition external

to the uterus sufficient to explain the persistence of hemorrhage.

Dr. Aveling had observed that, in cases requiring dilatation where something existed in the uterus capable of being removed, the cervical canal was either dilated or dilatable; this peculiarity had been noticed by Harvey. In these cases, he preferred to use his own dilators. Where the os was rigid and contracted, a more gradual method was better.

Dr. Routh believed that Dr. Edis's paper was eminently practicable, but he took exception to one or two points. As to rapid dilatation of the uterus, it did not always succeed when the uterus was rigid; and after all, it was not a rapid, but a long and tedious process, requiring an anæsthetic. He preferred the sea tangle tents used with proper precautions, and always collected and prepared his own. In regard to those cases of metrorrhagia in which nothing could be found after exploration, it should be remembered that an ulcerated or excoriated condition of the mucous membrane need not be restricted to the os or external portion of the cervix, but might extend up to the uterine cavity. It was quite in keeping to suppose that a congested state of the liver would have the same effect on the uterine mucous membrane as was the case in piles, causing them to bleed and enlarge. The last objection he would take was to the incision of the cervix. The danger to the patient from septic poisoning was greatly increased by such a measure.

Dr. Barnes thought no law in therapeutics more clear than that which dictated direct examination of an organ at fault if it could be effected. The endeavor to do so was made, in the case of other organs, by percussion and auscultation. The uterus offered the incontestable advantage of being directly accessible.

A narrow condition of the os externum was a frequent factor in cases of hemorrhage. Great benefit was often derived from simply enlarging this opening by a strictly limited incision. The immediate effect was to relieve local engorgement. It also afforded a ready escape for imprisoned blood clots and mucus, and gave free access for exploration and the application of topical remedies. It was also useful in many cases of intra-uterine polypus and fibro-myoma of the body of the uterus.

Dr. Thomas Savage found Hegar's dilators to be very unsatisfactory. Laminaria tents were much more efficient but were sometimes followed by disastrous consequences. In several cases in which he had suspected a portion of the ovum to be left behind, he had thoroughly swabbed out the uterine cavity with pure carbolic acid, and found that such a course would often prove sufficient for cure.

Dr. Bantock was compelled to dissent from Dr. Edis on one or two minor matters. He did not approve of incising the internal os after partial dilatation for the purpose of removing a small fibroid tumor, because it would be impossible to control the subsequent extension of the laceration of the divided tissues consequent on the forcible extraction of such a hard body as a fibroid tumor. He had met with cases exactly corresponding to those narrated by Dr. Edis, and it was quite easy for him to support his views. He thought it was a mistake to mix glycerin with iodine or carbolic acid when the full effects of either remedy were desired.—*Therapeutic Gazette*.

Hemorrhagic Endometritis.

DR. ANGUS MACDONALD (*Edinburgh Medical Journal*) states that nothing is so good in the treatment of hemorrhagic

or fungoid endometritis, whether it originates from an ill-treated abortion or otherwise, as a careful removal of the superabundant tissues by curetting. To do this thoroughly, however, you need to dilate the cervix, as you cannot get a suitable instrument through the undilated os internum. The danger of dilatation is no doubt real, but it is greatly lessened by use of careful antiseptic precautions, such as thoroughly washing out the uterus and vagina before and after operation. Its dangers are more than compensated for by the thoroughness and safety of operation secured thereby. A steel curette should be used. Such instruments as Munde's dull wire curette are of no use whatever for such cases. Only the unhealthy mucous membrane comes away. The operator at once knows by the feel, and by a peculiar grating sensation communicated to his hand by the instrument, when he has reached healthy tissue. — *Weekly Medical Review*.

Is Intra-Uterine Erysipelas Communicable?

PROF. R. KALTENBACH, in *Geissen Gynakol. Centralblatt*, viii. 44, 689, says that on the 31st May, a woman æt. 35, for the second time pregnant, was received into the lying-in wards. She had some time previously an erysipelas of both under extremities, which had started from an ulcer on the leg. On the 19th of June an erysipelatous inflammation on the right heel appeared, which spread over both legs. Here and there vesicles were found. The temperature exceeded 102.2° F. only once, and returned to normal on the 1st of July. At the time of the birth, which occurred fourteen days later, scales of skin still showed themselves on the under extremities. The puerperal period ran a quite normal course, with the exception that a small abscess formed in

the region of the sacrum. On August 5, the patient with her child were discharged well. The child showed a desquamation on its head, neck, and thorax. In the course of the next few days the deeper parts took part in this desquamation.

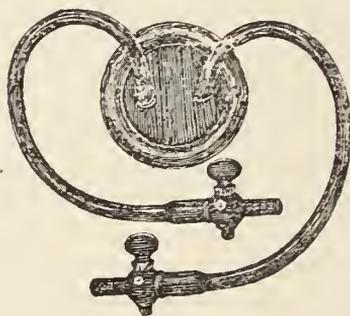
For intra-uterine infection spoke:

1. The characteristic form and mode of spreading of the desquamation.
2. The time at which it occurred.—

Medical and Surgical Reporter.

Apparatus for Vaginal Irrigation.

At a recent meeting of the British Gynæcological Society (*Arch. Gynæc. Pediat. and Obstet.*), DR. IMLACH showed the apparatus employed by him for prolonged vaginal irrigation. It was a spring pessary with a rubber dia-



phragm into which two rubber tubes, each a foot long, were inserted flush with the surface, and both influx and efflux tubes terminated in a tap. After the pessary has been inserted within the vulva a yard of tubing was attached to each tap. The influx tube was thus connected with a two gallon jar placed on a table beside the bed or chair occupied by the patient, while the efflux tube hung over a pail. In case of disease of the cervix uteri and of recent pelvic inflammation, he had often continued the irrigation for long periods without intermission. A nurse in attendance was

required, as the flow was six gallons in the hour, though it could be diminished by turning one of the taps. When the ordinary vaginal douches or any of the rather expensive vulvular cups were employed, few women could bear the injected fluid at a higher temperature than 105° or 107° , and the labor was so troublesome that they were seldom used for longer than half an hour each day. With his instrument a temperature of 120° could be borne without pain. Sometimes various disinfecting solutions were used, but often only hot water during the greater part of the time. He generally began the treatment early in the morning, and it was continued until evening. If the patient was able she sat, reading or sewing, on a low chair, but if not she lay on a couch. In the evening the extra tubing was removed, and glycerine (to which any required medicament could be added) was injected through one tap until it flowed out at the other. Then both taps were turned off and the cervix uteri was left in this glycerine bath all night. Next morning the irrigation was recommenced, and the pessary was not removed until the course of treatment was concluded. In recent pelvic inflammation the relief from painful symptoms, when the method of continuous irrigation was employed, was far greater than what he had ever obtained by the intermittent and occasional douche. In cervical catarrh this method was sufficient, except when there was considerable laceration of the cervix uteri. And in cancer of the uterus fœtid discharge and pain were mitigated.

He thought the apparatus would be found to be of service in obstetric practice. It was simple and cheap, and could be made of different sizes by any instrument maker.

DISEASES OF CHILDREN.

Proper Diet for Children.

Technics gives this excellent advice from the pen of DR. ARTHUR V. MEIGS :

Children under two years of age are generally best fed on milk and milk foods, and the less this is departed from, as a rule, the better. Under this age they should never be taken to the table, for it only gives the child a fancy for articles of diet which, if it never saw, it would never want. In the great majority of cases, children have not much desire for animal food of any sort until the first dentition is over, unless the craving is fostered in them by their being given one thing and another to eat, and thus there is created what is almost an unnatural appetite. This, of course, is not intended to be an absolute rule, for many children want, and seem to need, after the first year, a meal once or twice a day of something besides bread and milk. But no mother should feel uneasy if her child takes almost nothing but milk and bread and butter until after it is two years of age.

Drenching Infants.

DR. R. J. PEARE thus writes in the *Kansas City Medical Index* :

The artificial feeding of infants, which for various reasons not infrequently becomes necessary for short periods, is often perplexing. The child, with the greatest obstinacy, presses the tongue against the palate, and effectually obstructs the passage of the milk. When swallowing is induced under these circumstances most of the food is extruded from the mouth, and very little reaches the stomach. How much nourishment the child really receives becomes a matter of great uncertainty. But while every effort is being made to sustain it, and the impression exists that it is

sufficiently fed, it on the contrary visibly emaciates. To overcome this trying difficulty, I have resorted in a few cases, greatly to my satisfaction, to drenching through the nasal passage. The milk is first warmed to blood heat, and then, with a spoon rather pointed, pour gently into the nose, the child lying on its back during feeding. By this method the milk passes down behind the tongue, and is beyond the control of the child, except in so far that it might bring the soft palate into action, thereby closing the posterior nares; but this is not likely to occur. Contrary to what might be supposed, strangling does not arise from this method, the breathing not seeming much disturbed by it. Among its advantages, not the least is that the exact quantity of food taken may be known, for with careful management none of it need be spilled. These suggestions may be serviceable to others.—*Medical and Surgical Reporter.*

On Revaccination.

In an essay on the revaccination of young individuals, published by DR. JULES BESNIER, in the *Revue Mensuelle des Maladies de l'Enfance*, this author publishes the following conclusions: 1. The number of successful revaccinations in young subjects revaccinated for the first time, increases with the advancing years, and reaches its maximum at the period of fifteen to twenty years. In adults revaccinations are less frequently successful than in young subjects. 2. Certain diseases favor a successful revaccination at certain periods of life; among these are the affections of the typhoid type. The ordinary eruptive fevers of childhood and the chronic affections of old age have no such influence. 3. In the subjects vaccinated at birth and not revaccinated, the predisposition for variola and vac-

cinia reaches its maximum in the ages of fifteen to twenty, and decreases gradually as age advances. 4. This fact is a stringent reason for the revaccination of all persons at the stated ages of adolescence. 5. Bovine lymph is, by all means, preferable to human lymph. 6. In absence of an epidemic of variola, the months of March and April (Easter holidays) are most suitable for revaccination of school children.—*Therapeutic Gazette.*

Bronchitis in Children.

DR. KOSKALM concludes an article published recently in the *Peoria Medical Monthly*, as follows:

Commonly bronchitis requires little treatment. I am afraid that most physicians have dropped into a routine practice, which is to be regretted. The prescription given is almost invariably a mixture of "solvents" and "expectorants to loosen the phlegm," however loose that may already be. It may at times do no harm, if it does no good. I claim, however, that by this indiscriminate ordering of expectorants the lives of many infants are endangered, if not sacrificed. If seen in its earliest congestive state a nauseant emetic, with restoration of the action of the skin, or the latter alone, may prove abortive of an attack. Failing in this, sthenic fever, if present, requires remedies calculated to diminish the force of the circulation, such as aconite, the antimonials, quina, ipecac. *Veratrum viride* is used, but, in my opinion is too actively depressant. A warm bath, hot drinks and some mild aperient also tend to this effect. Among the laxatives calomel is very useful in small doses of $\frac{1}{4}$ grain every two hours, though the *modus operandi* be unknown. Spirits of mindererus with spirits of nitre and jaborandi may be administered. If there be much useless cough a small

dose of an opiate, or preferably, the extract of hyoscyamus or cherry laurel water, as not retarding secretion, should be added. Hot applications to the chest, such as mustard with linseed meal in the proportion of $\frac{1}{2}$ oz. to 8 oz., or hops, are useful as derivatives, and may be continued in the second stage. When the congestive stage has continued for a day or two, we must change our remedies to such as will promote secretion (sooner than this we will hardly succeed), among these ipecac, squills, antimony, lobelia and especially the chloride of ammonium; also, warm vapors impregnated with glycerine or lime. These remedies are useful as long as they are indicated by dryness of the mucous membrane, and should be stopped or lessened in quantity as soon as the cough has become quite loose. At the end of a week or ten days we may begin with stimulating expectorants to aid in the expulsion of mucus, which is again becoming tenacious. Being now less abundant and more difficult to raise, it is thickened by evaporation into the air which is constantly passing over it as it is plastered against the sides of the air tubes. This class of expectorants has a tonic and stimulating effect on the mucous membrane, restoring it to its natural condition and increasing the functional activity of the cilia and bronchial walls. The most commonly used are squills, senega, the carbonate of ammonium, camphor and the resinous substances, such as benzoes and benzoic acid, tolu, Peruvian balsam, copaiba, cubebs. A small amount of a narcotic may be added if necessary. It is this combination of stimulants and expectorants with a little opium which renders paregoric so useful. Inhalations by spray or otherwise of tar or turpentine are also beneficial, especially in chronic cases. In ca-

chectic children a tonic course with iron may advantageously follow the more direct medication. In capillary bronchitis or in ordinary bronchitis, when there is a low state of vitality with debility arising early, we must withhold entirely the depressant remedies, using instead the stimulants freely. In these cases there often arises extreme danger from obstruction with mucus; the child is too feeble to now raise the phlegm in which it is drowning. To depress the system with arterial sedatives, to relieve the cough, to increase the amount of mucus by loosening expectorants is pernicious, is even murderous. By strenuous efforts the child gets air enough; enfeeble it by narcotics and the efforts are crippled; relieve the cough and the secretions settle still closer to the alveoli; loosen the phlegm and more accumulates. The thing to do is to evacuate the offending matter, and this can only be done by a prompt and efficient emetic of zinc or copper. Ipecac is depressing; deaths have resulted from apomorphia. The improvement after thorough emesis is often next to wonderful. I now almost invariably begin the treatment in a child, especially in an infant, with vomiting (preceded by some stimulant), by which the air passages are well cleared. A large poultice applied over the whole chest, by virtue of heat and moisture, aids very materially in the improvement. The breathing after these two measures becomes deeper, less rapid and the infant once more finds leisure to nurse. At the same time we must, by all means, try to support the powers of life with stimulants and concentrated food, to enable the child to continue its laborious respiration for a few days, when the danger will usually be passed. The subsequent treatment is similar to that in ordinary bronchitis.

I once more would urge upon you the necessity of recognizing the mechanical nature of the danger; when this is appreciated the proper course will suggest itself, and measures be avoided that would make matters worse.

OBSTETRICS.

Tait On Faradization.

DR. R. P. HARRIS presented the following letter from Mr. Lawson Tait, of Birmingham:

I have very strong objections to the proposal to treat cases of extra-uterine pregnancy by faradization. In the first place, the diagnosis of these cases must always be haphazard, that is to say, a correct diagnosis will not be made, probably more than once in three times; the result will be that all such cases will be dealt with mischief only, and I venture to predict that this treatment will be dropped, as all such cases are, without explanation of the case, in a very short time. My greatest objection is, that supposing the fetus has passed through the stage of tubal rupture and remained alive, what right have you to murder that child? If it goes on to full time it may be delivered alive, and the woman will have a chance of recovery from the operation far greater than with the faradization treatment of destroying the child. The cases, according to my experience, which recover from the operation are about six out of seven.

Every one who has had much experience with pelvic tumors must have seen a certain number of cases where the fetus has died between the fourth and sixth month, and where, after a prolonged course of suppuration, it comes out through the bladder, rectum, etc., these are of course the cases where the tubal rupture has taken place into the broad ligament on the left side. I have

seen one right-sided case going into the bladder. It of course killed the patient.

In the whole course of my life I have only known of one case where the woman has carried an extra-uterine pregnancy for a number of years after the death of the fetus. We knew with perfect certainty all about this case, and for about eighteen years she has carried on the left side a condensed ovum of extra-uterine pregnancy. I doubt very much if there could be found in the whole world three other such cases; whereas the number of cases who die or have prolonged illness after the suppuration and discharge of the fetus is, even in my own experience, very great.

In closing his letter, Mr. Tait writes: I wish you would make this opinion of mine known on your side.

In reply I will state:

1. We do not in this country practice electrolization in cases of extra-uterine pregnancy. No puncturing needle is used, and the electro-magnetic current will not endanger the life of the patient any more if the growth to be acted upon is a tumor than if it be as presumed, an ectopic fetal cyst. The experience of seventeen years in the United States, in which no fatal result is believed to have taken place, has only tended to establish this fetical method as a valuable means of saving women when in great danger from rupture of the fetal cyst and internal hemorrhage.

2. We do not propose to act upon the fetus after it has escaped into the abdominal cavity, unless the fetus should be very small and be easily accessible to the pole of the battery placed in the vagina. We cannot see that it will be any more a murder to destroy a two or three months' fetus after it has escaped from a Fallopian tube by rupture than while it is still in it. The chief objection

lies in the fact that an ectopic fetus will be much more likely to give trouble after its destruction than one that is securely enclosed in a sac from which the amniotic fluid shall have been absorbed. It is true that an abdominal fetus may be delivered alive at term if permitted to live, but it is not correct to estimate the risk of such operations as lower than faradization properly performed, for it is far higher. Primary laparotomy, as far as we know of the operation, has been fatal in 15 out of 19 cases.

It is not proposed in this country to operate by faradization upon fetuses of from four to six months. Dr. T. G. Thomas has, it is true, proposed to make the limit $4\frac{1}{2}$ months, but the general impression is that it is much safer immediately and remotely, if done in the second and third months, when fetal ossification is very incomplete. The entrance of fetal debris into the bladder is not necessarily fatal as in the case reported by Mr. Tait, for Parry refers to nine cases, four of which recovered. —*Obstetric Gazette.*

Management of Breech Presentations.

At a recent meeting of the New York Academy of Medicine, DR. ROBERT A. MURRAY read a paper with the above title (*New York Medical Journal*), which dealt principally with the measures necessary to be taken to deliver in breech cases and to diminish the percentage of mortality. The importance of an effort in this direction was apparent from the fact that the statistics quoted from authorities, gave a mortality in breech presentations of about one in eight and a half cases. Among the causes of this class of presentations were a contracted pelvis, an excessive amount of liquor amnii, violent movements, and a peculiar formation of the lower segment of the uterus. It was

also remarkable what a large proportion of the cases occurred in premature labor and multiple pregnancy. The statistics of Simpson went to show how frequently, the child being dead, the loss of tonicity of the spine and the presence of flaccidity in the tissues, caused malpresentations; those tables demonstrated that there was a constant tendency after the sixth month of pregnancy for the head to present.

In a case of breech presentation in which the mother's pelvis was of full size and regular form, and the child of moderate proportions, labor would probably be accomplished without particular difficulty, and the obstetrician had only to wait. If, however, the indications were that the labor would be difficult, if the pelvic cavity was not roomy, or the child of large proportions, version, if it was to be performed, should be done early before the rupture of the bag of waters. If the case was allowed to progress, no obstruction being met with, the critical moment for the child would be just after the birth of the trunk and lower extremities, for now the cord was in danger of becoming compressed between the unyielding head and the pelvic wall. The cord should be pulled down and placed next the sacro-iliac synchondrosis by the side of the child's head, where it would be least likely to become compressed. The contractions of the uterus might be followed up by the hand, and flexion of the head might be aided by raising the trunk of the child. But in cases in which the limbs were extended upward over the front of the child, so that the toes were near the face, the breech was not nearly so large as the child's head, and, being readily moulded, entered the pelvic cavity; the entire foetus then presented, as Barnes had well described, the form of a wedge with the base upward. Now, if traction

was made by means of hooks, fillet, or forceps, and unsuccessfully, as it was likely to be, the apex would be dragged into the pelvis, and, the cavity becoming more tightly filled, compression of the cord would be increased, and the uterus rendered more irritable, and here the only measure for the safety of the mother and child was to bring down a foot. The use of the blunt hook to do this was difficult, as it was apt to slip and injure the soft parts, or cause fracture of the thigh; consequently, if the child was living, it should not be resorted to. The fillet, if it could be guided over the limb, might cut the tissues or prove too weak to overcome the difficulty. The obstetric forceps had been recommended in these cases, but it was condemned by most authorities. It was only adapted for use on the head. The performance of cephalic version, as recommended by Spiegelberg, would be possible only before rupture of the bag of waters and before the breech became wedged.

The clear indication in such a case was to break up or decompose the obstructing wedge, which was to be done by bringing down one foot. The position of the breech in relation to the pelvis having been determined by ordinary diagnostic points, the hand was to be passed in front of the breech where the foot lay, and one foot seized by the instep and brought down; then the breech would probably soon descend. The cord would be better protected than if both feet were brought down. The foot nearest the pubes was most easily drawn down. If the case was not otherwise complicated, the labor would now go on naturally. If the breech filled the brim, or was forced into the pelvic cavity, little space would be left for the operator's hand, and under these circumstances the hand would have to be passed up to the fundus uteri in order

to grasp the foot. That hand should be introduced whose palm would touch the abdomen of the child when introduced. When the foot was reached, preferably the anterior one, it was to be seized by the instep and drawn down out of the vulva. It was essential to get hold of the foot; taking hold of the knee, or hooking the thigh in the groin, would be of no use. During the operation the uterus should be supported by the other hand or by an assistant. If inertia uteri should now exist, we should still have attained by our hold on the foot security for further progress of the case.

The operation of extraction by the breech might be divided into: 1. Drawing the trunk through the pelvis. 2. Liberation of the arms. 3. Extraction of the head. Traction on the leg should be carefully made, in drawing the trunk down, coincidentally with the pains. The trunk should be drawn downward and backward in the axis of the brim, external pressure being made by an assistant, the traction being kept up until the breech was fairly in the pelvic cavity. After the extraction of the breech, the cord should be carefully looked after. Liberation of the arms might become necessary if the pelvis was at all contracted, or if traction upon the trunk had been too rapid, or had not been accompanied by external pressure on the uterus.

The head being at the brim, Smellie's method might be employed in the manner recommended by Schröder, or the method of Scanzoni. In all cases of breech presentation the forceps should be at hand ready for application to the head if it should be necessary. Particular care should be taken during its introduction not to lacerate the cervix. Passing a catheter up into the mouth of the child at this stage would frequently save life.

The subject of the management of breech presentations had been brought to the author's mind forcibly during the past year from the number of cases which he had seen in consultation, in nearly all of which he had found difficulty arising from flexion of the legs on the abdomen, diminishing the size of the breech to a certain extent, and at the same time forming a wedge that became more tightly impacted as the child descended. In all of these cases unsuccessful efforts had been made to extract before he was called, and he was impressed with the advantage of introducing the hand and bringing down the foot over other methods, such as the use of the forceps, the blunt hook, the fillet, etc.

Mammary Functions of the Skin in Lying-in Women.

The breast may be regarded as a highly specialised sebaceous gland, or, at least, as a highly specialised cutaneous gland. It may have developed out of the indefinite blastema of the epiblast, either directly or through the intermediary stage of a sebaceous gland. The distinction made by Dr. Creighton at the discussion of Dr. Champney's paper at the Royal Medical and Chirurgical Society, will, in view of deeper embryological considerations, appear to be of not great importance. For it is plain that the glandular structures to which he referred must have originated from epiblastic germs, as the sebaceous sweat, and mammary glands have also done. That a sebaceous gland is also a miniature breast must be regarded as theoretically proven from a chemical standpoint. Milk is a chemical compound in certain proportions of albumen, fat, and sugar, and analysis of sebaceous matter also yields fat and a small proportion of

proteid and carbohydrate. Dr. Champneys' most careful and detailed description of the axillary lumps forms the result of an equally sedulous research, which, so far as is known, is unprecedented, and therefore original in the true sense of the word. The lumps that he described as situated in the axilla may, for all practical purposes, be regarded as mammæ. Their evolution follows step by step that of the mammary glands in parturient women, and there are some grounds for believing that they may be the seat of similar pathological affections. Further, Dr. John Williams bore testimony to the effect that, like the breast, the axillary lumps may show changes during menstruation.—*Lancet*.

Inflamed Nipples.

For sore nipples, DR. WILSON, of Glasgow, recommends: \mathcal{R} . Plumb. nitrat., grs. x-xx; glycerini, $\bar{3}$ j. M. Apply after suckling, the nipples being washed before the child is again put to the breast.

DR. PLAYFAIR recommends: \mathcal{R} . Sulphurous acid, $\bar{3}$ ss.; glycerite of tannin, $\bar{3}$ ss.; water, $\bar{3}$ i. M. Apply after suckling.

DR. BARNES recommends: After washing away remains of milk after nursing, smear with salve made of: \mathcal{R} . Liquor plumbi, $\bar{3}$ i.; prepared calamine powder, $\bar{3}$ i.; glycerini, $\bar{3}$ i.; M. Vasaline, $\bar{3}$ vij.—*Quart. Comp. of Med. Science*.

Hydrocephalus in Utero; A Case.

DR. F. H. LITTLE (*Iowa State Medical Reporter*):

I was called to see Mrs. S., a stout young German woman, the mother of a healthy boy of about two years of age, and at this time in labor with her second child.

Upon examination, I found the woman in a very much exhausted condition, but with little or no pain, and greatly discouraged. Upon further examination, I found the body of a well formed female lying between her thighs, with a large solution of continuity in the lumbar region, the result of a ruptured *spina bifida*.

The child was dead, and had been so for some time previous to birth, as well marked post mortem changes were noticeable on various parts of the body. Passing my hand into the vagina I found the face in the hollow of the sacrum and the occiput under and above the symphysis pubes. Introducing two fingers in the mouth I was able by a good deal of force to pull the head down about an inch, but could move it no further. I then administered chloroform and applied my Elliot's forceps, but with no better result than before. All the force I dared exert did not move it the fraction of an inch. I then passed my hand up into the vagina, and above the brim of the pelvis could feel the outlines of a great head. Instantly I diagnosed hydrocephalus and decided to perforate.

Introducing a Thomas's perforator carefully along my finger until I had the point imbedded in the integument just beneath the occipital protuberance, and then screwing it through the occipital bone I entered the cranial cavity with this instrument very easily. Upon raising the concealed cutting blade of the instrument and dividing the bone and integument, there was a great gush of fluid and a lessening of the size of the abdomen, which until this time looked as though there might be a double pregnancy, it was so large.

Passing a crochet into the cranial cavity, I dislodged the various bones of the skull (which were but partially de-

veloped) and so reduced the size of the head, that by the aid of two fingers in the mouth the delivery of the head was very easily accomplished. I immediately delivered the placenta, which was normal, the uterus contracted nicely, and in an hour the patient had recovered from the effects of the chloro-

form, and was very comfortable, and in fifteen days was able to be up and dressed. The after-treatment consisted of hot vaginal douches, twice daily, of a 1 to 5000 bichlo. solution.

By permission of the parents I was allowed to take the child, and the next day exhibited it to the Society of Physicians and Surgeons of this county, which met at this place.

The measurements of the head were taken by several members of the Society, and were as follows (after the head was collapsed from perforation): circumference, 26 inches, occipito-frontal, 17 inches, and from one auditory canal to the other, 18 inches.

Rupture of the uterus is the great danger in these cases. Leishman in his *System of Midwifery*, reports 70 cases of Dr. Thomas Keith's, in which 16 were lost from this cause. Dr. Robert Lee reports 5 cases in his *Clinical Midwifery*, in which all were lost from rupture or inflammation of the uterus. Getchell, in his *Encyclopædia of Obstetrics*, just issued, makes no mention of these cases; nor does Meigs in his treatise.



CONSTITUTIONAL DISEASES.

A New Diagnostic Test for Typhoid Fever.

Statistics regarding the therapeutics of typhoid fever are almost always seriously vitiated by doubts as to diagnosis. This is more especially the case with the alleged abortions of typhoid. It is very desirable, therefore, to have some definite test of the presence or absence of the disease in its early stages. The temperature curve is known to be often far from typical; the roseola does not appear, if at all, until from seven to twelve days; there are, in fine, no pathognomonic symptoms in the earlier stage of the disease.

Several observers have recently tried to establish a method of making the typhoid bacillus of Eberth a means of positive diagnosis. This bacillus is now quite generally conceded to be a constant accompaniment of the disease in question, and of no other.

Attempts to find this bacillus in the blood have not been very successful, although Neuhaus (*Berlin. Klin. Woch-en.*, 1866, No. 6) observed them in blood taken from incisions made near the roseola spots. M. Bouchard has also found the bacillus in the urine. Recently Philopowicz (*Wien. Med. Blatt.*, 1866, Nos. 6 and 7; *L'Union Médicale*) has communicated the results of his personal experience in the examination of blood drawn from the spleen of typhoid patients. Having washed the skin with a solution of bichloride, 1 to 1000, he inserted the needle of a hypodermic syringe, previously sterilized, between the ninth and tenth ribs, and withdrew some of the splenic blood and juice. In this he was able to recognize the bacilli of Eberth, and produced cultivations showing their specific character. All this was done in four patients, before the appearance of any

roseola. There does not seem to be any great inherent difficulty in using this method of testing the nature of a suspected fever, provided, of course, that subsequent experience confirms the results of Philopowicz. Such a method cannot be made a routine one, but in hospitals it may be frequently used, and by it perhaps the much disputed question as to whether typhoid fever is ever aborted can be settled.

In this connection the editors of the *New York Medical Record* call attention to the daring experiments of M. Payon (*L'Union Médicale*, No. 115, 1885), who inoculated pure and attenuated cultures of the typhoid bacillus upon himself and five other persons, without producing any definite symptoms of typhoid fever as it occurs in man.—*Therapeutic Gazette.*

Menstruation During Typhoid Fever.

DR. E. BARTHEL, of St. Petersburg, *Deutsche Archives für klinische Medizin*, publishes a treatise on "The Retention of Menstruation and the Frequency of Pseudomenstruation in Different Forms of Typhoid." This is a question concerning which the authorities either omit altogether, or discuss, at least some of them, in an unfavorable manner. On account of this uncertainty, the doctor endeavored to secure the necessary data from the patients in his department in Oubuchow Hospital. He did this partly through questions, partly through special examination. His material included 112 female typhoid patients.

From the information obtained, he made the following statements: 1. If the menstruation was expected during the first five days of the disease, it appeared at the proper time. 2. If the time for menstruation fell between the end of the first and end of the second

week, then it came about two times out of three. In abdominal typhoid it was absent oftener than present. 3. If the time for the menstruation to occur was after the second week, then the menstruation generally remained absent during the sickness. 4. If the time for a second or third menstruation occurred in the course of the disease, then he generally found amenorrhœa. 5. The amount of blood lost and the continuance of the same was scarcely varied by the disease. 6. Non-menstrual hemorrhage from the genitals occurred very seldom—about $3\frac{1}{2}$ per cent. of the cases. 7. In some cases where the disease began during the menstruation, this ran its usual course, with the exception of one case. 8. The course of the disease never caused the commencement of the menstruation. *a.* In those girls who had not yet obtained their development, who had either not menstruated at all, or only one or two times. *b.* In old women who had ceased to menstruate. *c.* In women who had suffered a longer or shorter time from amenorrhœa. *d.* In women who had nursed shortly before or until their entrance into the hospital.—*Medical and Surgical Reporter.*

The Treatment of Acute Rheumatism by Prof. Da Costa.

We may begin with the assertion that no remedy has a specific action in this disease, but there are means which we may employ that will greatly lessen the after dangers. There are laid down two principal plans of treatment:—

1. Salicylic acid and the salicylates. These are unquestionably the most speedy remedies, but should not be employed in those cases in which much weakness exists, for it greatly increases the sweats and depression, or in those cases where tendency to cardiac com-

plication is manifested. In these latter it has been stated to be worse than useless.

If the acid be used, which is preferable to its salts, give not less than sixty to ninety grains in twenty-four hours. Ten grains may be given in emulsion every hour, for six hours, if borne well, and then the same doses may be given at intervals of two hours.

If the salicylates are used, give three drachms in twenty-four hours. If this plan acts at all, it will do so promptly; and if good results are not achieved by the second or third day, it had better be abandoned.

2. The Alkaline plan. This consists in rapid saturation with alkalies. It lessens the tendency to heart complication, but no good can be achieved by small doses; an ounce to an ounce and a half of either the bicarbonate or acetate of potassium must be given the first twenty-four hours, half as much the following day, and three or four drachms each day thereafter. Employ until the urine becomes neutral or alkaline, and then diminish the dose as above stated.

The bromides, which were formerly used, are not so rapid as the salicylates or so useful as the alkalies, but for lighter forms of the disease, with restlessness, they can be employed with good results. They also have some virtue against cardiac complications. In weak, exhausted cases, where the weakness occurs in repeated attacks, use the tincture of chloride of iron. This remedy is preëminently useful if the case be the least pyæmic, or of gonorrhœal origin. In treating this disease, no matter what plan be adopted, it is always of advantage to add to the other treatment ten or twelve grains of quinine per day. The treatment by blisters near the joint is effective, but

very painful. If a case be seen in which the joint remains involved, blister. It will always do good locally, and also have some good general influence.

As to local treatment, there is not much to say. We may wrap the joint in lint steeped in solution of potassii nitras, with a little tinctura opii added, and cover with oiled silk. Some patients enjoy, and get better relief from dry applications; enveloping the joint with cotton to which some powdered opium has been added.

Complications.—1. Carditis. Push the alkaline treatment to the utmost, supplementing by a certain amount of the bromides. We must give opium to relieve pain and procure rest and quiet. Digitalis is a valuable remedy, more so in endocarditis than in pericarditis. If seen early, use leeches locally. The Germans use ice over the heart, but this, to do any good, must be employed early. In most cases, at the time when seen, relief can best be had by poultices, but a blister may do good.

2. For cerebral symptoms, if with high temperature, besides the general rheumatic treatment, use quinine to reduce the temperature. More certain is antipyrin: give gr. vii-x every hour until impression is made, but it is not advisable to go beyond gr. xxx. We can also use application of cold cloths to the abdomen, chest and limbs. Cerebral cases, without high temperature, do best on stimulus in large amounts, eight ounces in twenty-four hours.—*College and Clinical Record.*

Consanguinity in Marriage.

DR. E. S. MCKEE, in a paper read before the Ohio State Medical Society, concluded:

1. Like breeds like, good or bad, entirely independent of consanguinity.

2. Evil results have undoubtedly followed consanguineous marriages, but whether dependent upon consanguinity is extremely doubtful.

3. Intemperance, luxury, dissipation, sloth and shiftlessness, as well as hygienic surroundings and innumerable other causes, among them the depraved moral state dependent on births, the result of incest, should bear much of the responsibility laid at the door of consanguinity.

4. Testimony is often weakened by religious or other prejudices.

5. Data are of doubtful reliability, full of flaws and false reasoning. The noted cases are the unfortunate ones. The favorable are unknown or forgotten. It is the ill news which travels fast and far.

6. We, as physicians, know that there is much more illicit intercourse than is generally discovered. May not many people be related though not aware of it? Many marriages may thus occur between relatives, presumed to be non-relatives, thus again vitiating statistics.

7. Statistics show about the same proportion of deaf mutes, idiots and insane persons descendent from consanguineous marriages to the number of these unfortunates, as the whole number of consanguineous marriages is to the whole number of marriages. They show fertility among the consanguineous to be slightly greater than among non-consanguineous. They also show a somewhat greater frequency of retinitis pigmentosa.

8. Atavism explains fully the fact that in some instances healthy consanguineous parents beget unhealthy children. This, as is well known, occurs in most hereditary troubles; furthermore, a less superficial examination may show this healthfulness to be only apparent.

9. Evil results, in the offspring of consanguineous marriages proves that something was wrong. That it was the consanguinity has not been proven. It may have been one of a hundred things and dependent on all of the antecedents for generations. Such results remaining absent after these marriages, proves, for that case at least, that consanguinity was harmless, for it was known to be present. Further, if consanguinity was the cause, the effect should follow where the cause is present.

10. Consanguineous marriages which bring together persons having a disease or morbid tendency in common are dangerous to the offspring. Not, however, one whit more so than the marriage of any other two persons not related yet having an equal amount of tendency to disease in common. Conditions present in both parties, good or bad, are simply augmented, and the result would have been the same were they not related.

11. Given a malformation or disease firmly established, we have a tendency to breed true. Given a defect or peculiarity in a family, race or sect, this will naturally be propagated by intermarriage, *e. g.* color blindness is remarkably hereditary among the Jews and Quakers. The Quakers are educated to abhor color. Those who admire color separate themselves from the sect, and thus intensify the tendency in the remainder. The defect has probably crept among the Jews and is kept up and intensified by intermarriage. The same means has also had its effect among the Quakers.

12. Certain inherited diseases, as scrofula, phthisis and rachitis, which are ascribed to consanguineous marriages probably in every instance, could be traced back to an ancestor.

13. Man is an animal, anatomically, physiologically and sexually. He is

subject to the same laws of propagation. In and in breeding in animals is carried on to an extent not only not permissible in the human species, on moral grounds, but also beyond the bounds of human possibility. Yet this is done by cunning breeders to improve the stock and put money into their pockets. The Jersey cattle have been bred for the last 150 years on a small island six by eleven miles. You would not raise them for beef or oxen, yet they command a high price for their milk and butter. This was probably the recommendation of the first cattle on the island, and this quality has improved from that time to this through in and in breeding.

14. It would be better for the offspring were consanguineous marriages under medical supervision. Certainly no better than for all marriages to be under like supervision.

15. The half a hundred abnormalities ascribed to consanguinity, including almost "all the ills that flesh is heir to;" among others, whooping cough approaches the ludicrous.

16. The factors which lead to consanguineous marriages are, portions of country geographically isolated or mountainous, rendering communication with the outside world difficult, religious or political sects of an exclusive nature, and aristocratic ideas. As examples, note the per cent. of consanguineous marriages in Scotland, 5.25 per cent. to those in England, 3 per cent., the preponderance in Martha's Vineyard, the commune of Batz, and among the Jews and Quakers.

17. The facts do not warrant us in supposing that there is a specific degenerative effect caused *ipso facto* by consanguinity.

18. Consanguineous marriages, no other objection being present, should not be opposed on physiological grounds.

On the Physiological and Therapeutical Properties of Thapsia Plaster.

DR. JAMES K. CROOK, in the *New York Medical Journal*, says substantially :

The following account, therefore, of its action and use is based entirely upon my own experience with it. The French plaster appears in the form of rolls or cylinders, and is of an orange-yellow color. The rolls are eight inches in width and about a yard in length, and, I am told, are sold to the trade for about fifty cents each. This is by no means expensive, as a roll will make from eighteen to twenty plasters of the average size for application—viz., four by four inches. It is very cleanly in its application, leaving but little residue on the surface when removed. The heat of the hand and body is sufficient to make it adhere. A vigorous friction of the surface with a spirituous solution before laying on the plaster will greatly augment its activity. In a period varying from five to ten hours after its application considerable itching of the part supervenes, and, if the edge of the plaster is everted, the skin beneath will be found of a uniformly scarlet hue. It should be removed as soon as the irritation becomes sufficient to render it annoying. In many cases I have found that it could be well borne for twenty-four hours ; but, as will be seen, it is not always safe to advise so long an application. Within from twenty-four to thirty-six hours it will be found that the area of efflorescence has extended considerably beyond the limits of the plaster, and that the eruption is assuming the form of a punctate or miliary rash, thickly scattered over the surface. In some cases the centres of the papules are occupied by minute vesicles, which may proceed to pustulation. The local redness and irritation continue for

about four days, and then begin to decline. If vesicles have been formed, they dry up and disappear speedily, though a purplish-red discoloration of the skin may persist for several weeks. The eruption is not unlike that produced by croton oil ; but I have never observed umbilication of the thapsia vesicles, nor in any case have cicatrices remained after their disappearance.

There are two principal objections to the use of the thapsia plaster : 1. The remarkable tendency of the eruption to spread, making it difficult to confine the sphere of its action within desired limits. 2. The occasional severe and painful character of its local action. These drawbacks may be partially overcome by prescribing a piece of the plaster much smaller than the surface desired to be acted upon, and, if it is a first application, by counseling the patient to remove it within six hours. Of course, if the plaster is being used on a patient for the second or third time, and he has been found to possess no idiosyncrasy to its action, it may be allowed to remain much longer. It is my belief that a tolerance is acquired for thapsia after repeated use. This has certainly been the case in my own person ; in three experimental applications of the plaster the irritation progressively diminished with each application. Patients have also informed me that it did not seem to "draw so well" after using it two or three times. In every case I have seen in which the plaster produced unpleasant effects, it had been allowed to remain *in situ* from eighteen to twenty-six hours. If the irritation produced by the plaster is unusually severe, an inunction of olive oil, or glycerin and rose water, or simply pulverized starch, will usually give relief. Patients should be cautioned to wash the hands after handling

the plaster, as the resin may be conveyed to other parts in this way. I have several times observed an erythema of the face produced by it, and in one case a mild conjunctivitis was developed.

My attention was first called to this plaster in the autumn of 1885, by a patient at the Clinic for Diseases of the Chest at the Postgraduate Medical School. The patient, a man aged thirty-four, had been treated at the school several months before at the clinic of Dr. William H. Porter. He informed me that he had suffered for several years with lumbago, and was rarely free from pain in the lumbar region and stiffness of his back. He had used various liniments and plasters with very little relief. On applying at the dispensary before, Dr. Porter had prescribed a plaster which had caused considerable irritation, and had brought out a profuse rash. It had given the patient immediate and marked relief, and he had had no return of the lumbago until a few days before his appearance at the Clinic for Diseases of the Chest, when he had taken cold from undue exposure. Since then he had had a mild attack of bronchitis, and had felt a gradual return of the lumbar pains. On his own recommendation, I prescribed a renewal of the plaster without any internal treatment. The patient returned to the clinic within three days with the information that the plaster had again been successful. According to his statement, the pain and stiffness had completely disappeared since the application of the plaster. This relief remained while the patient was under observation—a period of about two weeks.

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Mr. T. Pridgin Teale on Fireplace Construction.

The subject of fire grates may seem one somewhat alien to the surgical

mind, but if the studies of Mr. Teale lead to less poisoning of the atmosphere by the products of coal consumption, and to greater warmth of our houses in very inclement weather, he will have earned the gratitude of the public and of invalids; and if he reduces the cost of coals by one-fourth, he will deserve the thanks of all who in these hard times have difficulty in making ends meet. We shall best describe Mr. Teale's views as to the principles of domestic fireplace construction by quoting his rules, which he states with great brevity, and which are as follows:

1. As little iron as possible is to be used.
2. The back and sides of the fireplace should be of brick or firebrick.
3. The firebrick back should lean over the fire, and not lean away from it.
4. The bottom of the fire, or grating, should be deep from before backwards, probably not less than nine inches for a small room, or more than eleven inches for a large one.
5. The sides or coverings of the fireplace should incline to one another, as the sides of an equilateral triangle.
6. The lean-over at the back should be at an angle of 70° .
7. The shape of the grate should be based on a square described within an equilateral triangle, the size to vary in constant proportion to the side of the square.
8. The slits in the grating, or grid, should be narrow, perhaps a quarter of an inch for a sitting-room grate and good coal, and three-eighths of an inch for a kitchen grate and bad coal. When the slits are larger they allow cinders to fall through—in other words, waste.
9. The front bars should be vertical, that ashes may not lodge and look untidy, narrow (perhaps a quarter of an inch in thickness), so as not to obstruct heat, and close together (perhaps three-quarters of an inch apart), so as to prevent coal and cinders from

falling on the hearth. 10. There should be a rim an inch and a half in depth round the lower insertion of the vertical bars. 11. The chamber under the fire should be closed by a shield or economizer. 12. Whenever a fireplace is constructed on these principles, it must be remembered that a greater body of heat is accumulated about the hearth than in ordinary fireplaces, and corresponding care taken by an ash pan against heating wooden beams, etc. This ash pan should have a double bottom, the space between the two plates being filled with artificial asbestos, slagwood two inches in thickness. 13. A fireplace on this construction must not be put in a party wall where there is no projecting chimney breast, lest the heated back should endanger woodwork in a room at the other side. The benefits aimed at by Mr. Teale are: 1. Economy of fuel. 2. Reduction of soot. 3. Reduction of ash pit refuse. Mr. Teale astonished his audience by showing two small glass bottles containing the small ash residue of the coal burnt in his fireplaces, which consisted not of cinders, but very fine powder. As to the saving of coal, the general manager of the Leeds Infirmary estimates that in that institution it amounts to a sixth or 100 tons in the year. We have only space left to say that from some observation of Mr. Teale's own fireplaces, and some experience of them, we believe he has got hold of the right principles and in a large measure of the details. He was careful with the true candor of a scientific man to show how curiously his discoveries were anticipated last century by that remarkable man, Count Rumford, who did study medicine, but, unlike Syme and Teale, drifted into other pursuits and was lost to the medical art.—*Journal American Medical Association.*

Ethoxycaffeine.

The *Union Pharm.* for April, 1886, describes this new substitution-derivative of caffeine. It is isolated in the form of crystalline needles, which are insoluble in water, but slightly soluble in alcohol and in ether. It not only acts as a nervous sedative, but possesses marked narcotic properties. In doses of four grains, it relieves migraine and facial neuralgia, while eight grains have a hypnotic effect. When administered together with hydrochlorate of cocaine, it is less likely to irritate the stomach.—*New York Medical Journal.*

The Question of Cold as a Cause of Disease.

While prosecuting some investigations, in the years 1871-72, upon the temperature of the skin, I made an effort to study the influence which would be exerted upon the temperature of the skin by marked cooling off of one foot, and this with the view of clearing up the question of taking cold. For the purpose named, I put one foot into a basin of cold water. Immediately thereupon the temperature of the skin of the breast sank to a marked degree, so much so, indeed, that the needle of the thermoelectric pile I was using at the time ceased to record it. I was therefore not in position to determine the temperature of the skin of the breast even approximately.

By evening I began to sneeze, and got so severe a cold that I was not willing to repeat the experiment a second time, and so did not mention it in my previous report.

It appears to me, as a result of this experience, that, by rapidly lowering the temperature of one foot, the temperature of the entire skin immediately sinks; and, as this can occur only as the blood is driven out of the vessels

of the skin, it must follow that the blood is forced into the internal organs generally, or what is more unfavorable still, into some particular ones, leading to an inflammation, or, as in my case, to a severe cold.

Whether this lowering of the temperature of the entire skin, by the cooling off of one foot, invariably results, or occurs when a cold is coming on, not having repeated the experiment, I cannot decide.—*Deutsche Med. Zeit.—Practitioner and News.*

How to Keep a Cistern Clean.

The *American Agriculturist* says that complaints are frequent of the impure water of cisterns. This is inevitable under the careless management of these useful additions to the water supply, and is a fruitful source of what are called "malarial diseases." A roof gathers a large quantity of impure matter, dead insects, droppings of birds, dust, dead leaves, pollen from trees, etc., etc., all of which are washed into the cistern, unless some means are provided to prevent it. Even then the water should be filtered before it is used for culinary purposes. One way of preventing foul matter from entering the cistern, is to have the leader movable, and swing from a waste pipe to the cistern pipe. In dry weather the pipe is turned over the waste, and after the rain has fallen for a sufficient time to wash off the roofs and gutters it is turned into the cistern pipe. The cistern is provided with a soft brick wall laid in cement, through which the water filters, coming out by the pump perfectly pure, and free from unpleasant odors.—*Medical and Surgical Reporter.*

To Render Corks Ether-Tight.

The *National Druggist* says that C. Neuman has recently pointed out that

corks may be rendered ether-tight by chrome-gelatin. It is well known that ordinary corks very soon become porous to the vapors of ether, benzol and other volatile liquids, which gradually carry off every trace of moisture. By coating the corks with a solution prepared from 4 parts of gelatin, 52 parts of boiling water, and 1 part of ammonium bichromate (added to the filtered gelatin solution), and then exposing them for a few days to sunlight, absolutely tight stoppers will be obtained. The apparatus may be put together with unprepared, sound corks, and the exposed portions of the latter afterwards coated and exposed to sunlight. It is well known that gelatin, in the presence of bichromates, is also rendered insoluble in water by exposure to light.—*Ibid.*

DISEASES OF THE NERVOUS SYSTEM.

The Cortical Centre of Conjugate Deviation.

The seat of the lesion producing conjugate deviation is stated differently by various authors. Grasset places it in a convulsion at the bottom of the fissure of Sylvius. Landouzy localizes it not far from this in the inferior parietal lobe. Charcot and Pitres controvert the latter opinion without asserting any localization. Ferrier, basing his view on his own experiments and on a case related by Choupe, places it in the second frontal convolution.

A case reported (*Lyon Médicale*) by E. Blane confirms Ferrier's view. Briefly stated, the case was as follows: Marie G., aged fifty-one, was suddenly seized with loss of consciousness and power of movement. She was in complete apoplectic coma, with stertorous breathing and loud tracheal râles. There was marked and constant deviation of the eyes and face towards the left side. The features of the face were intact, and the

patient smoked a pipe at both sides of the mouth. The paralysis of the muscles on the right side was complete, and there was paralysis of the sphincters. The patient died on the night of the following day. At the autopsy the right hemisphere was found normal; on the left side a mass of blood the size and form of a hen's egg was found, raising up the meninges, on the external part of the frontal lobe, and completely destroying the foot of the second frontal convolution. The ganglia at the base were intact, and there was no appreciable lesion of the basal arteries.—*New York Medical Journal*.

The Use of the Catheter in Paraplegia.

Writing about ataxic paraplegia in the *Lancet*, DR. W. R. GOWERS very truly says that whenever there is retention of urine, or whenever the bladder is imperfectly emptied, the condition must be dealt with by appropriate local treatment. Remember, that kidney disease, secondary to cystitis or to mere distension of the bladder, is a common cause of death in all diseases of the spinal cord. In ataxic paraplegia this danger, if not absolutely great, is relatively greater than in many other diseases, because other sources of danger to life, such as bed sores or interference with respiration, are insignificant. There is no doubt that this danger may, to a large extent, be obviated. I have not in any case, or in any disease, seen an evil result from the early and frequent use of the catheter, and I have known more than one patient die whose life might have been saved had residual urine been regularly removed and the bladder repeatedly washed out. I know patients who are now alive who would, I am sure, have died had this treatment not been adopted. The simple reflex incontinence in which the bladder is

perfectly emptied from time to time calls for no interference.—*Medical and Surgical Reporter*.

The Function of the Recurrent Laryngeal Nerve.

In an editorial published recently in the *Journal American Medical Association*, the writer said substantially:

Such is the title of the admission thesis of DR. FRANK DONALDSON, Jr., of Baltimore, to the American Laryngeal Association, in May, 1886, which may be found in the *American Journal of the Medical Sciences*, for July, 1886. It supplies both phonatory and respiratory muscles—it supplies all the intrinsic muscles of the larynx except the crico-thyroid—but it is chiefly a motor nerve; the internal thyro-arytenoids, the lateral crico-arytenoids, and the transverse arytenoid are adductor (phonatory) muscles of the larynx, and the posterior crico-arytenoids are the abductor (respiratory muscles) of the larynx; and as has just been said, all these muscles receive their nerve supply from the recurrent laryngeal nerve. And the main question is, How is it that impulses travelling along this nerve alternately close and open the glottis? And how can we explain the fact that at one moment the nerve stimulus acts upon the adductors and at the next moment upon the abductors of the larynx.

Dr. Donaldson records nine experiments made upon dogs, the experiments being undertaken to test the following points: 1. Is it true that the constrictors cease to act during profound narcosis, or when consciousness is suspended from any cause? 2. Do we always get abduction of the arytenoids (dilatation of the glottis) on stimulation of the recurrent nerves, when consciousness is suspended? His interest in this subject had been awakened by the conclusions

of Dr. F. H. Hooper, of Boston, "that stimulation of the recurrent laryngeal nerve always produced abduction of the arytenoid on that side, provided the animal was deeply under ether; that on removing the anæsthetic, the dilatation produced by stimulation became less and less as the animal regained consciousness, until finally contraction of the glottis followed; and that the abduction differed in different dogs. In other words, he concludes that the tendency of the glottis is to remain widely open, and that any given stimulus from the recurrent nerve would act upon the abductor muscles alone unless volition came into play, when the stimulus would produce the opposite effect and produce adduction." In the first five of Dr. Donaldson's experiments it was found that under no conditions was abduction of either or both cords obtained, except where the branch of the recurrent going to the posterior arytenoid itself was excited. In all cases adduction of the arytenoid was obtained, however deeply the animal was under the anæsthetic. In two cases it was found that when the animal was made thoroughly apnœic, and when for some seconds there was neither glottic nor respiratory movement, adduction was the result of stimulation; and in two cases, *after the animal was dead*, though of course before the death of the nerves or muscles of the larynx, stimulation caused closure of the glottis. "Under all these conditions of unconsciousness and narcotism, then, was *adduction* produced. This result followed, in these experiments, stimulation of the cut and uncut nerve; and followed chemical and mechanical, as well as electrical, stimulation." And in still another experiment, in which the branches of the recurrent to the individual muscles were dissected out and stimulated equally, none showed a ten-

dency to a more rapid degeneration than another.

From these results it seems that the following conclusions are perfectly legitimate: 1. The constrictor muscles of the larynx do not cease to act during profound narcosis or during suspension of consciousness from any cause; their action is independent of volition, in the sense that they lose their power during suspension of volition. 2. Abduction of the arytenoids does not always follow suspension of consciousness. Under what considerations, then, asks Dr. Donaldson, do we get abduction of the cords upon stimulation of the recurrent nerve? There must be some conditions, since abduction was obtained by Dr. Hooper, who thinks suspension of volition one condition under which stimulation of the recurrent caused abduction. Dr. Donaldson thinks that he has discovered the conditions under which the abductors act. He found that: 1. The abduction obtained by Hooper was in no way reflex. 2. Abduction is in no way dependent upon the unconsciousness of the animal. 3. It is with weak stimuli only that abduction of the cords takes place, which movement of abduction gradually passes into one of adduction as the strength of the stimulus is increased. 4. This result invariably followed, whether the animal was slightly, deeply, or thoroughly narcotized; whether the animal was eupnœic or apnœic, when the dog had his medulla destroyed, and after local death had taken place. 5. The rate of stimulation did not affect the general result. 6. After strong and constant stimulation the abductor muscles became worn out and ceased to respond to stimuli. 7. In apnœa the cords came nearer the middle line, the abductors receiving no stimulus in this condition from the respiratory centre. "Here, then, I think, we have

a suggestion as to the innervation of the muscles of the larynx." Dr. Donaldson agrees with Dr. Hooper that the assertion that the abductor fibres of the recurrent are prone to disease is unwarranted. "The clinical fact may be explained, however, by the theory of the greater irritability of the abductor muscle or nerve fibres. For in cases of unilateral lesion of the cords from an aneurism or tumor, the constant pressure exerted by either acts as a mechanical stimulus to it, and the more irritable abductors are, therefore, the first to show the result of this constant stimulation, in their loss of function."

Dr. Donaldson would explain the innervation of the larynx somewhat as follows: Though the diaphragm and all the other muscles employed in respiration are voluntary muscles, breathing is really an involuntary act; and though we may modify respiration by the will, respiration habitually takes place without the intervention of the will. As the larynx is an essential part of the respiratory apparatus it must receive impulses from the respiratory centre in the medulla. It is necessary that the glottis be kept open, and we find that the cords are pulled slightly away from their apparently normal position between extreme abduction and extreme adduction at each inspiration, even in normal breathing. "The fact that in deep narcosis the cords are pulled widely apart, would seem to show that stronger stimuli than usual are proceeding from the respiratory centre to the abductor muscles; for in all deep narcosis the tendency is towards dyspnoea, and always in this condition normal respiratory muscles are called into greater play. The constrictors of the larynx are apparently always in a state of partial tonic contraction, and ready for use at any moment. I found that in every case

where the dog was thoroughly apnoeic that the cords came much closer together than in normal breathing; and this, it seems to me, is what we might expect, for in apnoea the respiratory centre is at rest; and the respiratory function of the larynx being for the moment in abeyance, the protective or constrictor function of that organ asserts itself." He thinks, then, that both the respiratory and constrictor (or protective) functions of the glottis are governed by those laws which govern the rest of the respiratory apparatus. "There seems to be a similarity between the nerve fibres of the recurrent and those of the pneumogastric, and we are inclined to think that the great irritability mentioned above is in the nerve fibres supplying the abductors; the two sets of fibres of the recurrent supply opposite sets of muscles, and may be likened to the two sets of fibres composing the pneumogastric—the one answering to less, the other to stronger stimuli." Finally, he thinks that the constrictors of the larynx, which need a stronger stimulus to set them in action, may find that stronger stimulus in the numerous reflexes which arise on the introduction of a foreign body into the larynx.

Reflex Neuroses.

Reflex neuroses, which may owe their origin to nasal disease, are classified by SCHECH as follows:

1. *Neuroses affecting the nose itself.*—Nervous coryza, associated with paroxysms of sneezing.

2. *Neuroses affecting adjacent parts.*—*a* Ptyalism. (Rare.) *b* Neuralgia, especially supra-orbital, also megrim and occipital headache. *c* Vaso-motor disturbance, causing swelling of face and conjunctivæ.

3. *Neuroses affecting more remote parts.*—*a* Possible vertigo and epilepsy. *b* Cough. *c* Vaso-dilator impressions to the mucous membrane of the bronchi, observed by Sommerbrodt. *d* Asthma.—*Die Krankheiten der Mundhöhle, des Rachens und der Nase.*—*New York Medical Monthly.*

A Liniment for Neuralgia.

GUÉNEAU DE MUSSY (*Ibid.*) recommends this lotion: Essence of mint, ʒ v.; tincture of aconite, ʒ ijss; chloroform, ʒ i¼. Shake thoroughly, and apply to the painful spot on a piece of flannel.—*New York Medical Journal.*

Sciatica.

DR. J. R. WEBB gives the following prescriptions from various sources, in the *Medical World*:

Dr. Eldorin recommends cupping sacrum, give one drop aloin tig. for three days, quinine, thirty grains, iod. potass., half drachm, vin. colchi, one ounce, aquæ, six ounces. Sig.: one teaspoonful three times per day, then give mixture of tinct. nux. vom. ten drops three times a day.

Dr. McClintock recommends acupuncture, inject one-half drachm cold water. Repeat daily—into sciatic nerve, if possible.

Dr. Ebert recommends calomel, iodine over seat of pain, dover powder to produce quiet, quinine in two-grain doses every two hours.

Dr. Sullivan recommends cold water, four ounces, two grains permanganate potass., hypodermically. Repeat two or three times a day.

Dr. R. L. Smith recommends ten drops ether, one-fourth grain morphine, hypodermically over seat of pain.

Dr. Hillman recommends paste of quinine and castor oil, friction over

nerve; lemon juice, if tongue is red and pointed.

Dr. Anderson recommends twenty-drop doses balsam copaiba every two or three hours.

Dr. Cone recommends minute doses tartar emetic, and applying tobacco leaves over seat of pain.

Dr. Goslin recommends hypodermic injections into the tissues, one-thirtieth grain sulph. atropia once in twenty-four hours.

DIGESTIVE TRACT.

Constipation.

After the reading of a paper on this subject by Dr. ARTHUR V. MEIGS, at the meeting of the College of Physicians, May 5, 1886, Prof. DA COSTA made the following interesting remarks:

A point of particular interest is the occurrence of fever in these cases. I saw the fourth case with Dr. Meigs, and the fact that it simulated typhoid fever so closely is a matter of interest. I have seen a similar case in which there were almost identical symptoms, with an almost identical termination. We see from this case and the others referred to, that constipation may cause fever which is continued and may present the symptoms of a low type.

There is another point connected with the occurrence of constipation in fever to which he did not have occasion to allude; that is to say, sometimes after low fevers in which the state of constipation to which he has called attention, occurs, relapse of the fever will be developed by the constipation. We grope around in darkness, wondering what may be the cause, thinking that it is a true typhoid fever relapse, when by giving small doses of oil or of laxatives, both the fever will disappear and the bowels be freely moved. I

have seen this state of things keep up for five or six days ; and I think that a good many cases of relapse in typhoid fever have their origin in the very condition to which Dr. Meigs has alluded and to which I now call the attention of the College.

I will go further ; I have reason to think that in some of these cases there may be well-developed typhoid fever symptoms with rash, due to constipation, which will disappear when the bowels are moved. I have seen the same thing after remittent fever. It seems to me that the occurrence of constipation after fever, typhoid or malarial, may lead to the re-development of the febrile state, which may be considered a relapse, when in reality it is only the same kind of irritation of the bowels which, in the case cited by Dr. Meigs, produced a fever of low type, when there was not the slightest reason for suspecting typhoid fever.—*Coll. and Clin. Record.*

The Treatment of Chronic Gastritis.

The treatment was thus laid down by DR. FRANCIS DELAFIELD, before the Association of American Physicians, in Washington :

1. *Climate and Mode of Life.*—These I believe to offer the most certain means of curing chronic gastritis. It is unnecessary to lay down rules as to the sort of climate, that can be regulated by the tastes of the patient. The two points of importance are : First, the locality selected must be one where the patient can lead an out-door life. Second, the patient must live in this climate either for several years, or for a considerable part of each year.

Excellent as this method of treatment is, it is evident that it can be carried out only by a limited number of persons.

2. *The Diet.*—The regulation of the diet is a matter which demands consideration in every case of chronic gastritis. In trying to ascertain the best way of feeding these patients, I have found only one satisfactory method, and that is to feed them experimentally with different articles of food, and then after an interval of several hours wash out the stomach, and see how thoroughly these articles of food have been digested and removed from the stomach. After pursuing this course for a number of years, I have arrived at the following conclusions :

It is necessary that the patient should be well fed ; a starvation diet never answers.

The stomach does not require any rest from the performance of stomach digestion ; on the contrary, it is all the better for being called on to perform its natural functions.

The patients' own ideas as to what food agrees with them are usually erroneous. They are apt either to starve themselves or to select the least nutritious articles of food.

The use of artificially digested foods, or of substances such as pepsine, to assist stomach digestion, is unnecessary.

The starches, oatmeal, corn meal, bread, the cereals, the health foods, are as a rule bad. Portions of them remain undigested in the stomach for many hours.

Milk in adults is an uncertain article. It answers very well for some persons, not at all for others.

Meat is usually readily and well digested, but there are occasional exceptions to this rule.

Vegetables and fruits can be eaten, but the particular varieties must be selected experimentally for each patient.

I do not believe that any case of chronic gastritis is to be cured by diet

alone. Even the exclusive milk diet, while it often relieves symptoms, is as a rule only temporary in its effect, so that the patient simply loses a certain amount of time by employing this instead of more efficacious plans of treatment.

3. *The Administration of Drugs.*—The advantageous administration of drugs belongs to the earlier stages of chronic gastritis. At that time they often palliate symptoms and sometimes even seem to cure the inflammation. In the latter stage of the disease their use becomes more and more unavailing. The reliable drugs for this purpose are not numerous; the preparations of soda, potash and bismuth, the mineral acids, glycerine, sometimes carbolic acid, sometimes iodoform, sometimes the bitter infusions. If none of these answer, it is hardly worth while to look any further. If we can combine with the administration of drugs, the regulation of the diet and of the mode of life of the patient, then of course our chances of success are much greater.

4. *The Use of Local Applications made Directly to the Mucous Membrane of the Stomach.* This I regard as the most efficacious plan of treatment for those patients who are not able to leave home and seek a proper climate, but ask to be relieved without interruption to their ordinary pursuits. The local applications are readily made by the introduction of a soft rubber tube through the œsophagus into the stomach.

Liquid applications are the best. They should be made in such quantities as to come thoroughly in contact with the entire surface of the mucous membrane, although the pyloric end of the stomach is the region where the inflammation is principally situated. They should be made at a time long enough after eating for the stomach to be as nearly empty as possible.

For many cases warm water alone in considerable quantities is the only local application needed. In some, however, there is an advantage in medicating the water, and for this purpose I employ a variety of substances.

The alkalies, the mineral acids, bismuth, carbolic acid, the salicylates, iodoform, belladonna, ipecac, gelseminum, may each one be employed according to the particular case.

For the first week it is often necessary to put the patient on a milk diet, and this can be done even with those patients who under ordinary circumstances cannot take milk at all.

Then, after a time, to the milk we add one solid meal composed of meat alone. Next, this single meal is increased by the gradual addition of fruits, vegetables and bread. Then comes the giving of two solid meals a day, instead of one, then three solid meals, and now we get rid of the milk in part or altogether.

For the first week of this treatment it is wise not to expect any special improvement. Indeed, even a longer time than this may try the perseverance of the physician and the confidence of the patient.

Sooner or later, however, the expected improvement begins; the nausea and vomiting cease; the constipation or diarrhœa is improved; the flatulence is no longer troublesome; the headache becomes less frequent; and of more real value than these, the improvement in the general condition of the patient becomes evident. The color, the weight, the appetite, the sleep, the spirits of the patient, all show a change for the better. Of all the symptoms, the pain is the one which is apt to persist the longest.

For two or three months, the patient has to be kept under observation, and the applications to the stomach made by the physician. After this, the patient

is dismissed, but continues the treatment himself, first every other day, then twice a week, then once a week for several months. The regular relapses of the disease are managed in the same way, but are much more quickly relieved.—*Medical and Surgical Reporter.*

Hepatic Colic.

PROF. BARTHOLOW had at his clinic a patient with *hepatic colic*, who was not jaundiced. The stone may be of such a size that suffering is produced by its passage through the cystic duct, while it passes without pain through the common duct, and without obstruction; therefore jaundice is not produced. To keep the bile alkaline and so prevent the further formation of gall stones, give persistently sodium phosphate or cholate.—*Coll. and Clin. Record.*

Drees's Solution of Albuminate of Iron in the Treatment of Circular Ulcer of the Stomach.

This solution, termed *liquor ferri albuminati* (Drees), is made by a pharmacist of that name, at Bentheim, in Hannover. It contains five per cent. of sesquioxide of iron, is said to be absolutely free from acid, from any tendency to induce coagulation or undergo precipitation in the stomach, and from any injurious action on the teeth. To adults it is given in doses of half a teaspoonful or a teaspoonful, three times a day, and the first mentioned is given to children over five years old. Dr. te Gempt (*Berlin. Klin. Woch.*, 1886, No. 15; *Ctrlbl. f. d. Ges. Therap.*, June, 1886) has used it in a number of cases of circular ulcer of the stomach, and with the most satisfactory results. With its use he conjoins that of Carlsbad salts and the dietetic measures recommended by von Ziemssen, and avoids recourse to narcotics except occasionally. The

vomiting of blood is speedily checked by the iron solution, its long continued use produces no inconvenience, and it promotes the appetite.—*New York Medical Journal.*

DISEASES OF THE URINARY ORGANS.

Treatment of Diabetes.

At the fifth German Congress for Internal Medicine (*Medical Record*), PROF STOKVIS, of Amsterdam, discussed this subject. The speaker followed Bouchardat and Cantani, prohibiting the carbo-hydrates absolutely, and he was pleased with the results so far obtained. He insists upon muscular exercise, by which alone the percentage of sugar can be greatly diminished, regulates all the other functions of the system, and counsels also moderation in eating and all other matters. Such general treatment is particularly adapted to fat and gouty patients, when they show symptoms of diabetes.—*Maryland Medical Journal.*

Salicylic Acid in the Treatment of Glycosuria.

The *British Medical Journal* contains an article by DR. HOLDEN, in which he reports six cases of "rheumatic" glycosuria in which the administration of fifteen-grain doses of salicylic acid, thrice daily, was followed by a rapid disappearance of sugar from the urine, no change being made in the patient's diet. When tried in four other cases, in which rheumatic symptoms were absent, the drug had no effect. He recommends the following combination: ℞. Salicylic acid, ℥ij; bicarbonate of sodium, ℥i; carbonate of ammonium, ℥i; water, ℥i. Mix thoroughly, and after effervescence has ceased, add water up to twelve ounces. Dose, an ounce to an ounce and a half three times daily.—*New York Medical Journal.*

COMPARATIVE TABLE SHOWING CHANGES IN THE URINE, WITH TWELVE DIFFERENT LESIONS.
 DR. WM. H. PORTER, in the *Quarterly Bulletin* of the Post Graduate Medical School and Hospital, gives the following instructive table :

BRIGHT'S DISEASES.	CHEMICAL EXAMINATION.				MICROSCOPIC EXAMINATION.	
	COLOR.	QUANTITY.	SPECIFIC GRAVITY.	AMT. OF ALBUMEN.	THIS REFERS TO BLOOD AND CASTS ONLY.	
VARIETY OF NEPHRITIC LESION.						
1. Acute Parenchymatous Metamorphosis of the Kidney.	Abnormally High.	Very Small.	High. from 1.017 to 1.030.	Abundant.	Early: Hyaline, epithelial, nucleated, and finely granular; small in diameter and abundant. Later: Some coarsely granular and fatty, with large diameter.	
2. Chronic Parenchymatous Metamorphosis of the Kidney.	Abnormally High.	Very Small.	High. from 1.015 to 1.030	Abundant.	Large hyaline, coarsely granular, and fatty casts, and large amount of cast debris.	
3. Parenchymatous Metamorphosis of the Kidney with Pregnancy.	Variable.	Variable, but usually Small.	Variable.	Variable Trace to Abundance.	All varieties of casts may be met with, even blood casts from the renal obstruction. Early it will resemble No. 1, later No. 2.	
4. Parenchymatous Metamorphosis of the Kidney with Diabetic Mellitus.	Lemon Yellow, but later Pale.	First Large, then Small or Suppressed.	First High, 1.025 to 1.060; late, Low; or at last Lower.	At first Glucose; later, trace of Albumen.	None until late in the diabetics, when hyaline casts appear, occasionally a few granular.	
5. Parenchymatous Infiltration Metamorphosis of the Kidney with Wasting Diseases.	Normal or Watery.	Normal.	Normal.	None.	Examination negative.	
6. Acute Diffuse Nephritis.	Abnormally High, Smoky or Bloody.	Very Small or Suppressed.	Low. 1.012 to 1.020.	Abundant, also Blood.	Blood and blood casts, a diagnostic feature. Early: Small, hyaline, epithelial, nucleated, finely and coarsely granular, in abundance. Later, fatty and larger casts.	
7. Chronic Diffuse Nephritis—Large Kidney.	Peculiar Pale.	Constantly Varying; sometimes Small, then Large.	Low, 1.017 to 1.040.	Constantly Varying from None to Abundance.	The quantity and variety of casts is constantly varying, at times abundant, and at others absent. The constant fluctuation is diagnostic. All varieties may be found during its course.	
8. Chronic Diffuse Nephritis—Small Kidney, without Vascular Thickening.	Peculiar Pale.	Always below Normal; small.	High, 1.015 to 1.025.	Usually Abundant and Continuous.	Hyaline, epithelial, nucleated, finely and coarsely granular, and fatty casts, of all sizes, and in abundance continually. Blood and blood casts occasionally found.	
9. Chronic Diffuse Nephritis—Small Kidney, Hyaline Thickening of the Afferent Vessels.	Peculiar Pale.	Usually Large, 80 to 100 oz. a day.	Low, 1.010 or Lower.	Abundant and Continuous.	As a rule, no casts are found; but occasionally a hyaline or fatty cast may be detected.	
10. Interstitial Nephritis or Cirrhotic Kidney; Cirrhotic Sclerotic, or Red Atrophy; Thickening of Afferent Vessels.	Nearly like Water.	Very Large.	Low, 1.010 to 1.005.	Usually Absent, occasionally a Trace.	As a rule, no casts are found; but occasionally a hyaline cast is discovered.	
11. Gouty Kidney.	Nearly like Water.	Very Large.	Low, 1.010 to 1.005.	Absent or a Trace.		
12. Waxy, Amyloid, or Albuminoid Transformation of the Kidney.	Nearly like Water.	Exceedingly Large.	Low, 1.005 to 1.000 or Lower.	Usually Absent, occasionally a Trace.		

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Rest in Treatment of Scrofulous Neck.

We give herewith a description and cuts of an article by Dr. FREDERICK TREVES, which appeared recently in the *Lancet*.

Scrofulous gland swellings in the neck, together with scrofulous abscesses and the sinuses that result therefrom are, as a rule, very chronic in their course, and very obstinate in their relation to treatment. There is little in the anatomy of the neck to account for this. The part is vascular; it is easy of access; it is not dependent. The arrangement of



the cervical fascia is certainly obnoxious to the easy progress of an inflammation, but in many of the most indolent cases this fascia is in no direct manner concerned. There is this, however, to be noted: that the neck is a part of the body that is in almost constant movement, and if rest is of real import in the treatment of inflamed tissues, then there can be few parts of the body where it is more clearly demanded than it is in this place. For the last three years I have made use of a splint, the main features of which can be gathered from

the annexed cut. It is made of felt, and takes its fixed point from the shoulders and back. The centre of the splint is strengthened by a slender strip of metal. This strip is carried up along the back of the neck, and at the occiput meets a cross piece which is moulded to the outline of the skull. The cross piece is kept in place by a narrow ribbon that encircles the forehead. In young girls and women the cervical part of the splint can be entirely concealed by the hair. The felt is freely perforated, and the whole appliance is exceedingly light. I have made extensive use of this simple apparatus. It keeps the neck still, but not rigid, and after the first few days of



its use it ceases to be irksome. Patients have worn it without interruption for three, six and nine months. It is perhaps needless to say that it is not worn at night.

Of its value I can speak in strong terms, and to this employment of rest I would ascribe results in some cases that I believe no other method of treatment would have secured. I have used it not only in the treatment of scrofulous affections, but also as a splint after operations upon the neck, in cases of burn and of accidental wound, in

carbuncle, and also in cases of lupus that have been treated by scraping.

[We believe this to be a good method of treating this common malady.]

Treatment of Compound Fractures.

VON MAAS, of Munich, employs the following treatment in compound fractures, performing all the bandaging under the spray: 1. The skin surrounding the wound is, to a considerable distance, disinfected. 2. The wound is repeatedly doused with a solution of acetate of aluminum, carbolic acid, two to three parts in the hundred, or corrosive sublimate, one part to the thousand, by which means any detached particles of bone or severed pieces of tissue are washed away. Pieces of bone projecting from the wound are resected if they can not be replaced. 3. The wound is covered with protective silk, and when the bones have been adjusted under this the whole is covered with corrosive sublimate gauze. Usually several folds of compress are laid over the wound, and the limb enveloped with the gauze, which is rolled up in the form of a bandage of eight folds, and at distances of six or seven inches is bound down by means of a roller compress.

This gauze binding is inclosed in a layer of sublimate wadding, and immediately over it is placed a wrapper of cambric or gauze moistened in a carbolic acid solution. Fractures which show little tendency to dislocation, and those in which the skin is badly crushed, are placed on suitable, well-upholstered pillows, to which they are made fast with gauze binding. In fractures with a tendency to displacement, a gypsum bandage is placed over the antiseptic dressing. Fractures of the thigh are treated by Volkman's extension binding. The gauze prepared with corrosive sublimate, common salt and glycerine, is,

by virtue of the two last-named constituents, sufficiently hygroscopic to absorb and neutralize the secretions of the wound without drainage. The temporary dressing is thereby made permanent. This dressing secures results similar to that of Lister, but it is simpler, more easy of application and does not need to be so frequently changed.—*Wien. Med. Wochenschrift.*—*American Practitioner and News.*

On the Treatment of Fracture of the Lower Extremity of the Radius, with Especial Reference to the Best Disposition to be Made of the Fingers.

DR. WM. BARTON HOPKINS, concludes an article in the *Polyclinic*, as follows:

Dressing.—Although I am in the habit of employing a Bond splint, as it permits of flexion of the fingers, and as its leather sides retain the necessary padding conveniently and effectually, I am aware that unless properly used, it is capable of doing much harm. Applied with a tight bandage, the forearm resting upon scanty padding, and the hand lifted high up on the wooden block, it will give all the conditions to retain the characteristic deformity of the fracture, or to reproduce it, if it has been overcome. On the other hand, a Bond splint can be made to fulfill the necessary requirements very well, if it is carefully padded and judiciously applied. I will state somewhat in detail the procedure which I adopt. Selecting a Bond splint of the proper size, a mass of oakum of sufficient bulk to conform accurately, when compressed, to the natural curve of the forearm, is placed upon it, and is covered with patent lint. This, if the injured extremity corresponds at all to my own, I fit to the latter, so that I feel my whole forearm comfortably and firmly supported by the padding and the hand brought lightly

in contact with the wooden block, by slight flexion of the wrist. The fracture is now reduced and the splint applied. The whole forearm is supported by the padding, which acts as a compress for the upper fragment, the only one that is usually needed. The bandage serves as the compress for the lower fragment by pressing the carpus and wrist down upon the block. In order to confine the fingers, a few recurrent turns of the bandage made over them precede those which retain the splint. In twenty-four hours the bandage is removed and reapplied, without disturbing the splint; after this the dressing is changed once in four or five days. The splint is dispensed with in from three and a half to four and a half weeks, according to the age of the patient and the tendency of the fragments to become displaced.

Passive Motion.—Passive motion is open to none of the objections which I have urged against active movement. It being conducted by the surgeon, when the dressings are off, and the fragments are made secure by his fingers, may be commenced almost immediately. Each finger in turn having been *once* fully flexed and fully extended, and the wrist flexed and extended, pronated and supinated, all without pain to the patient, if done gently and at each dressing, the limb is bathed with whiskey and the splint reapplied. The fingers are kept at rest by the bandage during the acute inflammatory stage, which usually lasts ten days or two weeks. After this, unless the patient shows an inclination to use them too much, they are allowed to remain exposed.

If my observations be correct, the plan or treatment which I have detailed possesses certain advantages over others which I have seen employed, and which I have used myself where the fingers

are not confined, which may be summarized as follows:

1. That there is less swelling of the fingers and less pain at the wrist.
2. That impairment of motion can in a greater number of cases be prevented.
3. That the slight risk of recurring deformity is further diminished.

In exceptional cases, in aged and rheumatic subjects, where the *joints* seem to participate at once in the general inflammation set up by the fracture, and resist all efforts to render them movable, I have not found that fixing the fingers is of any material benefit.

A Rapid Method in the Treatment of Fractures.

DR. VON DONHOFF, of Louisville, read a paper on "A Rapid Method in the Treatment of Fractures." The doctor premised the reading by the statement that, by the "rapid method" it is not intended to anticipate or abridge natural processes of repair, but to take practical advantage of those phenomena, and to demonstrate by clinical data, embracing a record of one hundred and two cases collected by professional friends and himself, that surgical apparatus (fixed dressings) might, nay, *should*, be dispensed with in fractures of joints on the fourteenth day, and in fractures in the continuity of long bones at least on the twentieth day after the injury.

The advantages claimed for the method are, (1) Perfect safety, under ordinary circumstances, in the treatment of simple and the lesser degrees of compound fractures; (2) the uniform absence of ankylosis of fractured joints or those contiguous to fractures of shafts; (3) no appearance of muscular atrophy or atony as sequelæ of fractures; (4) the practicability of *finally* dismissing patients after the remarkably

short period of from twenty-eight to thirty days of treatment with perfect safety to themselves. Dr. v. D.'s experience with this method in the treatment of fractures extends over a period of ten years, and has been unexceptionally gratifying. The practice is based upon the now well understood stages of the reparative processes in bone, and notably upon one fracture, namely: the completion of the protective (ensheathing) callous by the fourteenth day, at which time the natural splint is sufficient to guard against displacements, and hence to render artificial safeguards unnecessary, except during hours of unconsciousness—sleep—when the precautions indicated in Dr. v. D.'s subjoined rules of practice are taken to avoid injury.

1. Strips of sole leather or gutta-percha (tin will answer also) of suitable breadth and length being at hand, these are immersed in hot water and adjusted by means of a roller to the site of the fracture previously reduced and properly swathed in cotton wool; the latter should be secured in position by a few turns about it with sewing thread. [Anesthesia is a *sine qua non* to the proper manifestation and reduction of fractures.]

2. If no suggestive incident intervene, such as shortening, angularity, or great uneasiness and pain, the *first* dressing, in cases of fracture of the shaft of long bones, should not be removed until the tenth day, but should never be permitted to remain longer than the sixth day in similar injuries of joints.

3. On the fourteenth to the twentieth day, barring cases in which untoward diathetic or local influences have been demonstrated to exist, it will be found that the fragments are fixed, and that the dressing may be dispensed with altogether, except in fracture involving

joints; in these the splints, properly stitched together, should be readjusted on going to bed, in order that the unconscious and possibly violent movements of the patient may not prove disastrous.

4. Gentle, passive motion of fractured joints should be begun at least as early as the sixth day after the first dressing, and practised every second day thereafter until the fourteenth, increasing the degree of motion as may be suggested by the judgment of the surgeon. After this date, the dressing being left off, the matter of moving the limb may be relegated to the inclination of the patient, unless he be too timid, when he may safely be encouraged to handle light objects and practice normal motions of the limb.

5. The average duration of treatment need not exceed twenty-eight days, under ordinary circumstances.

The above rules of practice have proven equally reliable in the treatment of compound fractures produced in osteotomies done for the correction of deformities near the ends or in the continuity of long bones.

6. The posture of the limb should be that best adapted to muscular equipoise—straight, or in an obtuse angle.

[Congratulations are due Dr. v. D., for his most valuable contribution to the subject of treatment of fractures. We heartily endorse his views, except when he insists upon passive motion on the sixth day after fracture. We have practised his plan upon a rational basis, for several years, and with the most pleasing results, but have never been anxious to trouble our patients with passive motion. It has been found sufficient to await the spontaneous motions of the patient. Nocturnal fixation seems, however, to be a desirable precaution.]

A Case of Shortening by Operation the Bones of the Limbs in the Treatment of Injuries Complicated with Extensive Destruction of the Soft Parts.

DR. MARTEL, of St. Malo, first conceived the idea, in 1882, that when extensive destruction of soft parts had taken place it would be better to reduce the bones to a corresponding length by resection than to rest satisfied merely with amputation. He was then attending a suitable case, but he was restrained from putting his idea into practice at that time, partly by the advice of a surgical friend, and partly by the untoward course of the case in question.

However, on June 2, 1885, a patient, B., æt. 32, was taken into hospital with a very severe compound fracture of the left leg. Anteriorly was a large wound whose extent was due to actual destruction rather than to retraction of the skin and subjacent tissues. The tibial fracture, oblique and not comminuted, was exposed in this wound, the ends overriding. The fibula was fractured in the middle.

The wound and its recesses were carefully washed with "strong" carbolic lotion, and afterwards, the limb was enveloped in a thick "*appareil ouaté*." The immobilization removed all pain. Reaction was moderate (on the third day, evening, temp. 39.8). Quinine for the fever; morphia and chloral for insomnia. Appetite returning. The remainder of the history is that of a suppurating, but not inflamed wound, with sloughs separating and cicatrization progressing up to February 25 (the fifty-fifth day of the treatment). On this day Dr. Martel resected about 75 millimetres of the tibial shaft, sawing obliquely both above and below. Much of the bone removed was necrosed. A corresponding portion of the fibula was removed through a sepa-

rate opening. The two tibial fragments were sutured with a single stitch of thick silver wire, which does not appear to have held them very firmly together. The carbolic spray was used during the operation, and both during the operation and afterwards, the wound was carefully washed with "strong" carbolic lotion. Drainage with a large tube behind the fragment. Then carbolized charpie dressing and gutta-percha splints. On March 25 it is noted that "the osseous segments are united, but the uniting tissue is flexible." On or about this date the silver suture was removed from the bone. On April 25 "consolidation appeared complete." June 8 a fenestrated, silicated bandage was applied. August 3 "only two small lenticular" ulcerations remained, which soon afterwards healed completely.

The amount of shortening was 7 to 8 centimetres. There was a good deal of stiffness of the ankle joint. But otherwise everything was satisfactory; the limb was well shaped, and crutches and sticks were shortly discarded for a high boot.

The author is only cognizant of a single instance in which a surgeon was guided by an idea analogous to his own. In the *Centralblatt für Chirurgie*, Karl Loebker published a case in which, in order to facilitate apposition and suture of the ends of nerves and tendons, cicatrised and contracted after a transverse wound of the forearm, he resected portions of the radius and ulna. This operation was only moderately successful as regarded the ultimate results.

With regard to the question of what is the best time at which to undertake an operation like the author's, he points out that, until sloughs have begun to separate, it is not possible to be certain of the limits of destruction. After stating other considerations, he gives

his opinion that the most favorable moment for resection is to be found between the tenth and twentieth day after the accident.—*Gaz. Méd. de Paris.—Medical and Surgical Reporter.*

[This plan is undoubtedly a good one and deserving of practical application. A valuable adjuvant would be a saw having adjustable parallel blades for the purpose of simultaneously cutting the upper and lower parts of the portion of bone to be excised, thus insuring as perfect a fit as possible of the bone ends to be united.] A. H. P. L.

A New and Original Method of Surgical Dressing.

DR. CHARLES W. STROBELL, of Middletown Springs, Vt., writes to the *Medical Record* that he was led by the paper of Dr. Hamilton, and the criticisms upon it in recent numbers of the *Record*, to consider what improvements might be made upon the modes of anti-septic dressing now in use. The main objection to the ordinary dressing of cotton-wool, gauze, etc., is that it conceals the wound from view, so that inflammation, secondary hemorrhage, and other accidents, cannot be detected at their onset, and may become only too well established before the surgeon becomes aware of their existence. In order to obviate this, Dr. Strobell proposes to cover the wound with a thin glass globe, so constructed as to fit closely to the part, provided with two openings for drainage tubes and a large opening on the top, to permit of access to the wound, in case of need, without removing the globe. These openings are provided with glass stoppers, so that they can be hermetically closed. The base of the globe is provided with a flange, and its sides, up to within two inches of the drainage tube openings, are roughened so as to facilitate the

adhesion of the isinglass plaster used in sealing it. When applied to stumps after amputation, a thin rubber band, three inches wide, is applied over the flange, so that it rests with one-half its width on the integument of the limb, to secure additional safety. The flange is covered on its external surface with isinglass plaster, adhesive on both sides, so that the band of rubber shall adhere firmly to the globe. In the case of an amputation at the knee joint, after the sutures and drainage tubes are in place, the wound is capped with a disinfected globe of the proper size to fit snugly over the limb, the drainage tubes in the globe being on a line with the anterior surface of the wound. The rubber band is now turned down over the limb, and strips of adhesive silk, one inch in width and twelve inches in length, are applied longitudinally from the upper part of the ground portion of the globe up the limb, each strip overlapping slightly the preceding one, a final strip being placed circumferentially around the flange and covering in the ends of the longitudinal ones. In a case of laparotomy an oval shaped globe may be applied in a similar manner.

The following are the conclusions of the writer. The method commends itself to the profession :

1. In the complete isolation of wounds that can be obtained in the event of infection of hospital wards by erysipelas, etc., as the globe can be hermetically sealed.

2. All changes can be noted clearly at any moment, with the minimum amount of discomfort to the patient, thereby increasing largely his chances of recovery.

3. The perfection of drainage, which has never been obtained in so great a degree, obviating the necessity of soaking off bandages saturated with dry pus,

blood and serum, often adhering so firmly to the wound that the most gentle manipulation is required to avoid laceration of the tender granulations.

4. Secondary hemorrhage can be detected at the earliest possible moment.

5. The first evidence of inflammation can be noted and its movement forestalled by removal of the cause.

6. The action of topical remedies can be observed without exposure of the wound to the air.

7. The dressing can be adapted to wounds of almost every description.

8. Refrigerant and thermal water dressings can be applied with the utmost facility.

9. Lotions or powders can be easily applied to the wound through the main opening in the globe without disturbing the dressings.

10. If it is desired to prevent the ingress of infected air, the drainage tubes can be filled with plugs of iodoformed or carbolized cotton.

11. In the event of inflammatory swelling, rendering the constriction of the base of the globe excessive, the apparatus can be replaced by one of larger size with less expenditure of labor and time than is required in the application of a Lister dressing.

12. Facility is afforded for determining the therapeutical effect and germicidal action of direct sunlight in the treatment of wounds.

13. By means of long, slender forceps and scissors, the sutures, drainage tubes and adhesive plaster may be easily removed through the main aperture in the globe.

14. The weight of the apparatus is not as great as that of the ordinary Lister dressing.

15. If perfectly applied, there should be no more constriction of the limb than results from moderately firm bandaging.

16. The expense is comparatively light, and the globes can be used indefinitely, being thoroughly disinfected by boiling water.

17. The apparatus may be adapted to any external surface by taking, in special cases, wax impressions, and transmitting them to the manufacturer.

In conclusion, I will say that my claim to originality is, in my opinion, well founded, as nowhere in surgical works have I seen glass mentioned, used in the way I have indicated, as a protective dressing.—*Medical and Surgical Reporter*.

[It seems a very good idea, though adding to the tediousness of surgical dressing. Yet we can see in it a means of often preventing still greater labor and not a little danger. We have a sealed wound under continuous observation.]

A. H. P. L.

A Case of Aortic Aneurism Treated by the Insertion of Wire.

DR. J. RANSOHOFF, *Medical News*: In a colored man, *æt.* 35, an aneurism of the ascending aorta, resulting from over exertion in rowing about two months previously, had been treated ineffectually by iodide of potassium and subcutaneous injections of ergotine. Finally a straight hollow needle with thumb screw attachment was pushed into the aneurism from the right side and through it was passed ninety-six inches of flexible silver wire. The pain experienced was very slight and, during the introduction of the first forty-eight inches of wire the pulse remained unchanged, but it then suddenly became almost imperceptible and very rapid, the patient became very faint and death appeared to be imminent; stimulants, however, overcame the syncope and the remainder of the wire was introduced without interruption. On the autopsy,

the syncope was found to have been due to the passage of a loop of wire beyond the neck of the sac and into the aorta, where it was probably deflected by the aortic valves. There was no bleeding during the operation nor immediately after the withdrawal of the needle. An amelioration of the symptoms continued for two weeks after the operation, but then a change for the worse supervened, great œdema of the right side of the face and the right arm being developed, and, in hope of consolidating this part of the sac, ninety-eight inches of wire were inserted into the sternal portion; some improvement supervened, but the patient died suddenly eight days later, from rupture of the sac. Autopsy showed the formation of clots about the loops of wire. From his experience in this case and an analysis of fourteen others, the operator concludes that in but thirty per cent. of the cases can death be attributed to the operation, and except in peripheral vessels where so many safer methods are at our command, the practice is worthy of further trial; practiced as a last resort, it has undoubtedly lengthened life, and it is far from improbable that, if often adopted, a permanent recovery will occasionally be obtained in cases that would be hopeless without it.

[As occasion enabled us to state in these columns a few months ago, horse hair, properly cleaned, and then curled, seems to be the best agent for filling aneurismal sacs. The wire seems to be too stiff.]

A. H. P. L.

Trusses in Hernia.

As a rule, the wearing of a truss is regarded simply as a palliative expedient, hence it is well that we should be reminded by Dr. JOHN CHIENE (*Edinburgh Med. Jour.*), that the application of a truss in the treatment of this com-

mon affection must not be looked upon as simply palliative. In old people with long standing herniæ the curative action of a truss cannot be looked for; but in all recent cases at all ages a truss must be applied, not simply as a palliative, but in order to effect a cure. The younger the patient the greater is the probability of this good result. The hernial protusion, after it has been once reduced, should never be allowed to come down again. Although in the recumbent posture the chances of the hernial protrusion occurring are diminished; still, as any exertion, as in the act of coughing, may during the night cause the protrusion, a truss should therefore be worn day and night. During the night less pressure is required to keep up the hernia, and if a spring truss is irksome to the patient the hernia may be kept up by a thick pad of layers of lint or layers of flannel, fixed in position by an elastic spica bandage. —*Medical and Surgical Reporter.*

The Surgery of the Lungs.

DR. TRUC, in a thesis discussing the present status of surgery of the lungs, shows that pneumotomy, partial or total, practiced antiseptically, is generally well endured by the different animals, and is compatible with life.

In general applied to the treatment of tuberculosis, the operation has hitherto given deplorable results, while as an operation for secondary cancer of the lung, circumscribed and superficial, it seems useful and little dangerous.

The operation may be further advantageous:

1. In certain abscesses producing serious complications, their location being well established.
2. In circumscribed abscesses producing infection, their location being exactly determined.

3. In localized severe putrid bronchitis.

4. In rare forms of limited tuberculosis, represented by an isolated superficial cavity, the septic products of which occasion septic symptoms which directly endanger the life of the patient.

5. In large hydatid cysts, which are not spontaneously relieved, nor lead to the ordinary methods of cure.

6. In cases of intrapulmonary foreign bodies which have resisted ordinary means for their removal and produce inflammatory symptoms or destruction of the parenchyma, their locality being known with precision.

Dr. Truc further concludes that exploratory puncture, carefully made, is generally harmless, and frequently of great diagnostic value.

For the operation the thermocautery is to be preferred to the bistoury, as being less dangerous, and costal resection should be generally performed as a convenient means of opening large cavities, and for facilitating cure. As adjuvants to the operation, antiseptic irrigations seem always useful and frequently necessary. Uncombined with pneumotomy, antiseptic injections seem but little beneficial.

As to intraparenchymatous in tubercular diseases, when carefully made with fluids but slightly irritating and in moderate doses, they are well endured, and while they neither aggravate the local condition nor arrest the progress of the pulmonary lesions, they in some cases seem to ameliorate the symptoms of the patient. For making such injections, the axillary and subclavian regions are to be selected as being most accessible and least dangerous.—*Med. News.*

Anæsthesia of the Throat.

A twenty per cent. solution of menthol in alcohol or oil will produce anæsthesia

of the mucous membrane of the throat or nose in a minute or less. It has the advantage over cocaine of acting more quickly, and through a cumulative effect, keeping up the anæsthesia for several hours when the application has been repeated a few times.—*Berlin Klin Wochenschrift.*

A Mustard Sponge.

DR. B. W. RICHARDSON recommends the use of a sponge for mustard poultices. He says: A sponge makes the best of mustard carriers. The nurse mixes the mustard in a basin with water until the mass is smooth and of even consistency. Then she takes the soft mass all up with a clean sponge, lays the sponge in the centre of a soft white handkerchief, ties up the corners of the handkerchief neatly, to form a hold and applies the smooth convex surface to the skin. This mustard sponge, warmed again by the fire, and slightly moistened, can be applied three or four times, is good for several hours, and saves the trouble of making a new poultice for re-application, often a matter of importance during the weariness of night watching. The sponge can afterwards easily be washed clean in warm water.—*Medical and Surgical Reporter.*

Chloride of Calcium as a Glandular Deobstruent.

DR. ARTHUR DAVIS thinks that this old and formerly much used drug is not sufficiently resorted to in cases of enlargement of the lymphatic glands, and he relates two cases wherein the results were very satisfactory. He utters the caution that the drug must be given in solution in doses of from three to ten grains thrice daily, according to age, and he concludes that in the application of this drug, therefore, three points should be borne in mind: 1.

The necessity of a cautious but gradual increase in the strength of the dose taken. 2 The steady persistence in its use for a lengthened period. 3. Its uselessness in cases where suppuration has already commenced.—*Ibid.*

Dentist's Leg.

A peculiar sensation of numbness, or "pins and needles," in the extremities is frequently experienced by dentists. This condition, Dr. GEORGE JOHNSON (*Lancet*) considers to be due to the combined influence of perverted nerve function, directly due to a mechanical impediment to the circulation through the rigidly contracted muscles and their associated nerves, and to direct compression of the nerves by the firmly contracted muscles. This combination is found in dentists who stand fixed and firm in one position for long periods of time. The obvious means of prevention and of cure consist in rest for the over strained limb, or such a frequent change of position as is equivalent to a certain amount of rest. Standing in one position is notoriously more fatiguing than walking, and for the obvious reason that while in standing one set of muscles is in a constant state of active contraction, the circulation through them being thereby retarded and enfeebled, walking involves alternate contraction and relaxation of the muscles, with an invigorated and quickened circulation.—*Ibid.*

A New Bunion Splint.

In the *British Medical Journal*, MR. R. J. SPITTA describes a new splint, which he has contrived in order to maintain the great toe in its normal position after continual distortion from badly fitting boots, and in cases of bunion, or enlargement of the joint. The

splint can be worn during the day, provided the boot be of a good size and with square toes. The apparatus consists of a well fitting band of steel, suitably covered, about half an inch wide, passing round the heel from the base of the toe on the inner side, to a corresponding joint on the outer border of the foot, being kept in position by a shaped lacing piece across the arch, and passing beneath the sole. To the steel band is attached, at its inner extremity, a rack and pinion, by which the toe can be drawn away from the median line to any extent desired, the pressure of the screw on the foot being relieved by a moulded steel plate, accurately fitted to the side of the foot, and which is cup shaped over the joint or bunion, and covered with soft leather. From the screw and rack, a firm piece of metal is continued on to the end of the foot, and is provided with a leather stall, which laces round the toe and grasps it tightly. Gradual extension is applied, so that in a week or two the toe becomes quite normal in position.—*Ibid.*

A New Hæmostatic.

DR. SPAAK, in the *Journal de Bruxelles*, describes a hæmostatic which he accidentally discovered, and which he has used for some months. It consists of 2 parts chloroform and 100 parts water, and presents the following advantages: 1. It acts with remarkable promptness. 2. It has not the least unpleasant taste. 3. It has no escharotic action. 4. It is always to be had and costs almost nothing. 5. It has no unpleasantness in its action and does not disturb the operation.

In all operations in the cavity of the mouth and the neck, a simple washing out with this remedy is sufficient to stop the hæmorrhage from the larger vessels in an instant.

The author does not state the reason of this action. He simply relates the fact.—*Nashville Journal of Medicine and Surgery*.

Frequent Site of Periostitis in the Young.

JONATHAN HUTCHINSON says that in young persons a not uncommon place for acute periostitis to occur is behind the lower third of the femur. It is very desirable that abscesses thus caused should be opened early, and it were to be wished that the safe place at which to reach the bone were more generally known. It is on the outer side, in the hollow between the tendon of the biceps and the ilia-tibial band. At this spot a free incision may be made down to the bone without encountering any important structure. If this rule of procedure were generally recognized, such cases might be treated by incisions in their earliest stage, and thus not unfrequently necrosis prevented.—*British Medical Journal*.

How to Sharpen a Knife.

DR. O. H. ALLIS, in the *Coll. and Clinical Record* :

I always like to tell you things that will be of practical value to you. One thing that you should learn now, and which will be of advantage to you all your lives, is how to sharpen a knife. Many men have achieved great distinction in surgery who could never sharpen a knife. The knife should be ground so as to be slightly concave, and should be of good steel. Unless the knife is of good tempered steel, and unless you have a good oil stone, you will become discouraged, and think that you have no skill or cannot learn. If the knife is very dull, you grind it by putting it on the stone and carrying it backward and forward ; if the stone is not a good one, a little ground slate stone dust may

be sprinkled on it. In order to get a fine edge on it, you do not want much strength. Use only two or three fingers, and draw the edge of the blade toward you in a manner just the opposite from what you do on a leather strap ; then turn the knife and carry it in the opposite direction. In this way a good edge will be obtained. Where a stone is not available, I have often used a piece of board with fine dust sprinkled upon it.

[The value of knowing how to get a good edge on a knife, especially when we are so situated that we must either use a dull one, or sharpen it ourselves, can only be fully appreciated by those who have had such an experience. The above paragraph is well worthy of recollection.]

A. H. P. L.

The Treatment of Burns.

ALTSCHUL (*Monatsheft f. Prakt. Dermat.*) reviews the treatment of burns, and gives the results of his own experience. Iodoform he regards as the application *par excellence* for burns of the second and third degrees ; he prefers an iodoform-gelatin of the strength of ten per cent., or, better still, an iodoform paste, of which the following is the formula : White bole, ʒ ss. ; olive oil, ʒ i. ; solution of subacetate of lead, ʒ vi. ; iodoform, from ʒ ij. to iv.

Joiners' Varnish in Burns and Scalds.

DR. KRASSOVSKY, of Yaransk, Viatka Government, reports (*Proceedings of the Viatka Medical Society*) that in two cases of burns of the second degree, he has obtained excellent results from repeatedly painting the parts injured with the common alcoholic varnish used by joiners. Pain immediately disappeared, and when the film of dry varnish fell off, it left the sound skin covered with epidermis. The author concurs with Dr. Svislovsky in that this plan of treatment

is applicable only in cases where the cuticle remains unbroken. The author borrowed the use of varnish in burns and scalds from popular medicine, the method being extensively practised by peasants and artisans of the Yaransk district.—*London Lancet*.

A Disinfecting Powder.

SIGMUND (*Ibid.*) suggests the following: Beech tar or oil of cade, ʒ v to viij.; powdered sulphate of lime, ʒ vij. Mix thoroughly, dry, and pulverize. Recommended as a suitable dressing for sloughing wounds and syphilitic ulcers.

[Seems to us to be a worthy suggestion. It should be a good wound stimulant.]

A. H. P. L.

VENEREAL DISEASES.

The Evolution of Venereal Disease.

It was only in May of this year that, in an article in the *Edinburgh Medical Journal*, by Milton, it was stated that the question of the unity and duality of syphilis was yet far from settled. This is well illustrated by the article by F. LE GROS CLARK (*Ibid.*), in which gonorrhœa, chancre, and the initial lesions of syphilis are held to be derived from the same source—namely, the secretion of an inflamed urethral mucous membrane. The writer calls in question the specific nature of gonorrhœal ophthalmia; believes that mild secondary symptoms follow a chancre after a short period of incubation, and that the initial lesion differs from it only in having greater induration, a longer period of incubation, and more pronounced secondary symptoms. He holds that cases of secondary syphilis may arise from a gonorrhœa, and that it is not necessary to assume the existence of urethral initial lesions in cases arising apparently

without local lesion. He has never met with a case which suggested to him the presence of initial lesion in the urethra. In treatment he favors the bichloride of mercury with sarsaparilla, though it would seem that the subchloride of mercury (calomel) was meant, as we are advised to give half a drachm to a drachm of it a day for a long continued time.—*New York Medical Journal*.

[The belief that these three venereal diseases originate from the same virus seems to us extremely absurd.]

A. H. P. L.

The Prognosis in Syphilis.

FOURNIER (*France Méd.*) has rendered good service by pointing out a number of conditions which should influence our prognosis in syphilis, and make us anxious lest what we might consider not a very bad case should turn out exceedingly grave. These conditions are alcoholism, extreme youth or old age, scrofula, tuberculosis, malarial poisoning, depressing agencies of all sorts—such as bad hygiene, pregnancy, insufficient food, and prolonged lactation. That all these are grave factors in the prognosis of the disease is well known and recognized. We would draw attention to two parts of his paper, which embody views not so generally accepted or familiar as the foregoing. In speaking of the relation between scrofula and syphilis, he says: "It is certain that syphilis very often reacts upon scrofula so as to exaggerate it. Syphilis, either hereditary or acquired in very early life, is the cause of lupus. Scrofulous subjects who acquire syphilis in early life are disposed to lupus." Among the depressing agents and as a factor of gravity, Fournier gives prominence to a dissipated life, and to that jaded condition acquired by the luxurious habits of the club and the irregular

life of a man of the world without any occupation. These people, he says, are prone to a precocious course of evolution of the disease, and succumb rapidly to it. They very frequently have cerebral syphilis, which is specially liable to be the case among gamblers and stock speculators.—*Ibid.*

DISEASES OF THE EYE AND EAR.

Some Points in the Differential Diagnosis Between Acute Conjunctivitis and Iritis.

DR. BARTON PITTS, in an article published in *St. Joseph Medical Herald*, says :

In conjunctivitis the inflammation is confined to the mucous surface lining the lids and anterior scleral surface of the ball. There is a burning itching sensation, often feeling as if some foreign body was in the eye. After sleep, the lids from the mucous discharge, are glued together, pain is not usually an accompaniment. Vision is not affected further than an indistinctness arising from the increased lachrymal and mucous secretions being deposited upon the cornea. Upon an examination, by everting the lids, we find increased redness or hyperemia of the conjunctiva, often some little swelling of the lids may be present, and perhaps slightly increased temperature. In iritis we usually find more or less conjunctivitis, accompanied by some or all of the above symptoms, but in addition we have marked pain, especially photophobia, sluggishness or immobility of the pupil, with more or less lachrymation. Upon an examination in an attack of iritis, a change in the color of the iris is usually noted, arising from an increased vascularity, giving to a blue iris a greenish tint, a brown iris assuming a somewhat reddish tinge. The edge of the iris does not remain sharp and clearly de-

finied as is normally the condition, but has the appearance of being swelled, giving to the pupil a hazy uneven appearance, a condition which I have often observed to exist normally in the horse. There is marked injection at the sclero-corneal junction, giving to the conjunctiva and sclerotic at this point a pinkish color. There may be also more or less chemosis. The lids of the eye are often swollen and puffy. Vision is usually much affected, owing partly to haziness of the aqueous humor and contraction of the pupil, in connection with the disturbance brought about in the iris and ciliary bodies, from the inflammatory action, interfering with the accommodation of the eye. With the above points kept prominently in view it will be difficult for any one to confound catarrhal ophthalmia and iritis.

In regard to the treatment of the two affections, we must fully appreciate the fact that in iritis the effect of the inflammation is to form a plastic deposit of lymph, with a great tendency to attachment to the crystalline lens. The great object, therefore, in iritis, is to remove the edge of the iris as far as possible from the central surface of the lens.

We have an agent, in the use of a strong solution of sulphate of atropia, that fulfills this object and furthermore has the property of markedly allaying the inflammation present. The treatment therefore in iritis should consist in the early instillation of a strong solution of atropia (iv to vi grs. to an $\bar{\text{z}}$ of aq. dist). Exclusion of light, a total rest of the eyes, local bleeding or application of leeches to the temple. The treatment of acute catarrhal ophthalmia or conjunctivitis, is usually satisfactorily fulfilled by rest of the eyes, thorough cleanliness and the application of very mild astringent lotions, amongst the

best of which is boraci acid x grs., to
 ʒ i aq. rosæ.

**Use of the Actual or of the Galvano-Cautery
 in the Treatment of Necrotic or Suppu-
 rative Ulcers of the Cornea.**

DR. A. T. WILLIAMS says, in an arti-
 cle published in *St. Louis Medical and
 Surgical Journal* :

The method of applying the cautery
 is very simple. The eye should be first
 thoroughly cocainized. When anæsthe-
 sia is complete the lids are separated,
 the ball held firmly with the fingers, and
 the cautery quickly applied to the sur-
 face of the ulcers. The application
 must be made lightly and rapidly, since
 superficial cauterization is all that is
 required; though no absolute rule can
 be made in this latter respect, as each
 individual case presents a separate
 problem to the physician, and he must
 judge how much or how little the ulcer
 should be burned.

The whitish or yellowish points of
 infiltration or deposition on the surface
 of the ulcer must always be touched.
 The clean portion of the ulcer, on the
 contrary, should be let alone. A bare
 touch of the cautery is all sufficient. It
 must never be forgotten that the cautery
 —and the galvano-cautery especially,
 will go through the corneal substance as
 a hot iron does through snow. Cauter-
 ization should be repeated from time to
 time until the ulcers take on a healthy
 healing action.

The theory upon which the curative
 value of the cautery is based, is that the
 ulceration is due to specific microbial
 germs. The object therefore, in the ap-
 plication of the heat is the destruction,
 not of the necrotic material on the sur-
 face of the ulcer (material too dead to re-
 vivify and live, and too much alive to die),
 but of the micro-organisms which infect
 the cornea and cause the ulceration. In

other words, the ulcer is sterilized by
 the aid of heat, and placed in a condi-
 tion where the natural reparative ten-
 dency is not neutralized by destructive
 organisms.

Prior to the introduction of the actual
 cautery, I have often caused such ulcers
 to heal by touching their surfaces with
 pure carbolic acid, and in one instance
 at least I successfully used chromic acid
 for the same purpose; but the actual
 thermo or galvanic cautery is far supe-
 rior in every way, and is to be preferred
 in all such cases.

Finally, I would remark that the in-
 troduction of cocaine has made the use
 of such radical measures as the actual
 cautery as a therapeutic agent in oph-
 thalmology, a possibility, and renders
 the operation not only easy of execu-
 tion, but painless. Without this anæs-
 thetizing agent, there could be but little,
 if any, general resort to the hot iron or
 galvano-cautery in the treatment of these
 dangerous affections of the cornea.

DISEASES OF THE SKIN.

**Permanent Removal of Hair by Electrol-
 ysis—With Cases.**

DR. SAMUEL E. WOODY in the *American
 Practitioner and News* : The operation
 is simple, but painfully tedious, the
 operator often suffering more than the
 patient. As in other simple and tedi-
 ous operations, success depends most
 upon a peculiar manual dexterity, and
 much more satisfactory results are
 attained after some experience.

The essential instruments are a gal-
 vanic battery and a fine needle. The
 number of cells to be employed depends
 upon their strength, the delicacy of the
 patient's skin and the distance between
 the poles when applied to the body. I
 formerly used from four to six zinc-
 carbon elements, but now employ twice

that number of Leclanché (telephone) cells. These are placed in a closet and connected by wires with the operating table. More than a year ago they were charged with fifty cents' worth of sal ammoniac; and, though furnishing electricity for door and signal bells about my office and residence, they are apparently as strong now as then.

For a long time I used the finest cambric needles, gold plated, and have done some good work with them. Of late I have been using a very fine wire of iridium and platinum, which being more pliable follows the hair better, and is less likely to perforate the follicle. An ordinary surgical needle holder, insulated by being covered with a piece of rubber tubing, may be used; but where much work is done, it is best to get one specially made of hard rubber, with a little spring button for breaking or closing the circuit. You should have the patient come only on bright days, for good light is necessary. She should be seated near a window, preferably in an operating or reclining chair, so that her face is nearly upon a level with the operator's eyes. A moistened sponge holder connected with the positive pole of the battery is held in the patient's hand, while the needle holder is attached to the negative pole.

The needle is now introduced for about one-eighth of an inch into the follicle down beside the hair. To do this accurately a sharp eye is necessary; and if the hairs are very small, I wear a jeweler's eye glass. But most important is a steady hand and a delicate touch.* Possessing these, the operator can tell by the resistance encountered when the needle is piercing the dense skin or dropping into the follicle.

At the first sitting I have the patient close the circuit by grasping the sponge electrode, and thus avoid the slight

shock by making the connection more gradual than would be possible if I used the little spring button in the needle holder. But, after some degree of toleration is attained, this is a matter of no moment. The current flowing through the tissues decomposes the salts, the acid going to the positive pole (sponge), and the alkali to the negative pole, where it accumulates around the needle in the hair follicle and destroys the papilla, loosening the hair, and rendering it impossible for another to grow in its place. Around the needle the tissues will be seen to blanch, and in a few seconds minute bubbles of hydrogen will rise, and the action is complete, as is shown by the ease with which the hair comes away upon the gentlest traction, or even on brushing the finger over the part.

The amount of pain will vary greatly, some women complaining bitterly of a current of half the strength that other women will bear with ease. The upper lip is the most sensitive part of the face; but altogether I have not found the pain to amount to much, and when it does it can be relieved by injecting the muriate or rubbing the oleate of cocaine over the part a few minutes before operation. After a few sittings the skin becomes tolerant of the action of the current, and the patient no longer complains.

The operation when properly performed, should not be followed by any scars. But if the patient's skin is very tender, or too strong a current and too large a needle be used, especially if not accurately placed in the follicle, or if too many hairs close together are removed at one sitting, pustules will be formed and permanent cicatricial points will result. The number to be removed at one sitting depends upon the tenderness of the skin and the extent of

surface covered. I never remove at the same sitting hairs closer together than a quarter of an inch, except in moles, where I purposely induce some suppuration to destroy the pigmentation.

After the operation the face should be bathed in hot water and rubbed with cold cream or other emollient, and a thick veil worn, especially if the air be raw and cold.

The number of hairs to return and demand a second removal will decrease with the skill of the operator and the thoroughness of the operation. I usually expect the return of about five per cent., but when these are in turn removed the cure is complete. It is always best to leave the finer or lanugo hairs, otherwise the face will have a bald, glistening appearance.

The Absorbability of Fats or Analogous Substances by the Skin.

DR. E. B. ANGELL (*Buffalo Medical and Surgical Journal*):

The celebrated dermatologist, Dr. Unna, has shown that the more readily a fatty substance absorbs water the more rapidly is it itself absorbed by the skin. He has found out what are the relative amounts of water that fatty substances will take up, such as vaseline, lanoline, and various mixtures. The complete table of the results of his experiments is given below. It is of interest through indicating the relative value of the various substances used as inunctions or as vehicles for external medication.

One hundred parts of the following substances absorb :

	PARTS OF WATER.
1. Vaseline,	4
2. Lard,	15
3. Benzoated Lard,	17

4. Almond Oil,	70	} 23	
Yellow Wax,	30		
5. Olive Oil,	70	} 26 to 31	
Yellow Wax,	30		
<small>(According to the age of the oil.)</small>			
6. Cod-Liver Oil,	70	} 28	
Yellow Wax,	30		
7. Cod-Liver Oil,	70	} 32.3	
White Wax,	30		
8. Linseed Oil,	70	} 41.3	
Yellow Wax,	30		
9. Linseed Oil,	70	} 48.5	
White Wax,	30		
10. Oleic Acid,	70	} 50.5	
Yellow Wax,	30		
11. Oleic Acid,	70	} 60	
White Wax,	30		
	Olive Oil,	60	} 16
12. Turpentine (Oleo resin)	10		
	Yellow Wax,	30	} 19
13. Olive Oil,	65		
	Resin,	10	} 27
	Yellow Wax,	25	
14. Mutton Tallow,	70	} 27	
Olive Oil,	30		
	Lard,	80	} 14
15. Spermaceti,	10		
	Olive Oil,	10	} 28
16. Lard,	50		
	Spermaceti,	10	} 32.6
	White Wax,	10	
	Olive Oil,	30	} 39.5
17. Olive Oil,	70		
	Spermaceti,	15	} 105
	Yellow Wax,	15	
18. Olive Oil,	70	} 39.5	
	Spermaceti,		15
	White Wax,	15	} 105
19. Lanoline,			

According to the above table, mixtures containing white wax absorb more water than those prepared with yellow or unbleached wax. This may be due to the fact that white wax is more or less acid, and this opinion seems to be confirmed by the greater absorbability of mixtures containing oleic acid.

Hysteria and its Relation to Diseases of the Uterine Appendages.

DR. S. C. GORDON, in a paper read recently before the American Medical Association, concluded as follows :

If I were asked to formulate my views, derived from my own experience and that of the men who have done much more in this direction, I should sum up about as follows :

1. That these (so-called) hysterical symptoms occur almost exclusively in women. That whenever any of them do occur in men they are much less in degree, even if they do not differ in kind.

2. That it is fair to presume from the first proposition that it is due to disease of some organ or organs peculiar to women.

3. That they are not due to disease of the uterus alone, for when all apparent abnormalities of the uterus are corrected, the symptoms, very often, are not in the least relieved.

4. That all modes of treatment, other than operation, have failed to cure, and in most instances have not ameliorated the symptoms, even where the disease was believed to exist in the uterine appendages.

5. That the large majority of all cases operated upon have been entirely cured of the symptoms for which the operation was made, and the remnant have been relieved and are continuing to improve.

6. That it is impossible, in a majority of cases, to determine by the touch, disease of these organs that will produce the symptoms alluded to.

7. That one can, by these symptoms alone, make a sufficiently satisfactory diagnosis to warrant the operation.

8. That after correction of all well known and clearly diagnosed uterine troubles, these symptoms are not re-

lieved, we are justified and required, for the cure of our patient, to recommend this remedy.

9. That the operation does not in any case destroy the sexual desire, or in any way unsex the woman, except so far as it may prevent further child bearing.

10. That in a majority of cases requiring the operation, the woman is already sterile.

11. That in my own experience the specimens removed have been found so changed by inflammatory action as to be cirrhotic, or otherwise destroyed, either by softening or cystic degeneration of both ovaries and tubes, with very frequent stenosis of the latter.

12. That a fatal result from the operation is extremely rare, if it is carefully performed and closely and intelligently managed as to the after treatment. In the twenty-five cases operated upon there has been but one death.

It is certainly time that the profession were done with the old idea that a hysterical woman is only to be laughed at, and treated as one who deserves no consideration at our hands. Thousands of women, of the strongest character, have been cruelly and shamefully treated by their friends, even while they were suffering the most excruciating agony, and simply because the profession has given countenance to the theory that "she could prevent it if she chose," that she was "only hysterical." We cannot expect more from the laity than we teach them. Instead, let us each strive to "contribute something to the science of pathological anatomy" out of this mass of distressing symptoms.—*Journal American Medical Association.*

Dr. Gallard's Clinic for Diseases of Women at the Hotel-Dieu.

DR. THOMAS LINN, in the *Medical Times*, says : The very large number of

patients treated, and the fact that Dr. Gallard is the most prominent of the specialists of women's diseases in Paris, lead us to give copies of a few prescriptions in the most common forms of disease met with here. It may be stated that so frequent is the demand for these formulas that the doctor had them printed all ready for use. Even his signature is lithographed.

The following is given in all cases of *metritis* or in *anæmia* :

1. \mathcal{R} . Ferri subcarbonat., 10 grms ; ext. cinchonæ (soft) 10 grms ; ext. opii aquos., 1 gramme. M. Divide into one hundred pills. Not to be silvered.

2. Drink iron water at meals. To be made by putting a few iron nails in common water.

3. Take every week two sulphur baths, or every morning take a shower bath of fifteen seconds.

4. Take at the noon meal every day a wine glass of cinchona wine.

5. Take once every week thirty centigrammes of powdered rhubarb at dinner (last evening meal).

The next one is given in all cases where a *uterine fibroma* has been found.

1. \mathcal{R} . Extract. hyoscyami, 3 grms ; plumbi iodid., 6 grms ; adipis, 50 grms. M. Sig.—Every evening use this pomade by friction on the abdomen.

2. In the morning wash it off with soap and water.

3. Twice a week stop these frictions, and use instead tincture of iodine painted on the abdomen.

4. Take every day a teaspoonful of this solution :

\mathcal{R} . Potassi iodidi, 10 grms ; aquæ destillatæ, 250 grms. M.

5. Twice a week take a salt water bath, and daily use very large vaginal injections of fresh water.

6. Support the viscera with an elastic abdominal belt.

In cases of *cancer of the uterus* the following is given :

1. \mathcal{R} . Conii fructus pulveris, ext. gentianæ, $\bar{a}\bar{a}$ 3 grms ; ext. opii aquos., 60 centigrms. Divide into sixty pills.

M. Sig.—Take one every morning.

2. Apply on the belly cataplasms of laudanum, as needed, for pain.

3. Use twice a day an injection of water in which for every pint add a tablespoonful of

\mathcal{R} . Acid. carbolic. (crystal), 10 grms ; alcoholis, 250 grammes. M.

Or else add half a teaspoonful of this: Perchloride of iron (solution Pravaz) at 30°.

In all cases of women also having *phthisis* the following directions are given :

1. \mathcal{R} . Sodii arseniatis, 10 centigrammes ; aquæ destillatæ, 250 grms. M. Sig.—Take a teaspoonful with every meal.

2. Use as a drink an infusion of pectoral flowers, to which add syrup of tolu.

The French infusion of pectoral flowers consist of mallow, coltsfoot, catsfoot, red corn, rose or poppy, guimauve or marshmallow, etc.; and it might be remarked here that while the practice of the French physicians of giving infusions of herbs may seem to us old fashioned, still it is wonderful to see what relief they often afford to patients.

3. Take every evening, at least two hours after the last meal, a pill containing ten centigrammes of cynoglossum.

4. Paint every evening one quarter of the chest with tincture of iodine, in such a way that you do not paint over the same place more than once in four days.

With the above internal treatment, Dr. Gallard uses the usual local appli-

cation *per speculum*, once a week, that are in use by gynæcologists.—*Maryland Medical Journal*.

Artificial Suspension of the Menstrual Flux.

DR. LOEWENTHAL (*Bull. Gén. de Thérap.*): It has been thought that when the menses became suppressed without appreciable physiological cause, the proper course to pursue was to bring them on, in the belief that a re-appearance of the flux was an indispensable condition to health.

At present, the thoughtful physician cares little about the stopping of the flow, but searches for the casual cause of its discontinuance. Loewenthal proposes a therapeutic treatment which is radically opposed to that of our ancestors. Not only does he refrain from efforts to bring on the flux, but in certain cases he actually suppresses it.¹ In women of good health the menses are a salutary and necessary means of throwing an excess of blood out of the system. They constitute a monthly purgation for the sake of systemic equilibrium. But this is not the case with many women not in good health. It is especially aside from the fact in chlorotic cases. In these there is a decrease in the normal quantity of blood, and the menses, far from being salutary, are pernicious. Nature often suppresses the flux under such circumstances, and if it does not, it is the duty of the physician, according to Loewenthal, to endeavor to arrest it.

In his own cases he has accomplished this by injections of hot water (122° F.) and rest in bed for a time. The water must be very warm; lukewarm water, or water under 115° will not accomplish the object, but tends to favor the flow. He has used this method with 23 patients. Of these, 18 were chloro-anæmic, 2 were hysterical, and 3 con-

valescent from severe maladies. The chloro-anæmia patients were cured in this way without further treatment. The amelioration was rapid, and generally followed the first artificial suppression. In one case, a cure was effected only after eight suppressions. Of the two hysterical patients, the condition of one only was ameliorated. No report is given concerning the convalescents. Loewenthal observed no evil results, in any case, following the complete artificial suppression of the flux. His chief difficulty in the cases which he treated, was to keep the patients quiet in bed long enough to effect the result.

M. Kugelman is said to have easily obtained suppressions by the use of *hydrastis canadensis*. He states also that he has observed frequent suppressions following a journey by rail. Maritime voyages, on the contrary, have, according to Irving, a very clear emmenagogue action.

[Our experience is exactly opposite to Irving's.]
A. J. C. S.

Is Disease of the Uterine Appendages as Frequent as it has been Represented?

After discussing this question in the *American Journal of Obstetrics*, Dr. HENRY C. COE, of England, thus answers it:

In conclusion, the following deductions may be regarded as legitimate:

1. Ovarian disease is not as common as it has been represented; the surgeons, and not the pathologists, being responsible for the prevalence of the contrary opinion.

2. Because an ovary is partially diseased, it does not follow either that its functions have been materially impaired, or that its removal is imperative.

3. The expressions "cirrhosis" and "cystic degeneration" commonly applied to the ovary, are mischievous

terms, which are too often used in justification of unjustifiable operations.

4. Actual disease of the tubes is far less frequent than is generally believed. Lesser degrees of inflammation, especially slight "catarrhal salpingitis," are seldom appreciable to the pathologist, still less to the surgeon.

5. Many of the symptoms ascribed to disease of the uterine appendages are really due to localized peritonitis, and will not be removed by a removal of the appendages.

6. The physiology of the ovaries and tubes is still imperfectly understood; their pathology must then remain *sub judice*, and operations for their removal, on the ground of limited disease alone, must be regarded as largely empirical. To which I would venture to add the prediction:

7. The present enthusiasm in this country in favor of Tait's operation will not endure, because it will eventually be discovered that the number of permanent cures is entirely out of proportion to the number of operations.—*Medical and Surgical Reporter*.

Treatment of Leucorrhœa and Fœtid Vaginal Discharges.

DR. CHERON orders the following injections morning and evening: Chlorate of potash, ℥ iij; laudanum, ℥ ij; aquæ rhenicæ, ℥ x. Two or three tablespoonfuls for a quart of warm water.—*Medical Press and Circular*.

Rapid Dilatation of the Uterine Cavity.

M. VULLIET, of Geneva, at a meeting of the Academy of Medicine, demonstrated his new method of dilatation of the uterine canal, and explained its application to the treatment of uterine affections. He places his patients in the genu-pectoral position, and after using a bougie or dilator, he introduces

three or four small tampons, which have been previously dipped in a ten per cent. solution of iodoform and dried; to each of which a double thread is attached to facilitate removal, which should take place in twenty-four to forty-eight hours. The cavity is then washed out with an antiseptic solution, and new tampons inserted, and in this way continuing until maximum dilatation is reached, being careful not to leave the uterus empty if a good result is looked for. Laminaria tents, which have also been disinfected, may be employed, if more rapid dilatation is desired at the end of three or four days. When dilatation is complete, the interior of the uterus is visible throughout its entire extent, and it is an easy matter to apply the actual cautery, or any other local treatment, in cases of cancer, polypi, or endometritis. With antiseptic precautions this procedure is without danger.—*Kansas City Medical Index*.

Fatal Results from "Splitting the Cervix."

Dividing the cervix at the external, or at the internal os, or in the intervening portion, though not long since a comparatively frequent operation for dysmenorrhœa or sterility, is now very rarely done. Most operators now turn to dilators for the treatment of cases where incision was formerly done; one wing of the army of gynæcologists still fights under the same banner of mechanical uterine pathology, only in place of hysterotomes, its enthusiastic soldiers use dilators. Possibly it is only a question of time when many of the dilators will be placed in the grave beside the hysterotomes, if the teaching of men like Duncan, Schultze and Williams prevails, and the mechanical theory of uterine disease is cast aside.

However this may be, we have been somewhat astonished to know of the

mortality which Sims had from this operation. Pajot states, in a recent lecture, that he knew of at least four deaths of women upon whom Sims had performed his operation of division of the cervix, and he believes that other similar accidents happened to him. In the light of these facts, the profession is to be congratulated upon the fact that the operation has fallen into disuse.—*Medical News.*

Palliative Treatment of Uterine Cancer.

The *Medical Press* tells us that Prof. SIREDAY uses a very simple but effective palliative treatment for cancer of the womb, and in the many cases in which he applied it the patient's sufferings were rendered very supportable. His method consists in washing out the vagina by a solution of corrosive sublimate (1:3000), and in applying small plugs of cotton imbibed in a four per cent. solution of chloral and dusted with iodoform, to the wound. It is essential that the wound should be exactly covered with the first plug and left *in situ* for two days, when the dressing is renewed. After a few days of this treatment, the ulcer, which hitherto wore a very ugly aspect, becomes clean and resembles an ordinary wound, and the pain is greatly lessened. By this method also hemorrhage is arrested, and thus the life of the patient is prolonged and her general state is greatly improved.—*Medical and Surgical Reporter.*

Photographing the Uterine Cavity.

According to the *Lancet*, a Swiss physician describes a plan of introducing wadding tampons and laminaria tents into the uterus, by which he has succeeded in dilating the organ to such an extent as to be able, by means of reflectors, to get a complete view of the whole cavity in cases of carcinoma,

fibrous polypi, fibromata, and endometritis. Not being content with ocular inspection, he has also contrived to obtain photographs of the cavity. New inventions for uterine exploration, medication and instrumentation are often of a somewhat hazardous nature, but we tremble to think of the future of some female patients if photographing the interior of the uterus should ever become one of the medical fashions of the day.—*Therapeutic Gazette.*

The Intra-Uterine Stem in the Treatment of Flexions.

DR. A. REEVES JACKSON recently read a paper before the Chicago Medical Society and published in *Journal American Medical Association*, in which he said:

The details of the method which I employ latterly, are as follows: After ascertaining the existence and direction of a flexion, I endeavor to pass a flexible olive-tipped bougie through the bent portion, and if possible, quite to the fundus. The depth of the uterine canal is carefully noted. I then select a pliable stem having the same diameter as that of the bougie, and one-third of an inch shorter than the ascertained depth of the uterus. The os uteri being then exposed by means of a speculum, the stem, either seized with dressing forceps or mounted upon the end of a piece of pointed wire, is passed entirely into the uterus. A large flattened tampon of absorbent cotton, moistened with slightly alumized glycerine, is then pressed firmly against the bulb of the stem, and allowed to remain one or two days. It is then removed and replaced by a fresh one. It may be necessary to reapply the tampon three or four times before the tendency of the stem to slip out of place disappears.

If the os uteri be found pointing high up, either forwards or backwards, it may

be impossible to introduce the pessary through a valvular speculum. In such a case the patient should be placed in the semi-prone position of Sims, or, as I prefer, in that of Simon, on the back, with the buttocks projecting beyond the edge of the table, or bed. With perineum retracted, the cervix may be drawn towards the vulva with hook-forceps, and the stem introduced as above described. These cases present rather more difficulty at this stage of the treatment, but, as a compensation, the stem very rarely leaves its place.

These flexible stems are made by cutting the distal end from the ordinary bougies used for stricture of the male urethra. A shoulder or bulb is provided by rolling upon the stem a section of rubber tubing.

After the yielding stem has remained for a period varying from one to three weeks, according to the degree of tolerance manifested by the uterus, it is removed, and a thicker one put in its place. This, likewise, is permitted to remain a week or two, and is then replaced by a Chambers stem, which, after the preliminary treatment described, rarely produces irritation. I never expect much, if any, change of shape to occur in the uterus in consequence of the use of the flexible stem; and yet in several instances I have been surprised to discover that a very considerable alteration had taken place within a few weeks, or even a few days, after beginning its use. Moreover, in a few cases I have not been obliged to resort to a rigid instrument at all, the acuteness of the flexion having been converted into a slight curvature by the use of the pliable instrument alone. Usually, however, not only have I found it necessary to use an inflexible, or nearly inflexible, pessary, but to persevere in its use for periods varying from three months to a

year. This is not done continuously, however. I always remove the pessary at the end of three or four months. Of course, the uterus is found straight at this time. The patient is permitted to go without the stem for at least a week, at the end of which time I make an examination to ascertain the condition of the uterus. If it be found still of proper shape the pessary is not re-introduced. I do not feel at all certain, however, that the apparent cure after so brief a period, will be permanent, and, if practicable, I like to make another examination after the further lapse of two or three weeks. In case the examination reveal a return of the distortion, even in slight degree, the stem is replaced and the patient directed to wear it for another period of two or three months, when the effect of the treatment is again tested.

The feature of this treatment which I hold to be necessary to its safety and success, is its slow and gradual conduct; and the non-observance of this necessity has been, I believe, the cause of dangerous results and a failure to cure. A moment's consideration ought to assure us that an amount of force necessary to suddenly straighten a chronically flexed uterus, would be as great as would be needed to bend a straight one, and could not be safely applied to the exterior of the organ, were that possible, much less to its delicately organized interior. Any method of treatment which contemplates the very rapid restoration of a flexed uterus, is faulty in principle and dangerous in practice. The distorted viscus must be coaxed, as it were, into proper shape, and then permitted to grow into normal symmetry.

The drawbacks to this method of treating uterine flexions, are fourfold: 1. Difficulty of retaining the instrument in position. 2. Pain. 3. Hemorrhage.

4. Pelvic inflammation. The three latter are common to all other modes of treatment.

1. *Difficulty of Retention.*—In nearly all cases there is a tendency on the part of the uterus to expel the foreign body, and this tendency is in direct proportion to the degree of irritation produced by its pressure—modified, however, by the relative sensitiveness or excitability of the uterus. In some cases an intra-uterine stem will give rise to most intense expulsive efforts at riddance, while in others its presence will be apparently unheeded; but even in some of the worst of these tolerance becomes established after a few days of rest in bed, and use of the tampon.

Occasionally, even when the uterus appears quite tolerant of the presence of its tenant, the latter will slip out almost as quickly as it is introduced. I have not found any entirely satisfactory method of preventing this. The best, so far, has been the use of a vaginal pessary which maintains the uterus in a position of a strong ante- or retroversion, and thus brings the bulb of the stem to rest against the vaginal wall.

2. *Pain.*—In my experience, pain in any considerable degree has not been a frequent or formidable symptom. When it is manifested, I rarely do anything to lessen it, beyond enjoining strict rest in bed. Regarding it as an indicator of the amount of local disturbance the stem may be causing, I prefer to not abolish it by the use of opiates, and thus mask possible inflammatory mischief. Commonly, pain which early follows the insertion of the stem, subsides after a day or two. If it persists longer, or becomes worse, I at once remove the instrument for a few days, and then re-introduce it. It may sometimes be necessary to thus remove and replace it several times before it can be finally left.

3. *Hemorrhage.*—This is a frequent consequence of the use of the stem. I have known a few cases in which it was produced almost immediately after the introduction of the instrument, and continued as long as the latter remained. In most instances, however, we need not expect more than a slight flow, lasting a few days, and perhaps an earlier appearance of the next menstrual epoch, with, possibly, an increased amount of discharge during the first two or three periods following the beginning of the treatment.

4. *Pelvic Inflammation.*—As already stated, this has not occurred in my experience as a result of the use of the stem pessary. But the fact has not lulled me into an unwarranted security against its liability to appear, and I find myself always looking for it.

Invariability of the Pulse in Menstruation, Regardless of Posture.

The fact that the pulse of the normal male beats from ten to fifteen strokes more per minute when the body is in a vertical position than when lying down, has long been recognized, and until a very recent period it was assumed that the same difference existed in the pulse of the female. Graves first pointed out that in cases of cardiac hypertrophy the pulse remains constant in all positions. More recently, Jorissenne discovered that in pregnancy the same constancy exists in the female, and suggested this fact as a diagnostic test of that condition. *La France Médicale* now announces that M. P. Louge, intern of the Marseilles Hospital, has discovered that in women there exists during the menstrual flow the same constancy of pulse in all positions of the body. It is exceedingly difficult to account for this phenomenon by any known physiological law. Cardiac hypertrophy cannot

be invoked, and the only hypothesis that I can suggest is that there is an augmentation of the tension of the blood during menstruation—a suggestion which seems to be supported by certain clinical phenomena of the catamenial period.—*St. Louis Medical and Surgical Journal.*

DISEASES OF CHILDREN

The Rectum in the Young.

At the meeting of the Obstetrical Society of New York, Dr. JACOBI read a paper on this subject, of which the following is a brief synopsis: The hollow of the sacrum being less curved in the child than in the adult, the rectum is shorter, straighter, and more uniform in shape, hence liquid or semi-solid feces, after passing the sigmoid flexure in the infant, are rapidly evacuated. In the embryo the intestine is formed in sections, the excess occurring in the descending colon and sigmoid flexure; the latter may have a length of even thirty cm., whereas in the adult it seldom exceeds twenty cm. Because of the small size of the infantile pelvis the colon is thrown into folds, so that instead of one, there may be several flexures. Clinically, the presence of the redundant intestine is of great interest, from the fact that it may give rise to difficulty in determining the true position of the sigmoid flexure, and may prevent the passage of the intestinal contents, leading to the erroneous diagnosis of complete obstruction. The inflammatory conditions of the rectum, catarrhal, diphtheritic, etc., are of the same character as those in the adult. A simple proctitis may result from the irritation caused by a foreign body, or may be due to syphilis or tuberculosis. Periproctitis occurs rarely after typhoid and pyemia. There is no instance on

record of cancer of the rectum in an infant. Complete fistula are rare in children and are difficult to cure; the incomplete variety are much more common. The actual cautery is the only reliable agent to employ in treating them; it should be applied to the entire canal from without inwards.

Dysentery.—This may be sporadic, endemic, or epidemic. The catarrhal and diphtheritic variety are interchangeable. As a result of the inflammatory process, the mucous membrane often becomes necrotic. Destruction of the glands, and subsequent cicatrization of the mucosa, and contraction of the bowel sometimes occurs. The treatment is mostly local. Pain in the hypogastrium may be relieved by cold or warm applications. Opium is of great value, and is tolerated in full doses; it should be given by the mouth rather than in enemata. The best astringents are tannin and gallic acid, lead, nitrate of silver, and iron—all to be given in small doses, but at frequent intervals. Bismuth is a valuable remedy, which, in addition to its anti-fermentative action, serves to protect the mucous membrane. In case of ulceration, local enemata should be used; injections of tepid salt solutions, flax seed tea, etc., should first be given, in order to empty out the bowel, after which astringent solutions are to be introduced. A one per cent. solution of alum or tannin is generally useful. Weak solutions of nitrate of silver (one or two per cent.) may be used in subacute cases, but should be neutralized at once with salt solution.

Rectal Polyypi.—These vary in size from a pea to a hazel nut, or larger. They may be single or multiple, sessile or pedunculated, their usual site being just above the internal sphincter. They were first described by Stoltz in 1831; Bokay found them only in one out of

2,600 patients, but Dr. Jacobi usually meets with three or four cases annually, and has treated about 100 cases, the ages of the patients ranging mostly from two to five years. Among the symptoms noted were irregular defecation (mucus or blood sometimes being discharged), with accompanying tenesmus, especially when the polypus was near the internal sphincter or between the two sphincters. A red mass might protrude from the anus, and repeated hemorrhages were not uncommon, the last symptom being almost pathognomonic of polypus. The growth is readily felt on introducing the index finger into the rectum, which can usually be accomplished without difficulty. The treatment is simple, since the pedicle offers but a slight resistance, and may be tied and cut, or separated by torsion or evulsion, the loss of blood being insignificant. Sessile polypi often give rise to no symptoms, and may be caused to shrink up and disappear by using astringent injections.

Prolapse of the Anus or Rectum.—These are only different degrees of the same pathological condition. Weakness of the sphincter may be either congenital or acquired; the latter may result from overstraining as the result of an inflammatory process in the bladder or bowel, fistulæ, abscesses, polypi, etc. The mildest form of prolapsus consists in a simple eversion of the anus, between which and the worst variety, in which three or four inches of the bowel protrude and are incarcerated, there are many intermediate forms. The indications always are to reduce the prolapsed part, and to retain it in the proper position. For the latter purpose a T bandage, or tamponing, with fixation of the nates, has been recommended; plugs of hard rubber or lead are used by others. The cause of the prolapsus,

whatever it is, ought to be eliminated. Polypi or vesical calculi should be removed, constipation and chronic diarrhœa should be cured. The child ought not to be allowed to defecate sitting upon a low stool, and each passage should be assisted by a large enema.

The swollen mucous membrane must be cleansed by frequent injections, and astringents be applied to it, a one per cent. solution of nitrate of silver being recommended; the latter must be neutralized at once with salt solutions, as otherwise it may produce soreness of the rectum, and thus lead to tenesmus, which will increase the existing prolapsus. Excessive hyperemia may be relieved by applications of ice and a four per cent solution of cocaine. In exaggerated cases, the solid stick of nitrate of silver might be applied, or, better still, the actual cautery, which may be applied longitudinally, transversely, or at several different points. If the sphincter is weak, an induced current passed through the perineum, is beneficial, sulphate of strychnine being administered hypodermically in daily doses varying from $\frac{1}{60}$ to $\frac{1}{24}$ gr. Instead of the latter, an ointment composed of one part of extract of nux vomica and from twelve to twenty parts of fat or vaseline, may be introduced into the rectum.

Fissure of the Anus.—This is generally regarded as a rare affection in infants, but it is more frequent than is usually supposed. Kjelberg is the only writer who claimed that it is frequent during the first year of life. It generally appears as a narrow, reddish or grayish slit, observed on separating the margins of the anus, seldom extending beyond the sphincter, while the surrounding parts present a normal appearance. The fissure is extremely sensitive to the touch, and an examination frequently causes a contraction of the

sphincter that is partly voluntary and partly spasmodic. A milder form of fissure may result from the rhagades of congenital syphilis, or from local skin eruptions. The more severe varieties are due to constipation or the passage of foreign bodies; the former condition may result from a congenital contraction of the sphincter, leading to an accumulation of feces in the ampulla, just above the point of constriction. As a rule, the fissure is situated at the posterior edge of the anus in the median line. The pain during defecation is intense and may last for several hours afterwards, so that the little patient's face becomes haggard and distorted; abdominal pain, tympanites and other intestinal troubles may co-exist with cerebral irritation and sleeplessness—all of which symptoms may often disappear after a single dilatation of the sphincter. Vesical spasm and dysuria are not unfrequently due, not to the presence of a calculus, but to anal fissure.

Incontinence may occur instead of dysuria, not the paralytic form, but that in which small quantities of urine are passed at a time with tenesmus. In many children the symptoms may be more general; they are restless and fretful, lose their appetite, their sleep is disturbed, and they scream suddenly without any apparent cause. Their stools are frequent, but of the average daily amount and appearance. A poly-pus and fissure may rarely co-exist in the same patient after the first year of life; there will then be frequent discharges of blood, as well as excruciating pain in the region of the anus. The proper treatment of fissure consists in forcible and instantaneous dilatation of the sphincter, with or without anæsthesia, by the introduction of the two index fingers. The sphincter should be stretched until its fibres are distinctly

felt to give way. Boyer advises deep incisions through the sphincter, but these may be followed by hemorrhage, ulceration and septic absorption.—*American Journal of Obstetrics.*

The Different Forms of Paralysis met with in Young Children.

DR. WHARTON SINKER, *Jour. American Medical Association:*

The most frequently met form is infantile spinal paralysis, or *polio-myelitis anterior*. This term indicates the pathology of the disease, which is an inflammation of the nerve cells of the anterior horns of white matter of the spinal cord. This affection may come on at any period of life, but is generally seen in children and usually at the age of two years.

The children are generally strong and apparently healthy, and the paralysis is sudden in its onset. Fully two-thirds of the cases I have seen have been attacked in the summer months, hot weather and teething seeming to be predisposing agents. Dr. Barton, of Manchester, England, reports that of fifty-three cases in which he noted the time of onset, twenty-seven occurred in July and August. The attack is preceded by fever of greater or less intensity, with pain in the head and limbs, with general soreness when moved or lifted. After a few days, paralysis more or less complete occurs, but in a few days a regression of the paralysis from some of the affected parts occurs. Sensation is undisturbed. Atrophy of the muscles is soon apparent; in fact, the paralyzed portion stops growing for a time. The temperature of the affected portion is low and the skin is blue and mottled, but there is no tendency to ulceration, and wounds or scratches heal readily. The skin and tendon reflexes are lowered or abolished in the affected limbs. At

first response to the farradic current produces but little muscular contraction, except when a powerful current is used. When atrophy has set in the reaction of degeneration is seen. Most cases of club foot are the result of infantile palsy. Deformities of the upper extremities are rare; this disease differing in this respect from cerebral palsies.

The exact causes of infantile palsy are unknown. Over fatigue often precedes an attack; sudden chilling is considered by S. Seguin to be a frequent cause.

The *prognosis* as to perfect recovery is only moderately good. In many cases the most faithful treatment fails to restore the paralyzed muscles, but in almost every case we can expect more or less improvement.

In the early stages of the paralysis, after the subsidence of the fever, the treatment should consist of mild stimulation to the spine; ergot, and small doses of bromide of potassium should be given instead of the bromide. When the palsy is established, electricity and massage are the means to be depended upon. They must be persisted in for months or even for years. Internal treatment is of little or no value unless there is some failure in the general health of the child.

Spasmodic paralysis as seen in children is of two varieties. When of primary spinal origin, or when there is a descending degeneration of the cord from a primary cerebral lesion, there sometimes seems to be a congenital defect in the motor tracts of both brain and cord. In the spinal variety there is often seen, soon after birth, rigidity of the limbs; at first this is only occasional, but as the child gets older, every effort to move a limb causes muscular rigidity in it. The child does not attempt to walk until three or four years of age. Then

when it is supported under the arms and it tries to stand or to walk, the movements are very peculiar and characteristic. The feet are extended and inverted so that the child rests on the toes. The knees are strongly adducted and lock together so that the legs become entangled. By degrees the child becomes able to walk with the aid of apparatus or some form of crutch. The hands and arms are often affected, and every effort causes muscular rigidity to come on. The mind is unaffected in these cases, and the speech may be distinct, although it is often very defective. Sensation is unimpaired, and the patella reflex and ankle clonus are exaggerated. There is no wasting of the muscles. By these symptoms we infer that the disease is localized in the lateral columns; but exactly what is the nature of the lesion we do not know, for no post-mortem examinations have been made in these cases. The cause is unknown. Hamilton found three of seven cases which he had collected were premature births. Adherent and contracted prepuce has been thought by some to be caused by reflex influence of the spasmodic paralysis, but operation has not given relief. The treatment should consist of massage, galvanism to the spine, ergot and cod liver oil. Fluid extract of conium may be given to allay spasm. In severe cases great improvement follows this treatment.

Even when we can do no positive good to the limb, very much can be effected by the aid of apparatus. Properly adjusted braces to the legs will enable a child to walk on crutches or on a Durrach wheel crutch.

There is a form of spasmodic spinal paralysis in which the child is imbecile. In these cases there has probably been congenital defect in cerebral development. The head is small and there is

no evidence of intellect ; often nystagmus is present.

Paralysis from Pott's Disease.—Paralysis of the lower extremities may result from caries of the spine. The lesion may be either a meningitis or a myelitis ; if meningitis alone, there is considerable pain and contraction of the legs. Generally there is a transverse myelitis. The symptoms are numbness and pricking of the legs, with loss of sensation ; gradually increasing loss of power, with wasting of the muscles ; incontinence of fæces with retention or incontinence of urine. Sometimes there are ulcers over the sacrum or on the limbs.

The indications for treatment are evident. An apparatus which will take the weight of the body from the spine is necessary and is sometimes sufficient of itself. Frequently, however, the application of the actual cautery over the spine brings improvement in the symptoms when an apparatus has done no good. Massage and electricity should be used to restore the atrophied muscles.

Paralysis from Rachitis and Diphtheria is seldom complete. The former is often spoken of as the pseudo-palsy of rickets. Negro children, who are very subject to rachitis in cities, often have rachitic paralysis. The child at three or four years is unable to walk or stand. Sometimes it has not sufficient muscular development to sit upright. It can move every limb and has no loss of sensation, but has no power. Cod liver oil and massage bring about the most satisfactory results in these cases. *Diphtheritic paralysis* usually begins in the muscles of the soft palate and pharynx and extends to the extremities. It is generally bilateral and incomplete, but I have seen a case in which it was hemiplegic. It is considered peripheral in character, and is believed by some to be connected

with the altered condition of the blood consequent on the original attack. Diphtheritic paralysis is rarely fatal, and lasts in most cases only a few weeks, although it may continue for months. Strychnia and electricity are the means to be employed, and the case usually responds promptly to these remedies.

Pseudo-hypertrophic Paralysis is a rare affection, but is of much interest. The disease belongs almost exclusively to infancy. It is characterized by muscular paralysis with great increase in the bulk of the muscles. This enlargement is due to fatty deposit, while the muscular tissue proper is atrophied. The affection begins with weakness of the legs, a peculiar balancing of the trunk, and separation of the legs in walking. The shoulders are thrown far back in standing and walking. There is great difficulty in getting from the sitting to a standing position. Later in the disease the muscles become wasted and shrunken, and the general health begins to suffer. Death results from implication of the respiratory muscles. The skin is mottled like a piece of castile soap. The tendon reflexes are abolished and electro-muscular contractility is impaired. There is often a greater or less amount of mental weakness. There is no loss of power over the bladder and rectum, and sensation is not affected. Heredity influences the disease, which is slow in its progress, but the course is steadily downward.

Freidrich's Disease is still more rare than the preceding. It is practically locomotor ataxia in childhood. There is evidenced here also a hereditary predisposition, and the female children seem most liable.

Cerebral Palsies.—Hemiplegia may result from some injury at the time of birth, either from the forceps or from

the pressure of a prolonged labor. A child may be born hemiplegic after a perfectly natural and easy labor. Under these circumstances we must regard the paralysis as the result of imperfect cerebral development. Hemiplegia, under these circumstances is generally permanent. The side affected grows less rapidly than the other. The flexors of the arm and hand are usually contracted. The leg becomes rigid in the act of walking. Convulsion is almost always associated with cerebral paralysis, either immediately preceding the attack or occurring soon after. The convulsive movements are most violent on the side which is subsequently paralyzed. The child will have an idiotic expression and speak indistinctly, but their friends think them intelligent. The convulsions are liable to return when the child is older, and then assume an epileptic form. The walk is peculiar and is called the spastic gait; the patient plods along looking as if he were about to pitch forward. The affected limbs are smaller and shorter, the growth of both bone and muscle being affected. In the choreaic variety, where the arm is in constant motion, the muscles may become hypertrophied, but the bone remains short.

Prognosis.—As a rule the prospect of recovery is bad; even if the patient gets well the hemiplegic side remains awkward.

Treatment.—Cod liver oil and massage, which always relaxes the contracted muscles. The affected limbs should be used by the patient as much as possible.

Summer Diarrhœa.

In the large class of summer diarrhœas of children and adults, with griping in the bowels and flatulence, the use of listerine, in doses varying from ten drops to a teaspoonful (with or without

water) has a most salutary and pleasing effect.

It can be administered at short intervals after eating, as soon as regurgitation, distension or acidity occurs. Its action in arresting excessive fermentation is prompt, besides it exercises a decided sedative influence on the mucous membranes of the stomach.

The thymol, menthol and boracic acid which, with the quota of alcohol necessary to their proper admixture, form the principal elements of listerine, lend to this compound a special value in this class of cases.—*New York Medical Journal.*

The Internal Administration of Chrysarobin in Infantile Eczema.

STOCQUART (*Monatsch. f. Prakt. Dermat.*) reports a number of cases of eczema in children, all of which were treated with small doses of chrysarobin, from a thirtieth to a tenth of a grain, or even a grain, being administered daily. The periods of cure did not exceed ten days. Theoretically, the drug is supposed to exercise a constricting action upon the capillaries of the skin.—*Ibid.*

A Purgative for Infants.

M. HUCHARD (*Nouveaux Remèdes*) suggests a tablespoonful of a mixture of equal parts of castor oil and Malaga wine, thoroughly shaken together.—*Ibid.*

Infantile Constipation.

DR. LOUIS STARR recommends. ℞. Mannæ opt., ʒj; magnesiæ carb., ʒj; ext. sennæ, fl. ʒiij; syr. zingiberi, ʒj; aqua, ʒiij. M. Sig.—One teaspoonful two or three times daily.

℞. Resinæ podophylli, gr. ½; spts. vini rect., ℥ xv; syrapi, ʒj. M. Sig.—One teaspoonful at bedtime.—*Medical Bulletin.*

A Few Suggestions for the Preparation of Milk for Infants.

DR. JOHN M. KEATING (*Medical News*):

At this time of year the subject of infant diet becomes a very important and interesting one. At the recent Sanitary Convention held in this city under the auspices of the Pennsylvania State Board of Health, I advocated the use of cow's milk prepared so as to resemble closely woman's milk, as the best form of diet for at least the first three months, urging at the same time that a certain amount of a soluble salt of lime should always be added to an infant's food to counteract the great tendency to rickets which exists in all bottle fed, and, indeed, in many of the nursed children of the day.

Let us take one of the given analyses (Percy) of cow's milk, that of an ordinary mixed dairy—

Water.....	86.67
Butter.....	3.20
Sugar.....	4.20
Casein.....	5.30
Salts.....	0.62

If this is diluted with *three* times its bulk of water, it will give us the following:

Water.....	96.70
Butter.....	0.80
Sugar.....	1.05
Casein.....	1.33
Salts.....	0.16

There seems to be some difference of opinion in regard to the quantity of casein and sugar (per cent.) in human milk. In every young infant it is better to have the minimum quantity as a basis to begin with, so that by diluting the milk as above, we reach, accurately enough for practical purposes, the percentage as given by A. V. Meigs, viz.—

Water.....	87.16
Butter.....	4.28
Sugar.....	7.40
Casein.....	1.04
Salts.....	0.10

If to a *four*-ounce mixture composed of *one* ounce of ordinary milk and *three*

ounces of water, we add *one* ounce of ordinary cream (about fourteen and a half per cent. of butter), and about eighty grains of sugar of milk (a level teaspoonful and a half),* we will get a result which closely resembles woman's milk, though containing less casein and more sugar than most authorities give as the result of their investigation.

Still, for very young infants this is an advantage rather than otherwise. As the child grows older, say two or three months, the amount of casein can be increased as follows:—

Take *two* ounces of ordinary fresh milk, add *two* ounces of water; the following will be the result:—

Water.....	93.38
Butter.....	1.60
Sugar.....	2.10
Casein.....	2.65
Salts.....	0.31

Now, add two tablespoonfuls of ordinary cream, of good quality, and a heaping teaspoonful (about 100 grains) of milk-sugar. Cream itself contains about three per cent. of casein. But I have insisted that there must be a certain amount of lime added to the mixture, and I do not think that lime water always serves the purpose required, even if it be given in large amounts. I prefer the soluble *lactophosphate*, and have used it largely with success for some years. To make this matter simple and to facilitate the carrying out of instructions, I have had compressed *tablets (Milk Food Tablets)* made, each containing—

Sugar of Milk.....	26 grs.
Calcis lactophas.....	1-6 gr.
Calcis carb.....	1-12 gr.
Sodii bicarb.....	1-2 gr.
Potass. bicarb.....	1-12 gr.
Sodii chloridi.....	1-6 gr.

* A silver teaspoon, such as is in ordinary use, when filled with sugar of milk and "leveled," will contain about fifty-seven grains; a plated teaspoon contains about five grains less—practically one drachm. A silver teaspoon when "heaping" holds about 117 grains of sugar of milk—practically two drachms.

These can be made up in large quantities, put in cans or wide mouthed bottles, and are to be used as follows :

To prepare the bottle for a child about a month old or younger, take three ounces of boiling water and stir in one ounce of ordinary milk ; to this add three tablets and dissolve thoroughly ; place the mixture in a nursing bottle and add two tablespoonfuls (one ounce) of good, fresh cream ; shake well, and give to the child at about the temperature of the body.

For a child two or three months old, prepare the bottle as follows :

Take two ounces of water (boiling) and stir into it two ounces of good, fresh, ordinary milk (if the child is of a constipated habit, they need not boil together) ; then dissolve into the mixture four tablets, pour this into the nursing bottle, and add one ounce of fresh, ordinary cream ; shake well.

If the child's stools contain a mass of curds, showing deficient digestion, it would be well at once further to dilute the milk. Should this not be sufficient a small quantity of malted food, such as Mellin's or Horlick's, a teaspoonful to the bottle, can be added, to stimulate the digestive functions. If this fail, then use *peptogenic* milk powder, and predigest the curd ; and, finally, if still unsuccessful, put the child on condensed milk.

OBSTETRICS.

Induction of Labor for Uræmic Poison.

DR. J. R. CARROLL, of Dovesville, S. C., sends us the following history :

I was summoned to see a patient, a lady, æt. 20, who was suffering from successive convulsions. After relieving her, I ascertained her previous health had been very precarious for several months. I found her a primipara, with general anasarca, and specially œdema-

tous was the labia majora, to the extent that assures such proportions as scarcely to be received with credulity by the profession. On analysis her urine was found to be 90 per cent. albumen, her bowels obstinately constipated, her alkaline urine only voided by catheterization. She was advanced to seven months in pregnancy. She was in a state of nervous prostration, torturing neuralgic pains prevented ease night or day. After consulting with her husband, he readily consented to induction of labor. After evacuating the bowels and the bladder, puncturing the labia, I then performed the operation according to Simpson's method. Her extreme nausea and protracted vomiting forbade the use of chloroform, so I relied on morphia and chloral ; it took eight hours to effect delivery. She had a violent convulsion between the birth of child and after-birth, which was controlled by chloroform, which did not prove conducive to hemorrhage. I used chloroform and hyperdermic injection of morphia to control convulsion. No depletive measures to remove the swelling, save infusion of digitalis, which was efficient after labor. She was in an extreme case of hyperæsthesia, for which I ordered large doses of bromide potass. and chloral hydrate. I left both in good condition. The mother has had no more convulsions and has assumed her natural size.

Treatment of Labor Delayed by Obstruction at the Pelvic Brim.

DR. SAMUEL SLOAN thus concludes a valuable article in the *Edinburgh Medical Journal*.

I now add a series of propositions for guidance in cases of labor obstructed at the pelvic brim. I do not offer them as final, but hope they may have a share in helping us to reach the time when the mist surrounding this important subject

shall have vanished, and we shall be able to do more than we now can for the safety of both mother and child.

1. That mere disproportion between the child's head and the brim of the pelvis is never a sufficient reason for preferring version to the forceps as an original choice in the combined interests of mother and child.

2. That cases sometimes occur, in which, for other reasons, version is to be preferred to the forceps as an original choice, but that if the child be of presumably average size, this operation should not be attempted with a conjugate diameter under $2\frac{3}{4}$ inches, and, with such a diameter only if it is a *justo-major* pelvis flattened.

3. That the following are some of the "other reasons" for preferring version to the forceps as an original choice: The occiput to the wrong side of an irregularly contracted pelvis; occipito-posterior position in a generally contracted pelvis, which position cannot be rectified manually (or rather bimanually); prolapse of the funis; placenta previa; face presentation; displacement or increase in bulk of the presenting part, as by the partial or complete descent of a hand or foot along with the head; great inclination of the pelvic brim throwing the head on to the pubes instead of permitting it to be over the brim; great difficulty in applying the forceps, or a very tight and incomplete locking of the forceps after some difficulty in their application.

4. That where the forceps for "other reasons" is unsuitable as an original choice, version may be tried, not simply in the flat, but in the generally contracted pelvis also, flexion of the head being no contraindication.

5. That if version is decided on, the breech of the child, where this is at all practicable, should be allowed naturally

to dilate the cervix; and that, if one leg must be brought down, the other should be left to increase, with the pelvis of the child, the expansion of the cervix.

6. That if version is decided on as an original operation, it ought, if possible, to be done by the bipolar method, and as soon as the os is sufficiently dilated to permit of it—the membranes being, if practicable, kept entire after version, but ruptured at once, if this is necessary in order to keep the breech in its new position.

7. That in cases of doubt, forceps should be preferred to version as an original choice. But should the pelvis be shallow, version has this advantage, that if the body be born, the child can sometimes be made to breathe though the head is at the brim. Craniotomy will also then be less difficult to perform, should this operation be afterwards required.

8. That in cases in which the forceps has failed there should be some reason for suspecting other causes than disproportion (see Prop. 3), before version is attempted as an alternative to craniotomy.

9. That the employment of version as an alternative to craniotomy, as a routine practice, is terribly hazardous to the mother, although it probably sometimes saves the child's life.

10. That in a generally contracted flat pelvis, if the child be of average size, and the degree of contraction be at all great, version is entirely inapplicable. A short trial should be made with the forceps. If no progress be made, craniotomy should be performed at once.—*Cincinnati Medical News*.

[The above summary of the treatment of labor obstructed at the pelvic brim, will bear and should receive careful consideration; as it is the matured statement of a veteran obstetrician.]

CONSTITUTIONAL DISEASES.

Treatment of Diphtheria.

DR. DE LASKIE MILLER (*Journal American Medical Association*):

Diphtheria is a general disease.

1. It is characterized by a period of incubation.

2. The general symptoms appear before the local.

3. The introduction of the germs by inoculation upon a distant part of the surface is followed by the appearance of the false membrane upon the faucial mucous membrane.

4. The membrane may form, under favorable conditions, upon various parts of the body.

These assumed facts would seem to be valid reasons for the belief that the throat affection is a local manifestation of a general disease.

Diphtheria is not croup,

1. Diphtheria is infectious. 1. Croup is not.

2. Diphtheria is a general disease. Croup is local.

3. Diphtheria is an epidemic asthenic disease. 3. Croup is a sthenic local inflammation.

4. Diphtheria may be followed by paralysis. 4. Croup not.

5. Diphtheria may be complicated by albuminuria. 5. Croup not.

6. The diphtheritic membrane involves the subjacent tissues. 6. In croup the exudate becomes a solidifying membrane upon the mucous surface.

In the management of diphtheria it is of the first importance to recognize the infectious nature of the disease. For the protection, therefore, of the healthy, isolate the sick. The room assigned to the affected should contain only the simplest articles of furniture. Carpets, curtains and upholstered furniture should be removed. The atmosphere

of the apartment should be kept at a uniform temperature of about 72°, and good ventilation should be secured without exposing the patient to draughts of air.

After the determination of the case, the thorough disinfection of the room, bedding and furniture should never be neglected, and the same may be affirmed of the clothing and persons of the attendants, and of the convalescing patient, as well.

The indications of treatment may be formulated as follows :

1. Destroy the septic germs in the blood.

2. Eliminate effete material from the system.

3. Prevent the formation of, or remove the pseudo-membrane.

4. Control pain and restlessness.

5. Sustain the strength of the patient.

6. Prevent the sequelæ.

7. Perform tracheotomy (?) or intubation.

The asthenic nature of the disease should be borne in mind, even in the earliest stage, that the treatment may be preventive of the possible sudden prostration which precedes the dangerous complications. The alimentary canal should be freely evacuated. This may be accomplished by exhibiting some unirritating agent, as castor oil, rhubarb, or a suitable dose of the compound cathartic pill ($\frac{1}{2}$ grain or 1 grain).

Keeping in mind the indications which have been tabulated, some combination of remedies may be devised which will meet most of the requirements of the case. And it is fortunate that the remedies from which experience justifies an expectation of benefit are not incompatible, and may therefore be grouped. It is also worthy of consideration, that medicines intended for children especially should be rendered

as palatable as possible. For this purpose the syrup of lemon may be substituted for the glycerine and water in the following prescription.

The following prescription is suggested as an example of such combination: ℞. Tr. ferri chloridi, ʒj; potas. chlorat., ʒij; acid hydrochloric dil. m xx.; tr. capsici, ʒj; morph. muriat. gr. ss; glycerine, ʒij; aq. destil., ʒ ijss. M. S. Give a teaspoonful every hour or two or three hours, according to the urgency of the symptoms.

Of course the proportions of the several ingredients will be varied in different cases to adjust the doses to the age and condition of the patient. The directions for taking the mixture given above, however, convey but an imperfect idea of the most efficient mode of using it. The patient should be required to take a drink of water, then immediately take the mixture undiluted. By this mode several indications are fulfilled at one and the same time. An efficient local application is made to the throat each time the mixture is administered, and the constitutional tonic, antiseptic and anodyne effects are also secured. The water which was taken before the medicine will be sufficient to properly dilute the remedies in the stomach, and thus prevent any irritation of that organ.

In mild cases this prescription will fill all indications, and a large proportion of cases in which this treatment was commenced early will progress and terminate as mild cases, which under some other course would prove severe and endanger the life. It will be unnecessary to annoy the patient by making other local applications. Moreover, there is good reason to assume that the paralysis which is sometimes a serious complication during the convalescence is due to impoverishment of

the blood, the restoratives contained in this mixture should therefore prove a powerful preventive of this complication. Experience justifies this expectation, for paralysis will be encountered but seldom during the progress of the disease or in the convalescence.

The same may be affirmed of the effects of this mixture upon the local symptoms and upon the formation of the pseudo membrane. The local pain, the congestion and swelling are relieved, and it is not unusual to see the forming membrane disintegrate and disappear within twenty-four hours after commencing the treatment. The earlier suitable topical applications are made to the exudate the more easily may it be removed. Unquestionably the case is sometimes made worse instead of better by the frequent resort to the probang, charged with escharotics or irritating agents. Besides, the excitement produced by this procedure must result in injury to the patient, especially when force is required to overcome the resistance offered by the child from fear and dread of the operation.

The importance of surrounding the patient with a warm atmosphere has been asserted. It is also important that the air be kept moist. The inhalation of simple warm aqueous vapor will produce benefit by its solvent effect upon the exudate, and also by allaying irritation and discomfort of the fauces. While this is being done additional benefit will be attained by charging the vapor with some agent or agents of recognized power in resolving the membrane, and also efficient as antiseptics, as aqua calcis, eucalyptus, oil of turpentine. Pepsin or trypsin may have a beneficial effect in dissolving the membrane, when the ordinary remedies fail.

The steam atomizer will be found efficient in utilizing the vapor. After a

certain age, no difficulty will be experienced in directing the spray into the throat. And even in cases of very young children, the timidity may be readily overcome by placing the atomizer when in use (and it should be in use while the false membrane persists) at a distance from the face, and gradually approximating it till the vapor is inhaled freely. The same object may be attained by causing the vapor, charged with the solvent, to rise from an open vessel placed contiguous to the patient.

Of albuminuria it need only be said that it is present in a large proportion of cases, and that while the kidney is large and pale, it is not indicative of the serious renal complications, as in scarlatina, and it is exceptional when any serious effects from it become chronic. Iron and chlorate of potash would seem to be indicated for this phase of the case, and these are contained in an eligible form in the prescription already given.

In conditions of great depression stimulants are indicated. It is a fact of common observation that alcoholic stimulants are well borne in diphtheria, and that intoxication is not likely to follow even the free administration of whiskey. So beneficial are stimulants, that the free use of spiritus frumenti is considered by some as specific treatment (?) in diphtheria. Under the same condition it will be natural to cast about for other active tonics, and quinine will be among those selected. That quinine produces any specific action in diphtheria is problematical, and when administered, it should be for its tonic effect.

Croupous Tonsillitis vs. Diphtheria.

DR. L. E. HOLT, in the *New Jersey Medical Journal*, says :

In order to present more forcibly the points of contrast between this disease

and true diphtheria, I have arranged them in the following tabular form :

<i>Croupous Tonsillitis.</i>	<i>Diphtheria.</i>
1. Invasion abrupt.	1. Much more often it is insidious.
2. Most marked general disturbance during the first two days; no tendency to asthenia.	2. Generally not much general disturbance before the third day, but after that marked tendency to asthenia.
3. Starts with a temperature of from 103° to 104.5°.	3. Rarely high in the beginning, 100° to 101°, gradually rising till the fourth or fifth day.
4. Pulse full and rapid.	4. When rapid it is feeble.
5. Membrane of yellowish color; edges sharply defined; limited to tonsils; does not bleed when detached; superficial; not very adherent; no tendency to reform after removal; appears early; does not spread.	5. Color gray, sometimes greenish; shades off gradually; on uvula, soft palate, and pharynx as well as the tonsils; bleeds readily even without being detached; infiltrates the deeper tissues; adherent; strong tendency to reform after removal; may not be seen the first or even second day; spreads steadily.
6. Albuminuria rarely if ever present.	6. Albuminuria rarely absent.
7. Reaches its height by the second day; by the fourth, the patient is generally convalescing.	7. Most commonly does not reach its height before the fourth day.
8. Paralysis never follows as a sequela.	8. Paralytic sequelae quite common.
9. It is doubtful if it is ever contagious.	9. Frequently spreads by contagion.

[We call attention to the above because so many hold that there is no essential difference between the two conditions, holding that it is only one of degree. Dr. Holt has done a good thing in writing his paper.]

A. H. P. L.

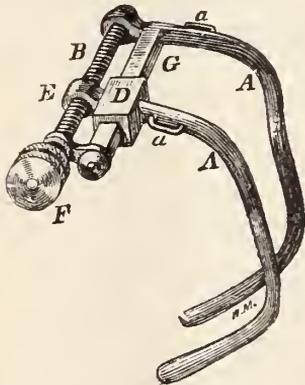
Tracheotomy Dilator.

DR. WALDO BRIGGS, in *Weekly Medical Reporter* :

Surgeons who perform frequent tracheotomy operations have long felt the need of some practical substitute for the different forms of tubes which have heretofore been used, an instrument

which could be more easily introduced, and that would retain itself in the trachea, one that would require less watchfulness and care on the part of the attendants, and was not liable to become clogged by the mucus or false membrane, and that did not of itself cover so much of the wound, and above all, something which would admit of dilatation of the lesion, if such became necessary.

The dilator made for Dr. Briggs by Hernstein & Prince, of St. Louis, is provided with loops (*a a*) for the insertion of tapes to keep same in place, but, as the instrument is self retaining by the form of the blades, it will be rarely necessary to use the tapes.



The instrument as shown in above cut, consists of two narrow blades (A A) of solid steel, curved as shown in the engraving and convex on the outer sides, the inner side of each blade being made flat, so that they may approach each other more nearly when closed. One of these blades, the left, is stationary, while the other slides by means of box D, upon the bar G, receiving its motion from the screw B, through the screw nut E; the screw is provided with a milled head, which renders the adjustment of the blades a rapid and easy operation; it is inserted and used as follows:

The blades of the instrument should be screwed up in close contact to each other before the operation is commenced. After the trachea has been reached and the incision made into it, the knife should be retained within the trachea, and the blades of the dilator inserted by slipping them in alongside of the blade of the cutting instrument, which thus acts as a director for them; this done, the knife may be withdrawn and the blades of the dilator separated to a proper distance. Should the wound become clogged at any time, the blades may be further separated, which will dilate the trachea and cause the obstructing material to be coughed out, or, it may be removed by the forceps or other suitable instrument.

Meat Jelly, Made at Home.

There are a number of good meat juices and meat extracts in the market, but for nutriment and palatableness none of them equals the following, which I commend especially to those having a country practice. Take equal quantities of good juicy lean beef, lean veal and lean mutton, and cut them into half-inch cubes or smaller. Put these cubes into a glass jar, or wide mouthed bottle, *without any water or other addition*; cork loosely, or cover with two or three thicknesses of linen or fine domestic, tied on, and immerse the bottle in a pot of cold water. Let the pot stand by the fire, close enough to keep at a simmer, but not come to a boil, for six or eight hours, according to the amount of meat used. At the expiration of this period, remove the jar and strain off the fluid while still hot; add salt sufficient to give the fluid a taste of it, and then put in a cool place to jellify. The product is a concentrated essence of meat, of high nutritive value and a delightful flavor. It

may be given alone or with other nutriment, one to two teaspoonfuls at a time, every hour if necessary.—*St. Louis Medical and Surgical Journal*.

Ice in the Sick Room.

A saucerful of shaved ice may be preserved for twenty-four hours, with the thermometer in the room at 90° F., if the following precautions are observed. Put the saucer containing the ice in a soup plate and cover it with another. Place the soup plates thus arranged on a good heavy pillow, and cover with another pillow, pressing the pillows so that the plates are completely embedded in them. An old jack plane, set deep, is a most excellent thing with which to shave ice. It should be turned bottom upward and the ice shoved backward and forward over the cutter.—*Ibid.*

Leyden on the Treatment of Obesity.

PROFESSOR LEYDEN, President of the Society of Medicine at Berlin, summarizes the experiences and opinions set forth in a discussion on the above subject, as follows (*Der Fortschritt, from Deutsche Med. Wochensh.*):

I fail in concluding, from the present debate, that one method of treatment may claim a signal superiority over the others; and my own experience in practice confirms me in this view. It seems to me that all the various methods possess nearly the same merit; every one of them, when judiciously persevered in, producing the wished-for result. We certainly may regard it as a material practical progress, to be enabled now-a-days to have at our command several efficacious methods of treating obesity, of which we may select that most suitable to the nature of the individual case, being at the same time agreeable to the predilection of the patient. As

a general rule, we ought to be guided by the etiology of the case; *i. e.* we have to withhold that kind of aliment on which the patient has grown abnormally fat. Therefore, the problem how to reduce the superfluous fat in a patient cannot be of great difficulty. The leading principles to achieve this—*viz.*, limited ingestion of food and increased structural metamorphosis, assisted by muscular exercise, are very old, but our means of accomplishing it have enlarged. The treatment, above all, ought not to endanger the general health, and ought to lead to success without the least possible inconvenience to the patient. These two conditions form the main pivot of the present discussion. Without, however, some self-denial, the necessary abstinence cannot be carried out. All the various methods, notwithstanding their apparent diversity, agree in the reduction of food; and the modern limitation of liquids (Orth's method) is in fact nothing else. Some persons can more easily endure thirst, others hunger.

Nor can I perceive a material indication of one method being more effectual than another. With due circumspection and perseverance, every one may finally succeed. But, at the same time, all these methods are fraught with some danger; anæmia, exhaustion, and especially debility of the action of the heart, not uncommonly ensuing after such anti-fat cures, when carried on too energetically and without discrimination. Such injurious consequences may even arise, when the treatment has been undergone with proper precaution and patience. There are many fat persons, whose proper condition of health requires a certain degree of stoutness: they will become ill and weak as soon as they lose fat. The physician, therefore, ought to consider the individual

nature. Young persons, on the other hand, especially men who have grown stout from too liberal indulgence in beer or at dinner parties, will soon and without danger be reduced and brought into proper condition by due limitation of their self-indulgent habits.

The selection of the method ought to depend not only on etiological considerations, but on the individualizing judgment of the physician, and partly on the preferences of the patient. And in the latter, undoubtedly, fashion plays a very pre-eminent part. No experienced physician will disregard the influence of fashion on medicine and therapeutics; fashion constitutes, I aver, a remedial agent which the physician has, in some degree, to acknowledge. Patients have more confidence in remedies which are of the fashion of the day, and more willingly submit to deprivations enforced by a treatment if this happen to be in fashion, *i. e.*, if a number of well known leaders of society and of their personal acquaintances have accepted it.

This influence of fashion we have met with in a remarkable manner in the different methods of treatment of obesity. Twenty years ago Banting's cure was in fashion, which, if used with certain rational restrictions, I still consider the best treatment. At that time persons of the better classes, who fancied or observed the slightest propensity to become stouter, adopted Banting's dietary. At present, for the same reason, they barely dare to partake of soups, and either limit to the utmost their drinks, or entirely abstain from liquids, and consider thirst a far less severe penance than any other kind of treatment.

Stout people resort with good effect to mineral waters and baths, losing there from ten to twenty pounds, thus preparing themselves for the dissipa-

tions of the coming season. They consider it a far smaller ordeal to submit for four to six weeks to the strictest abstinence in order to indulge during the remainder of the year in every luxury of the table, than to regulate their diet and to deny themselves any gastronomic enjoyment all the year through.

In concluding with a few words on the history of this subject, I may point out that the problem of the anti-fat cure is by no means one of the exigencies of modern times, but is coëval with medical science, or what in most remote antiquity passed for that. Hippocrates has laid down hygienic and dietetic rules for the prevention and the treatment of obesity, which are too well known to require further allusion. I shall confine myself to quotations from Galen and Celsus. The former gives the following advice:

"The best method of getting thinner consists in gradually withdrawing from the body that whereof there is superfluity, and in strengthening at the same time those parts which had been expanded. Bodily exercise will undoubtedly prove very advantageous, as we see stout horses getting lean by heavy work. Thus, likewise, those will never grow fat who are obliged continually to toil with hard labor. This, however, requires great precaution, it being certain that fat people frequently run danger of death when attempting violent bodily exercise."

Therapeutic Uses of Hot Water.

DR. D. T. SMITH, says substantially, in the *American Practitioner and News*:

In several cases of deep stupor from intense malarial fever, I am sure I have saved life in this way. In these cases, being called to patients already in such a state of stupor that nothing could be swallowed, and apparently beyond the

reach of internal medication in whatever way applied, I have ordered cold water poured on the head in great amount, with the result that they speedily rallied and made a good recovery; quinine, of course, being given to remove the cause of the disease.

In persistent vomiting there are few remedies, or none, so efficacious. Cloths freshly wrung from hot water applied to the stomach, iced water externally over the pharynx, and iced water or hot water frequently swallowed in small quantities, relieve the vast majority of cases of vomiting. In the convulsions of children, due to intensity of fever, the method of using it is that already described, viz., pouring it on the head.

In the convulsions of hysteria it acts like magic when properly used. In these cases we have to discriminate, since the rude use of water which gives the best result can not always be resorted to. Where we have full control, as among certain indigent and hospital patients, we can relieve these cases almost instantaneously by the dashing of water from a distance upon the face and head, as if we were bent on drowning them. A few minutes usually suffice for the relief of the worst cases.

In many cases of this character, where the nervous element is prominent, the treatment seems to act by breaking up the association of ideas or emotions that have taken on a warped character and engross the attention of the mind.

As a hemostatic, hot water occupies the very front rank. In menorrhagia or *post-partum* hemorrhage nothing else compares with it in a great majority of cases for arresting the excessive discharge. When used for this purpose it ought to have a temperature of from one hundred and ten to one hundred and twenty degrees, and be permitted to

drain off freely after reaching the cervix and other neighboring parts. When applied to external bleeding surfaces it may be used of a much higher temperature, even to boiling, provided arrangements are made to remove it at once as one would the actual cautery. Thus, in the slight cuts from shaving, the corner of the towel dipped into hot water and quickly applied to the bleeding spot promptly arrests the hemorrhage.

In cases of large bleeding surfaces, as after extensive surgical operations, I have not seen it tried, but, judging from current literature, it is winning a strong position as a hemostatic, even in abdominal surgery.

In ulcers of the stomach, giving rise to hemorrhage, hot water is also spoken of in commendatory terms.

In gonorrhœa it is an old-time remedy, and its use in dysentery is also advocated.

As a diuretic we treat water as a slave. It works so kindly, so surely, and so universally that we lose sight of its virtues, and seem to say, "What merit hath it; it hath simply done that which it ought to have done." Nearly all other diuretics are something of the nature of temporary helps to it, that can often without loss be dispensed with.

In the morning, when we need to wash out from the blood and tissues the ptomaines accumulated during the previous night, and which make us feel so weak, languid, and worthless, at a time when it seems we ought to be at our best, what is better than plenty of pure cold water drunk freely from the moment of first waking?

In heartburn, and especially in that form in which eructations of sulphuretted hydrogen occur, there is no better course, perhaps, than to fill the stomach with water, pending other measures of treatment.

In this way a patient may be able to come out in the morning fresh and comfortable, whereas, if the attack had been permitted to run on through the night, a week would have been required for the stomach to recover its normal tone.

In isolation, cold water, applied by means of the most abundant affusion, stands unrivaled.

In frost bites, and mild burns also, it is of great efficacy.

As a laxative water has no equal for persistence of effect and freedom from untoward after results. In this trouble the patient should begin on first waking in the morning, and drink from time to time as the stomach will bear until breakfast, or as experience teaches it to be necessary. When food is taken into the stomach, and the flow of gastric juice begins, the absorption of water in a measure ceases, and in large quantities it will then prove harmful.

For local inflammations, especially after injuries, water stands almost alone.

After dislocations or severe sprains or bruises, it is my custom to have a large vessel, usually a bucket, with a hole made in or near the bottom, swung so as to permit a stream of water to pour constantly on the injured part, using water as hot as it can be borne with comfort. In warm weather, however, and in injuries of the extremities, it may often with advantage be used cold. In this way I have seen a case of dislocated patella recover without perceptible swelling.

In swelled testicle I employ the same treatment. I was once called to treat a physician who had been thrown forward on to the horn of his saddle, resulting in a severe case of swelled testicle with excruciating pain. Arranging the apparatus as described, in a few minutes, with the hot water, he had relief, and then speedy recovery.

Lead Colic.

DR. FRANCIS W. CAMPBELL, in an article published in *Cambridge Medical Record*, concludes as follows :

Treatment.—Is palliative and curative. Relieve pain by morphia, by mouth, bowel or hypodermically—warm fomentations to the bowels, followed by hot linseed poultices over the abdomen, on which tincture of opium has been sprinkled. A mixture of chloroform and laudanum, applied night and morning to the bowels, is said to be very effectual in giving relief. Have the bowels move freely, and as they are constipated active cathartics are necessary ; the most active advised is croton oil, in a dose of two drops ; compound powder of jalup is useful ; so, also, is sulphate of magnesia, in doses of ʒj., every two hours, in one-half pint of water, until free dejections are obtained. Purgatives are useful in removing from the system the lead contained in the contents of the bowels. A drachm of dilute sulphuric acid in a quart of sweetened water, should be taken in the twenty-four hours. It is advised that this kind of lemonade might be used at meals by lead workers, as at this period much lead is thought to be introduced into the system. It would form an insoluble compound with any lead entering the stomach. Its efforts for good are said to have been tried and not found wanting at the large lead works at Birmingham, England. The great remedy for getting the metal out of the system, which is the object to be aimed at, is the administration of iodide of potassium, a soluble iodide of lead being formed, which passes away in the urine and other excretions. Its use is not empirical, for cases of lead poisoning under treatment, by iodide of potash, have shown lead in the urine when it was not present previous to the

administration of the remedy. Clinical observation has also given good proof of its efficacy, as I hope it will in the cases now before you. It is best to begin with a minimum dose of five grains three times a day. It should be gradually pushed till twenty grains three times a day is taken, if the system will stand it—as it very often will. The sulphurated or sulphur bath is useful. It is made by putting $\frac{3}{4}$ iv. of the sulphuret of potassium to thirty gallons of water in a wooden tub. The lead appears on the skin as dark discolorations, which can be removed by a brush—change of occupation may be necessary; for the paralysis of the extensors, electricity in its different forms, such as local faradization and galvanization. Strychnia is very useful in this form of paralysis. The powerful effect which strychnia has upon the excitability of the nervous system, and the admirable results which have followed its use in other forms of paralysis, forces itself on our attention here. It may be employed hypodermically. It is a drug, however, which must be given with great caution, and its effects watched, for its effects are various on different persons.

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Certain Points in the Diagnosis of some of the Infectious Diseases.

DR. E. G. JANEWAY, in a paper read before the New York County Medical Association, said :

One of the best safeguards against an error in the diagnosis of small pox was to bear in mind a classification of the varieties as dependent upon the symptoms. One of the most important forms of the disease, and one in which an error in diagnosis was liable to take place, was the hæmorrhagic, or purpuric. This was often mistaken for a malignant type or other infectious diseases, more

particularly scarlet fever and measles, or for purpura hæmorrhagica. A most important question in a doubtful case was, Had there been any exposure of the patient to a disease which might manifest itself in this way? Had the patient visited a strange place, had he been getting new clothing, had a stranger arrived in the neighborhood? Special inquiry should be made as to whether there had been any exposure about fourteen days before the disease developed. The author cited a case of purpuric variola seen in consultation in which the symptoms were obscure and the patient's physicians had scarcely taken the possibility of small pox into consideration. On careful inquiry it was found that the contagion had come from a patient in another town who was nursed and buried publicly through the interest of some charitably disposed ladies. One of the physicians acknowledged that he had never seen, nor even heard of, this form of variola. The case in question established the importance of three facts in making a diagnosis in a case of malignant small pox: 1. The importance of learning the nature of the disease from which this malignant case, not possessing in itself positive features, had developed. 2. Should the patient be dead, this might be learned by investigating others exposed to the original case; these, perhaps having a milder form, might manifest the more characteristic symptoms of the malady. 3. The result of exposure to the malignant case might give a clue to its nature. The cases of malignant small pox which Dr. Janeway had seen had proved fatal about the fifth day of the disease.

Another case was cited which illustrated the importance at times of making an autopsy in order to decide upon the nature of the disease. The case had been reported while he was a member

of the board of health as one of death due to cerebro-spinal meningitis. Dr. Janeway examined the body with Dr. J. B. Taylor, who was at the head of the vaccination corps. The patient had lived six days after his first illness. There had been severe headache, backache, vomiting, and fever, but no rigidity of the neck or the back. There were some twenty petechial spots on the abdomen. At one place there was a vesicle. There was no eruption on the face or extremities. A careful post-mortem examination was made, and the certified cause of death was changed to small pox. The people in the neighborhood where the patient had resided had been vaccinated, excepting one man who had nursed the patient and who refused to be vaccinated, denying that she had died of small pox. Within two weeks he sickened and died of small pox, thus confirming the diagnosis based on the post-mortem examination. This patient's physician, a careful practitioner, had not suspected variola.

Scarlet fever was likely to be diagnosed in cases of variola which began with an efflorescence, followed shortly by dark spots and patches, for in some cases petechiæ and hæmorrhagic spots appeared. If vesicles were present, they were mistaken for sudamina. An examination should not be considered complete which left out the chest and abdomen, and particularly the inguinal and axillary regions. Small pox was liable to be mistaken for measles under two circumstances: first, before the development of the vesicles, the appearance of the skin and general symptoms led to the diagnosis of an ordinary case of measles; second, in severe cases of small pox, the skin being red and showing dark-colored patches, accompanied by hæmorrhage from the nose, etc., the diagnosis was at first made, perhaps, of

scarlet fever, and a little later the case was called one of black measles. The author had known of several instances in which an outbreak of small pox in this city was due to mistaking hæmorrhagic variola for black measles.

As to the diagnosis between small pox and syphilis, one was much more likely to mistake the syphilitic eruption for variola than to mistake variola for syphilis. The multiformity of the rash, the condition of the glands, and the duration of the disease would decide in a large number of cases in favor of syphilis, and further aid in diagnosis would often be found in the history.

A mistake between variola and vari-cella was not infrequently made. The differentiation between typical cases was sufficiently easy, but the student was often troubled by the want of clearness in the differential points found in text books. A mistake was liable to result from paying too much attention to the form of the eruption. In purpura variolosa there was no specific eruption, and one who attempted to differentiate between this and other forms of small pox or other diseases by the appearance of the eruption would err. The author had known of mistakes in diagnosticating between variola and herpes. This might occur in cases of herpetic eruption on the face, associated with cerebro-spinal meningitis. He had known not a few cases of urticaria to be mistaken for small pox. In scarlet fever, when the characteristic eruption was present, there was little difficulty in making a diagnosis; but the early cases of an epidemic were liable to go unrecognized.

In childhood especially there might be great difficulty in differentiating between typhus and typhoid. An instance was cited in which typhus fever prevailed in an asylum, and at the same time

several cases of typhoid fever developed without typical signs, but the lesions found at the autopsy were those of typhoid. A cessation of the fever about the end of the second week would, in a doubtful case, lead to the suspicion of typhus; but it was to be remembered that some cases of typhoid were of short duration. When two or more persons were exposed to the same cause of fever, and became sick with a febrile complaint, it was probable they were suffering from the same disease, although the symptoms might to some extent differ. Typhus might also be mistaken for cerebral inflammation, especially cerebo-spinal meningitis, because of the peculiar petechial eruption in the latter. The author, however, had never seen an eruption in cerebro-spinal meningitis which reminded him strongly of that of typhus. If herpes was present in a given case, the disease was, in all probability, neither typhus nor typhoid fever. In a recent German work on diseases of the skin he had found the statement that bluish spots on the pubes were due to the presence of the *Pediculus pubis*, and that they marked the trail of the animal as it passed from the pubes to the axilla. But he had given some attention to this question, and he had found the blue spots without the pediculus, and the pediculus without the blue spots.

Meningitis was so seldom a complication of typhus and typhoid that its existence in a doubtful case would lead to the suspicion of tuberculosis. If there were tubercles in the lungs, it would be strong evidence against the existence of typhus or typhoid. Examination of the sputum for the *Bacillus tuberculosis*, under proper precautions, might be of diagnostic value. He had seen some cases in which typhus or ty-

phoid developed in a patient suffering from phthisis.

Pyæmic fever, especially when developed in connection with an old otitis media, might be mistaken for typhus or typhoid fever. If jaundice should develop, it would point rather to septic fever. Regarding the so-called typho-malarial fever, he thought it was typhoid modified by malarial poisoning. Intense malarial poisoning was capable of producing a considerable variation in the ordinary course of typhoid fever, but in a large experience in New York he had very rarely found at autopsies on typhoid patients evidences of the existence of malarial poisoning. One marked exception had been reported by him to the association the present year. In some other portions of the country this combination, without doubt, would be found more frequently. Probably, however, even in a malarial district, many cases of typhoid fever would run a characteristic course if undisturbed by medication.

Physicians hesitated to speak of a disease as being typhoid unless it ran the usual course of typhoid fever, but in outbreaks of this disease there were always cases which ran a course of not more than from three to ten days. He could cite instances in which thirty or more people in an institution were sick from a poison producing the symptoms of typhoid fever, most of the cases running the usual course, but in some the duration of the fever being quite short—showing that the poison of typhoid fever might produce a fever of short duration.—*New York Medical Journal*.

DISEASES OF THE NERVOUS SYSTEM.

A Peculiar Sputum in Hysteria.

DR. E. WAGNER has called attention to a peculiar sputum often observed by

him in hysterical patients, the appearance of which might readily excite the suspicion that a phthisical affection is to be dealt with. But in fact it has been observed invariably as coming from subjects (always hysterical) who show no symptomatology by which tuberculosis of the lungs may be confirmed. The sputum is, of course, free from bacilli, is of a hemorrhagic nature, mostly red, but of a lighter red than ordinary bloody sputum, and not in any way resembling ordinary rusty-colored sputum. When examined in a glass it appears like a reddish or brownish-red pulp, in which numerous small gray particles cover the bottom. This sediment is so characteristic that it is easy to make the diagnosis with the naked eye. In one case the sputum for several days, in color and consistence, resembled a raspberry jelly, so that he suspected the development of a sarcoma or carcinoma in the bronchial tubes, under which circumstances it is usual to see this character of sputum. Under the microscope, in the sputa described, may be seen considerable quantities of small red blood corpuscles, and along with them, frequently, numerous white blood corpuscles, pavement epithelium, and cocci. Alveolar epithelia from the lungs were not discovered. Sometimes mucous pockets are found embracing pus cells. In every case, upon failure to find signs of disease of the lung or larynx, the author believes he has a right to conclude that the bloody coloring proceeds from small bleeding vessels, that the colorless part of the sputum is a pathological secretion of the mucous membrane, and that probably it all originates in the buccal cavity. The writer reports four cases in which he had observed this sputum for a considerable length of time; in one of which, however, bacilli at length appeared. In

all cases an investigation for bacilli is of prime importance—with a view to differential diagnosis.—*Deutsche Med. Zeitung*.—*American Practitioner*.

Chloride of Methyl in the Treatment of Neuralgia and other Painful Affections.

TENNESON (*Revue des Sciences Médicales*) has used the methyl spray in a large number of cases with marked success. Among the reported cures are those of ten cases of sciatica and sixteen of rheumatism, while in several instances the pain of pleurisy, pneumonia, and pulmonary phthisis was relieved. In order to avoid local irritation, he directs that the spray shall not be applied to one spot for more than five or six seconds.—*New York Medical Journal*.

Intra-Cranial Hemorrhage; Record and Classification of 143 Consecutive Fatal Cases Observed in Medico-Legal Practice and in Private Autopsies in Philadelphia.

DR. H. F. FORMAD concludes an article, published in *Journal American Medical Association*, as follows:

Dr. Formad's conclusions were:

1. Hemorrhages exclusively above the pia mater and above the dura mater, *i. e.*, on the outside of the brain, are always due to *traumatism* or to *sunstroke*, provided a cerebral source for hemorrhage is excluded and the cerebral vessels and membranes are not diseased.
2. Hemorrhage in the floor of the fourth ventricle is always traumatic, provided there are no blood clots in the lateral ventricles or any other part of the cerebral substance.
3. Hemorrhage exclusively below the pia mater, or in any part of the brain substance or in the ventricles (except the fourth), is always idiopathic, *i. e.*, is due to disease.
4. A diseased condition of the cerebral vessels or substance is necessary in

order to ascribe a hemorrhage to disease; there must be traumatism (some form of violence or falls) in order to induce a hemorrhage in a normal brain.

5. The blood clot in concussion of the brain is not found at the point of application of violence, but always somewhere about the opposite side of the brain, and always within the arachnoid, *i. e.*, between pia and dura mater.

6. The blood clot in fracture of skull is always found at the point of application of violence immediately below and always between the dura mater and the fractured part of the skull itself.

7. A blood clot formed within the cranial vault is more favorable to the patient if due to fractured skull than if due to a mere concussion.

8. Only clotted blood and infiltration of blood corpuscles into tissue indicates an ante-mortem hemorrhage: liquid blood is due to post mortem oozing, and only stains, but does not infiltrate tissues.

9. Severe bruises and cuts of the scalp may be seen in cases of idiopathic apoplexy where a sudden cerebral hemorrhage causes a person to fall.

10. In some cases it is impossible to decide by medical examination alone as to whether a head injury and the result is due to a fall or to violence.

11. External marks of violence may be invisible to the unaided eye in some cases of injury of the head or other parts, but are easily detected and also distinguished from post mortem spots by means of the microscope.

12. The bulk of an intra-cranial hemorrhage stands usually in inverse ratio to that of the external hemorrhage into the scalp.

“Does albuminuria obtain in healthy persons, and under what conditions does it occur?” by grouping the observed cases of physiological albuminuria into three classes. Class 1 (a) comprises chiefly young persons, between puberty and the age of twenty, of delicate constitutions. Robust persons beyond that age or children seldom have albumin in their urine. The quantity of albumin undergoes great variation in the course of a few hours. At one period of the day there may absolutely be no albumin in the urine, while in a couple of hours afterward there may be as much as a half per cent. The albumin coagulates readily on boiling; occasionally the urine contains a few hyaline casts, but never any tubal epithelium. The marked variation in the quantity of albumin cannot be explained in many cases; in some, however, it can be traced to violent exercise, the partaking of nourishment, and psychical excitement. No pathological change in the kidneys can be assumed in this form of albuminuria, and we must attribute the phenomenon to an individual disposition. In the second class mucin appears in the urine in company with the albumin and in proportionate quantities. The existence of mucin would indicate involvement of the lower urinary passages; still the mucin may be the product of the kidneys themselves.

As in the preceding class, the quantity of albumin is decidedly increased during the forenoon. The third class includes cases in which small quantities of albumin appear in the urine without mucin. In a very large proportion of these cases hyaline casts and a few cylinders filled with cells are found. Occasionally also are to be found a few red blood corpuscles, and a strong suspicion obtains that there ex-

DISEASES OF THE URINARY ORGANS.

Albuminuria in Health.

VON C. V. NOORDEN (*Deutsche Med. Zeitung*) answers the question,

ists a temporary circumscribed inflammatory process.—*New York Medical Journal*.

Albuminuria Developed Experimentally in Man.

M. SCHREIBER (*Arch. f. Exper. Path. u. Phar.*, xix., 3; *Glasgow Medical Journal*) has studied in man the effects produced by compression of the thorax, or a portion of that cavity, the pressure being exerted by means of cushions applied to the anterior and posterior walls of the chest and regulated by screws. Among twenty-six people he found twenty in whom the compression developed a temporary albuminuria or increased a pre-existing albuminuria. Most frequently the reaction of the urine was acid or neutral, rarely alkaline. Microscopic examination was made in only a small number of cases, and once a few hyaline casts, and once a few red blood corpuscles were found. The albuminuria is due to the presence of serum-albumin and globulin, and peptones are also present. Its duration was one or several hours, all that was needed to prolong it being a repetition of the compression several times in the course of the day. The author does not think this albuminuria due to dyspnoea. He believes that its causes are the diminution of the difference which normally exists between the pressure in the capillaries of the alveoli of the lungs and in the left ventricle, the diminution in the calibre of the pulmonary vessels, and the diminution of the extent of the respiratory excursions. From these there results a stasis in the pulmonary circulation which is rapidly propagated into the vascular network of the kidneys, and hence the filtration of albumin. Whether this filtration occurs in the Malpighian corpuscles or in the convoluted tubules, he has not yet determined.

In a second article M. SCHREIBER states (*Arch. für Exp. Path. und Phar.* Bd. xx., Heft. 1 and 2), that in boys of eleven to fifteen years of age thoracic compression for half a minute sufficed in eight out of ten cases to provoke albuminuria ($\frac{1}{3}$ to $\frac{1}{2}$ per cent.), of which, in general, there is no trace at the end of an hour. In these he found neither peptones nor serum albuminose in the urine, but only serum-albumin and globulin. The ophthalmoscope showed that the albuminuria was accompanied by no modification of the size or of the color of the vessels in the fundus of the eye.—*Ibid.*

DISEASES OF CIRCULATORY ORGANS.

The Murmurs of the Mitral Area.

At a recent meeting of the Academy of Medicine, in Ireland, DR. C. J. NIXON read a communication on cardiac murmurs of the mitral area (*British Medical Journal*). He referred to five varieties of mitral murmurs met with: (1) presystolic murmur; (2) postdiastolic murmur; (3) organic systolic murmur; (4) functional systolic or postsystolic murmur; (5) mitral *bruit de scie*. In discussing presystolic and postdiastolic murmurs, attention was directed to the acoustic character of the murmurs, the conditions with which they were associated, and the signs which might simulate them. Presystolic murmur might occur with: (a) a sharp clicking first sound; (b) a systolic murmur of mitral reflex; (c) partial or complete extinction of the aortic second sound; (d) a postdiastolic murmur. Postdiastolic murmur was a sign of an extreme amount of stenosis of the mitral area, and, judging from the chronometric position of the murmur, the term postdiastolic was more correct than diastolic. Having

discussed the stages of mitral stenosis, as determined by the development of different physical signs, the subject of mitral regurgitant murmurs was next considered. In dealing with the systolic murmur of organic disease, a reference was made to Naunyn's murmur, which was regarded as an instance of a murmur produced by convection, owing to the peculiarities of change in structure of the mitral segments, just as Dr. Sansom had pointed out that organic changes in the mitral orifice might lead to a presystolic murmur being best heard over the tricuspid instead of over the mitral area. The systolic murmur heard over the situation of the left auricular appendix, in cases of chlorosis and such allied conditions, was not, as Dr. Balfour held, a murmur of mitral reflux, but a murmur developed in a displaced pulmonary artery. Systolic mitral murmur was developed in cases of hypertrophy of the left ventricle, associated with Bright's disease, without any organic change in the auriculo-ventricular valve; and it likewise was met with in cases of extreme dilatation of the left ventricle, as in a weak and dilated heart, and in cases of long standing aortic incompetency. In such cases, the inadequacy of the mitral valve was due either to overstretching of the auriculo-ventricular zona tendinosa, or to a relative shortening of the papillary muscles, in consequence of the dilatation of the cavity of the ventricle. Systolic mitral murmur, of purely functional origin, was next taken into consideration, and the conditions under which it is met with, and the special characteristics of the murmur, were dwelt upon. Dr. Nixon specially referred to the theory urged by Dr. Bramwell, to explain the occurrence of this murmur in connection with a peculiar arrangement of the muscular fibres of

the heart, surrounding the auriculo-ventricular ring, constituting what was termed a muscular sphincter. The murmur was held to be produced by want of tone in the muscular fibres of the ventricle, and of the sphincter muscle, allowing such a dilatation of the orifice as to render the valves incompetent. Dr. Nixon showed that this view was incorrect, as the arrangement of the muscular structure of the heart, upon which it was based, did not exist. After alluding to certain conditions in the lung which might simulate a systolic mitral murmur, a brief reference was made to the existence of a mitral *bruit de scie*, met with in cases of aneurism of the heart, or where an abnormal communication existed between the aorta or pulmonary artery and one of the ventricles.

DISEASES OF RESPIRATORY ORGANS.

A Remedy for Coryza.

RABOW (*Deutsch. Med. Wochenschrift*) has repeatedly seen benefit from the following powders, used like ordinary tobacco snuff, which also they resemble in appearance: 1. Menthol, 2 parts; roasted coffee, 50 parts; white sugar, 50 parts; mix, and take as snuff. 2. Cocaine hydrochlorate, 1 part; roasted coffee and white sugar, of each 50 parts; mix, and use as before.—*Maryland Medical Journal*.

A Pill for Hæmoptysis.

GUENEAU DE MUSSY, *Nouveaux Remèdes*, is credited with this formula: Extract of rhatany, 1 drachm; ergot, 45 grains; powdered digitalis, 8 grains; extract of hyoscyamus, 4 grains. Divide into twenty pills, of which four or five should be taken in the course of twenty-four hours.—*Ibid*.

DIGESTIVE TRACT.

A Case of Congenital Defect of the Epiglottis, Illustrating its Function in Deglutition.

DR. FRANK DONALDSON, in an article recently read before the American Laryngological Association, and published in the *New York Medical Journal*, said in conclusion :

After a careful review of the whole subject as presented in this paper, I feel justified in making the following conclusions :

1. That the epiglottis is not a valueless appendix to the mechanism of deglutition in the human subject, but that it is one of the agents for protecting the larynx from the entrance of food and drink.

2. That ordinarily the lowest third of the epiglottis is the only portion which is needed for this function.

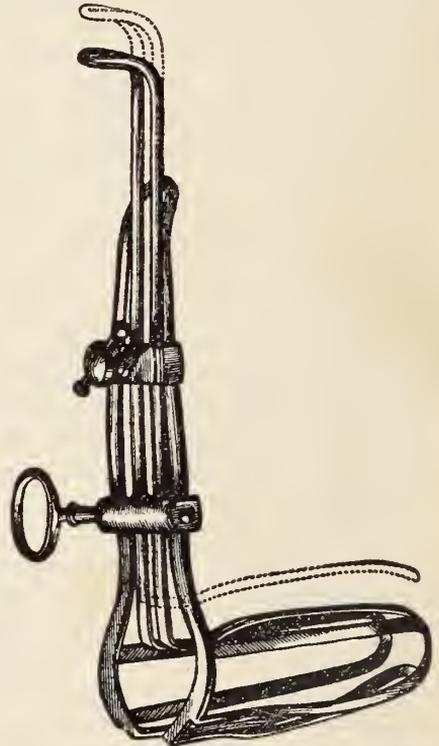
3. That the other effective agents for the protection of the air passages are the upward movement of the larynx in front combined with that of the tongue behind, the occlusion of the glottis, the exquisite sensibility of the mucous membrane of the upper glottic space, and exceptionally the lower constrictor muscles of the pharynx.

4. All these different portions of the pharynx are protective of the larynx to a greater or less degree, and it is difficult to assign to any one of them a position of greatest prominence. They ordinarily act together in protecting the larynx from the dangers connected with deglutition. In instances of disability of one or more of them, the others supplement their action.

Diagnosis of Rectal Diseases with the Aid of a New Self-Retaining Rectal Speculum.

DR. W. S. WATSON gives the following description of a rectal speculum in the *Medical and Surgical Reporter* :

We have had made a rectal speculum that we believe comes up to all the requirements for examining and treating about all of the diseases peculiar to the rectum and anus. The device is so constructed that it is easy to introduce. It is made of steel wire flattened in part and so bent as to form three and four fingers or blades with a contraction in their formation suited to the contractile



action of the sphincter muscle that holds them in place, requiring no assistant for the purpose. Dilatation laterally is by means of a transverse screw operating across the handle. Dilatation antero-posteriorly is brought about by a movement of the retractor blade, as shown in the cut by dotted lines.

The retractor part is a most excellent device in the combination ; with the aid of it folds can be made as tense as necessary.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

A Home Made Spinal Apparatus.

DR. C. FAYETTE TAYLOR: What may be called the handy method of getting spinal instruments came about during my recent visit to Meran, Austria, in this way: Olois Streber, a Tyrolean peasant, thirty-three years old, was run over by his own ox wagon in July of last year. He was taken up completely paralyzed in his lower extremities, and carried home, where he had ever since lain. In consultation with the attending physician, Dr. Mazegger, I found

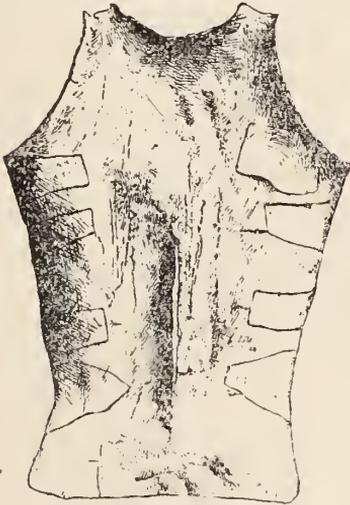


FIG. 1.

him in a pretty wretched condition, with sluggish ulcers in various parts of his lower extremities, and a large bed sore over the sacrum. Turning him on his face, I found undoubted evidence of primary injury to the spinal column in the lumbar region, with probable progressive disintegration of several vertebral bodies as a secondary consequence of the injury. The outward displacement of the injured and diseased vertebræ was plainly to be seen. There had been recovery of considerable sensation in the lower extremities, and there was

a slight amount of voluntary motion in the right leg, but not sufficient to be available in diminishing his utter helplessness. My first intention was to make an apparatus of wood, which would be perfectly feasible for the spine or for any other orthopædic purpose when workers in steel cannot be under command. But, after thinking about it over night, I adopted another and much better plan. My materials were several



FIG. 2.

sheets of thick blotting paper, such as can be procured at any stationery store; three yards of coarse linen cloth; some shellac dissolved in alcohol got at the druggist's, and a pot of glue. Taking two sheets of the paper held together, I cut them very nearly into the shape of the muslin portion or "back" of a man's waistcoat, long enough to extend from the first dorsal vertebra to below the trochanters, and wide enough to come well around the sides of the body. I then cut a longitudinal slit at the place corresponding to the projecting

vertebra, and slashed the paper on each side under the shoulders and above the ilia to within two inches of the centre line, taking care that the cut in the upper one was above or below that in the lower one, so that each cut would be covered in modeling by the uncut portion of the other paper. Everything being ready, I saturated both papers thoroughly with the alcohol and shellac by rapidly applying it with a paint brush. In a few minutes the paper was soft and pulpy, and was easily and quickly modeled to the form by gentle pressure with the fingers and hands. The edges at the top and shoulders had been cut at frequent intervals about half an inch deep, the cuts on one paper always coming between those on the other. The edges thus cut were then turned up, so as to form a rim for the purpose of giving increased strength to this portion of the apparatus, the only portion not capable of taking a curved form. Careful manipulation soon caused the paper to take the exact form of the patient's back; and, while I was still at work, the alcohol began to dry out and the paper to stiffen. Within half an hour the mold thus formed was lifted off and placed in the sun for more rapid evaporation of the alcohol, and in half an hour more was stiff enough to carry home without danger of alteration. Next morning it was dry and hard. On each side of this mold I pasted, with thick, hot glue, a layer of coarse linen cloth, thin enough to stretch and fit without necessity for cutting. Over the cloth thus glued on other layers of blotting paper were fitted, after having been first saturated with shellac and alcohol, then dried and glued down, and over each of these paper layers was a layer of cloth—thus alternating prepared paper, molded and glued down, and then cloth, to the number of four layers

of paper and five of linen cloth. It was then strong enough except at the point of greatest pressure at the middle of the back, which was strengthened by glueing down alternate layers of paper and cloth till the hollow in the posterior part of the back of the mold was nearly filled up. It would then bear the weight of a man without yielding in the least. Turning it over, the apparatus was completed by pasting with starch paste a number of layers of paper on each side corresponding to the projection in the spine, enough to secure the pressure desired at that point. Applying the apparatus after this last step of fitting, I found it lifted away from all parts of the body, top, bottom, and sides, except at the points of contact on each side of the affected vertebra. The requisite "support" was thus secured. This strong frame was then pierced near the edges by the awl in places corresponding to the location of the buckles in the steel "spinal assistant," and the buckles were tied on with narrow tape for strings. A linen "chest piece" and an "apron" of thick muslin, exactly like that we ordinarily use, completed the apparatus, at an outlay of about two dollars and a half, and, perhaps, three hours' time, spread over three days. On applying the "brace," it was found that the opening was too narrow to receive the projecting spinous processes. This was speedily remedied by paring off a little with the knife, after which it was perfectly comfortable, and he wore it night and day with entire ease and satisfaction from the first application, and is doing exceedingly well now.

The only thing of special interest in this novel spinal apparatus is the simplicity of the materials from which it is constructed. They can all be procured anywhere. Old newspapers would do just as well for taking the form or mold,

and I should have used them, except that blotting paper is more cleanly to work, and, in this instance, was more easily obtained. Of course, the chief thing is to get a perfect mold of the back. This is then built up and reinforced by successive layers till it is strong enough. Then it is practically indestructible, and will last for years. As the finished instrument does not show the first mold, which is the really important part, I have made a second one—an hour's work—from a photograph of which Fig. 1 was made. It shows the posterior or convex side of the mold. The completed apparatus, as applied to the patient, Streber, is shown in Fig. 2.

I do not see why the same materials and method of procedure may not be successfully employed in some cases for the upper or lower extremities.

Painless Reduction of Shoulder Dislocation.

DR. MACLEAD, of Shanghai, gives the following directions for the reduction of sub-glenoid dislocations without an anæsthetic :

Let the patient lie down on his back on the floor or ground, with the dislocated arm outstretched at right angles to the trunk, and also on the floor. Having told the patient to lie quite still and make no effort, let the surgeon, placing the approximate heel in the axilla, make traction gently and steadily at right angles to the line of the trunk ; and, as there may be no jerk or evident intimation of the return of the head of the bone to its place, let him ascertain its position, if necessary, adducting the limb to make sure ; if reduction has not taken place, let him renew and increase the force of traction, and repeat the examination until he has succeeded or failed, in which latter case nothing has been done to interfere with

other methods. It is possible that, in many cases, the heel in the axilla may be unnecessary, but it will serve to steady the scapula, and affords a better counter extending force than the weight of the patient's body, and thus leaves him free to lie still and make no effort as if to aid.—*British Medical Journal*.

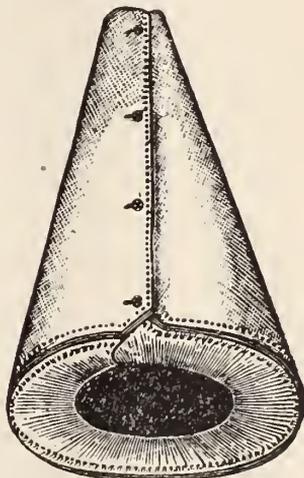
[We believe this method to be especially valuable in cases when from great swelling or other interference, the exact diagnosis is difficult or impossible, and also in the case of children.]

A. H. P. L.

Sponge-Cone for Ether Inhalations.

DR. RUSSELL MURDOCK (*Maryland Medical Journal*) :

This cone is made of white rubber cloth, and when buttoned forms a cone, open at both ends.



The opening at the apex can be compressed to any desired extent. The closed portion of the base interposes a dry surface between the wet sponge and the face, while the central opening confines the escape of vapor to a restricted region around the nose and mouth. The deep gutter, formed by the base and sides of the cone, will retain any surplus ether.

New Operation for Fistula in Ano.

DR. JOS. M. MATTHEWS, in *Progress*, advocates dilatation with laminaria tents of the fistulous tract and subsequent bi-lateral division of its pyogenic membrane with Otis's improved urethratome. He claims to have had good results. In fact he succeeded in curing such cases by this operation where the other means had failed.

The Treatment of Scalp Wounds at the Chambers Street Hospital.

DR. C. R. PARKE, in an article published recently in the *New York Medical Journal*, makes the following statements :

Our present method of treating a scalp wound is as follows : Upon admission of the patient, the wound and bloody hair are thoroughly cleansed with a douche of the hydronaphthol solution, next the hair is carefully cut with scissors for about one inch around the margins of the wound, after which it is cleanly shaved ; the wound is now again cleansed with the hydronaphthol, all clots and foreign bodies being removed, and careful examination for fracture made. This not being found, we proceed to the dressing, which consists in inserting ten or twelve horse hairs through the bottom of the wound, the opposing edges of the wound being carefully approximated and sewn together with catgut sutures, the horse hair projecting about three-fourths of an inch beyond the ends of the wound and thus acting as an excellent drain. The wound is now again washed with the hydronaphthol, and powdered iodoform lightly dusted over the line of the sutures, upon which are applied a few layers of iodoform gauze ; over this is placed a large compress of absorbent gauze, extending several inches beyond the wound on every side, the whole

being held in place by a bandage, the style of which depends upon the location of the injury. The patient is told to return in two days, provided no pain or unlooked-for symptoms arise, under which circumstances he is requested to return at once. Upon returning two days later, as a rule, we find primary union throughout the entire length of the wound, excepting at the ends where the drain protrudes. We have now converted the open scalp wound into a perfectly drained sinus. All but three or four of the horse hairs are removed, the sinus is irrigated with the hydronaphthol solution, and the same style of dressing reapplied. In two or three days more the sinus has so narrowed down that the remaining horse hairs can with safety be withdrawn, and complete healing can occur under the dressing then applied ; the catgut sutures are absorbed and give rise to no trouble. The wound thus heals with little or no scar, as compared with the plan which allows the wound to granulate from the bottom, and furthermore offers the advantage of healing in a much shorter time. The virtues which I maintain for the hydronaphthol solution over those possessed by the carbolic acid and bichloride solutions are that it is without odor and does not burn or discolor the hands as carbolic acid does, neither does it ruin one's instruments nor cause any danger from absorption, as is the case with the bichloride, while at the same time it is a perfect deodorizer, non-irritant, and, as I think, a disinfectant.

In order to give a little idea of the results we obtain under this method of treatment, I took at random 30 out of the 123 cases treated here in thirty days and carefully looked the patients up ; five of them never returned after the first dressing was applied. Of twenty-five there was a full record until they

were discharged cured. The longest period that any patient was under treatment was ten days, and the shortest three days, the average being six *plus*. The greatest number of dressings employed in any one case was six, and the smallest two, the average being three *plus*.

Citric Acid vs. Neoplasms.

Because of its destructive action upon morbid cells and indifference to healthy normal cells, this acid has been employed topically to destroy new growths till healthy tissue was reached, or has been injected at the edge of new growth to limit their growth previous to operation. It has also been douched over the wound after operation as a prophylactic measure.

The Fate of Extravasated Blood; An Experimental Research.

The object of research was primarily to determine the share taken by the liver, the spleen, and the bone marrow, in the disposal of extravasated blood. The method of research was the transfusion of large quantities of blood into the peritoneal cavity, the blood being, in all cases, derived from an animal of the same species. The animals used were the rabbit and dog.

I. *Local Fate.* 1. The part taken by cells in the local changes going on around extravasated blood is of the greatest importance; the cells being of two kinds—those of leucocyte, and those of connective-tissue origin.

2. The formation of blood-pigment from the red blood corpuscles is mainly a "cellular" process, being affected through the agency of cells, either by inclosure of the corpuscles bodily within them, or by disintegration of the red corpuscles and then inclosure of their fragments.

3. In the process of so-called "organization" of blood-clot, both varieties of cells play an important part; but, while both leucocytes and connective-tissue cells are concerned in the disintegration of the red corpuscles, the former, in addition, effecting the removal of the *debris* from the seat of extravasation, the connective-tissue cells alone are concerned in the process of formation of fibrous tissue by which ultimately the clot becomes replaced.

II. *Absorption.* 4. The absorption of extravasated blood applies not only to the serum of the blood, but also to the great majority of the red corpuscles which remain unentangled amidst coagula or the surrounding tissues.

5. This absorption is extremely rapid, both from the subcutaneous tissues, but especially from the larger serous cavities.

6. In the case of the peritoneal cavity, the absorption of the serum and red blood-corpuscles is effected almost entirely through the lymphatics of the diaphragm.

7. Under such circumstances, the increase in the number of corpuscles within the circulation is observable one hour after injection, and steadily rises till it reaches a maximum about the second or third day, the time varying according to the quantity injected.

8. Extravasation *per se* does not affect the vitality of the red blood-corpuscles; if absorbed back into the circulation within a day or two, they continue to live as before.

9. Their longest duration of life under such circumstances (in the rabbit) varies from two to four weeks, this duration applying naturally to only a few of them.

10. The probable life-duration of the red blood-corpuscle in man is about three weeks.

III. *Ultimate Fate of the Absorbed Corpuscles.*

11. The three great seats of blood-destruction within the body, under pathological as under physiological conditions, are: The liver, the spleen, and the bone marrow.

12. The nature of the process of destruction in the liver differs essentially from that in the spleen and bone marrow.

13. In the latter the process of blood destruction is mainly a cellular one, comparable in all respects with, although much more rapid and complete than, the similar processes taking place locally at the seat of extravasation; in the former, the destruction is much more rapid than in the spleen and bone marrow.

14. After increased destruction of blood-corpuscles within the body, the local evidences obtainable are—in the case of the liver, increased richness of its substance in iron and the presence of granules containing free iron within the liver cells; in the case of the spleen and bone marrow, increase in the amount of pigment containing free iron found within these organs.

15. In health, a different relation is maintained between the amount of blood destruction which takes place in the liver on the one hand, and in the spleen and bone marrow on the other.

16. Any disturbance of this relation on the part of the liver is of much greater consequence than on the part of the spleen or bone marrow.

17. The former is, in all probability, the pathological change which lies at the root of progressive pernicious anemia; as the latter is the probable cause of the anemia of leucocythemia.

18. The rapidity with which blood corpuscles introduced into the circulation become destroyed is very great, a number equivalent to about 4 or 5 per cent.

of the animal's own blood being destroyed daily.

19. The small quantity of blood transfusible into the organism in the case of man is therefore entirely removed from the body in a few days at most, probably not longer than three or four.

20. Transfusion of blood in the human subject, in cases of pernicious anemia, with the object of increasing the number of corpuscles, is devoid of all physiological basis, and is simply adding fuel to the flame, since the fault in this disease is not one of defective formation of blood corpuscles, but one of excessive destruction of those already present.—*British Medical Journal.*

Etiology and Pathogenesis of Acute Osteomyelitis.

At the fifteenth Congress of the German Surgical Society, DR. KRASKE stated that as the result of his bacteriological investigations he had come to the following conclusions: The pyogenic micro-organisms known as the *staphylococcus pyogenes aureus* is alone capable of producing acute osteomyelitis in man and is, in fact, most often concerned in its production. Besides this he has found that in a number of cases, other micro-organisms, such as the *staphylococcus pyogenes albus*, the *streptococcus pyogenensis* and bacilli play a certain role in addition to the *staphylococcus pyogenes aureus*. Then acute osteomyelitis is the effect of "mixed" infection. Cases of osteomyelitis which are produced by a "mixed" infection seem to acquire a certain degree of severity during the whole course of the disease. From this it may be concluded, until further knowledge of the subject is acquired, that the finding of different kinds of organisms in an abscess, due to osteomyelitis, is a sign of a grave prog-

nosis. It is possible that further investigations will establish as a fact that any micro-organism, which has pyrogenetic properties is capable of producing by itself a typical osteomyelitis in man. At all events, the assumption that osteomyelitis is a specific infection must be abandoned.

[It is gratifying to note this difference of belief in the specificity of osteomyelitis. It is not strange at all to find minor forms of life mingled with pathological products and it is only natural that special products should be capable of supporting differentiated forms of microscopic life. Granted that we always find certain germs in certain diseases, and yet it does not follow that they are productive of these diseases, in fact, no more so than the finding of children with men and women, or calves with oxen and cows prove that adult human beings are the progeny of children, or that oxen and cows are directly born of calves.]

A. H. P. L.

Acromégalie.

P. MARIE (*Revue de Méd.*) publishes full notes, accompanied by photographs, of two cases presenting a train of symptoms to which collectively he has given the name of *Acromégalie*. The principal features of the cases were symmetrical enlargement of the feet, hands and head, coming on in adolescence, marked diminution in the motor power of the extremities, a great tendency to varices, and a decided decrease in the size of the thyroid gland. There was cachexia, apparently more due to the general feeble state than to any grave disorder. The organs appeared to perform their functions normally; in both cases there was great thirst attended with an abundant excretion of urine. Nothing definite could be said of the causation. The author has collected from the literature

of the past hundred years five cases, by different authors, which he thinks resemble his two cases, and which should be placed in the same category. He sums up as follows: 1. There exists an affection, characterized particularly by a hypertrophy of the feet, hands and face, which he proposes to name *acromégalie* (hypertrophy of the extremities). 2. *Acromégalie* is entirely distinct from myxœdema, Paget's disease (ostitis deformans) and leontiasis ossea of Virchow.

Ammonia in the Treatment of Anthrax and Carbuncle.

The *Lancet*, without giving the source of its information, states that Dr. LEONIDAS AVENDANO lately read a paper before a Lima medical society, in which he testified to the great value of ammonia in anthrax and "carbunculous diseases," adding that it was a specific, and should be the only drug used. In cases of malignant pustule, after an incision has been made, the official solution of ammonia should be dropped into the wound, in the hope of its destroying the bacilli there and of some of it finding its way into the blood before the bacillus does, so as to make it impossible for the parasite to multiply in that fluid. In addition, some salt of ammonium, such as the acetate, should be given internally, and, on the slightest suspicion of general infection, resort should at once be had to intravenous injections of ammonia, in doses of ten drops of the official solution with the same quantity of distilled water. In cases of malignant œdema and carbunculous fever, too, "the microbe should be attacked directly in the blood, ammonia being injected into the circulation." Several successful cases were related, and the author closed by stating, to the honor of Peruvian medicine, that Dr. Leon Alarco had first injected

chloral in tetanus, and ammonia in septicæmia or purulent infection; that Dr. Armando Vélez and Dr. F. P. del Barco had first injected capsicum into the veins in yellow fever; and that Dr. Néstor Corpancho and himself had originated the treatment described for carbuncle.

[The plan is plausible, and seems to have met with success. It is well worth repeated trials.]

A. H. P. L.

Subnitrate of Bismuth as a Dressing.

1. Subnitrate of bismuth possesses antiseptic properties at least equal to those of iodoform. 2. No poisonous effects are to be apprehended as in the employment of iodoform. 3. The subnitrate of bismuth being a chemically indifferent substance, does not irritate the wounds; secretion is diminished. 4. Its action is very prolonged, though not vigorous, so that the dressings do not require to be frequently changed, and rest is insured for the wounds. 5. There is no action at a distance, nor does any specific effect attach to it. 6. It does not afford protection against erysipelas and other wound diseases, at least no more than iodoform. 7. It is no disinfectant, but as an antiseptic it keeps the wounds pure. 8. All wounds capable of healing by first intention can do so when dressed with bismuth. 9. It also represents an excellent material for forming scabs under which epidermis can grow over the wound. Its use on granulating wounds has not, however, been sufficiently studied as yet.—*Annals of Surgery*.

[Our experience is confirmatory of the above.]

A. H. P. L.

Inequality in the Length of the Tibiæ.

A boy, æt. 10, whose left tibia had grown three-quarters of an inch longer than the opposite one, in consequence

of stimulation of the lower epiphysis, owing to inflammation and necrosis of the shaft of the bone, was shown to the Medico-Chirurgical Society, by Professor ANNANDALE. As a result of this lengthening of the tibia, the foot had been gradually displaced outwards, so as to form a kind of talipes valgus. In order to remedy this deformity, it was necessary to lengthen the fibula, and he did this by dividing the fibula at the junction of its lower and middle thirds. In addition, division of the peroneal tendons was required before the foot could be brought into position. The deformity was now quite relieved.—*Medical and Surgical Reporter*.

Suture of Widely Divided Nerves.

DR. ASSAKY presented a thesis on this subject to the Paris Biological Society. According to the *British Medical Journal*, the doctor advises suture. The central should be joined to the peripheral extremity by means of catgut sutures. Excellent results follow, even if no close approximation is possible, when the loss of substance is great. Experiments on animals show that suture promotes and hastens nerve regeneration. The cicatrix, along the track of the sutures, is found richer in nerve fibres than where no sutures are used.

[See, also, "Nerve Suturing and Nerve Grafting," in our June issue, p. 85. Any man who fails to suture severed ends of important nerves, under favorable circumstances, should be considered unworthy of his privileges.]

A. H. P. L.

VENEREAL DISEASES.

Syphilitic Reinfection.

NEUMANN, *Allg. Wien. Med. Ztg.*, reports a case of undoubted reinfection

of syphilis. The patient was under his care in November, 1883, with her first attack. In December, 1885, she returned with an initial lesion of the vulva, which was followed by a general erythematous eruption of unmistakable syphilis, showing that the lesion of the vulva was an initial lesion and not an ulcerated papule. He regards this case as evidence that syphilis is a curable disease.

Preventive Treatment of Syphilis.

CHARLES E. JENNINGS, F. R. C. S., England, strongly recommends the destruction of chancre by Pacquelin's cautery, with the simultaneous employment of mercury, *before the initial sore has arrived at maturity*, in preference to the opposite plan adopted by so many, viz., that of waiting for the appearance of secondary manifestations before commencing anti-syphilitic treatment. The use of cocaine is invaluable in rendering the caustic application painless.—*American Practitioner and News*.

[Experience has fully well demonstrated that little or nothing can be hoped for from this method. Of greater promise is the more radical operation, including excision of the inguinal glands and the lymph vessels between them and the chancre. This was first advocated, we believe, by Dr. Hardaway, of St. Louis, of whose paper upon this subject we had no knowledge when expressing our own views for the first time.] A. H. P. L.

Blood Catheter.

DE F. WILLARD thus writes in the *Medical Times* :

Many a physician has been foiled in his attempt to empty a bladder of urine by the persistent clogging of the eyes of the instrument with coagula, whenever even slight difficulty of entrance has been encountered.

The instrument I use has been put to thorough and practical tests, and has proved itself to possess the following advantages in all cases where trouble is expected during introduction, or even where slight hemorrhage is probable :

1. Its eyes are two or three times the ordinary size.

2. It is carried into the bladder with the eyes closed, thus preventing choking of the apertures during the slow and often difficult passage along the urethra or through the neck of the viscus.

3. The obturator or plug can be rotated *in situ*, or slid backward and forward so as effectually to clear the openings.

4. The rapid withdrawal of the obturator loosens the clot by suction.

5. The obturator can be reintroduced and manipulated as frequently as necessary, without the slightest injury to the patient.

6. If desirable, injections into the bladder can be made through it, or a Bigelow Evacuating Apparatus can be attached to remove large accumulations of blood or of clots in the bladder.

The instrument, as made for me by Gemrig, of Philadelphia, is of any desired size, the apertures being large, and the interior of the tube being accurately filled with a sheet metal spirally coiled obturator or plug, which is very flexible and moves easily in all directions.—*Medical and Surgical Reporter*.

Gonorrhœa Contracted from Rectal Coition.

DR. RANDOLPH WINSLOW gives a Report of an epidemic of gonorrhœa contracted from rectal coition, in a late number of the *Medical News*. The cases, ten in number, occurred in an institution near Baltimore, where a large number of boys of ages from nine to twenty-one years are collected. The

epidemic is supposed to have originated in the following manner: A boy on leave of absence, contracted gonorrhœa from a girl, and on his return cohabited with a boy, causing an inflammation of his rectum. This boy cohabited with a third who in a few days had the gonorrhœa. Case occurred after case, with no assignable cause apparently, but some of the boys confessed to buggery and attributed the disease to it. Such cases are unusual, but it will be found, if a minute inquiry is made, that where males are in confinement and have access to each other, pederasty is comparatively common, and venereal diseases will be transmitted. A few years ago I saw several cases of chancre and gonorrhœa of the rectum in convicts at the Missouri State penitentiary, contracted in this manner. The cause was due to the necessity of placing two prisoners in each cell.—*St. Louis Medical and Surgical Reporter*.

DISEASES OF THE EYE AND EAR.

Badal's Operation (Laceration of the Infra-trochlear Nerve for the Relief of Glaucoma).

DR. J. S. PROUT, of Brooklyn, read a paper on this subject. Badal, of Bordeaux, he said, had proposed laceration of the infra-trochlear nerve for the relief of glaucoma accompanied by pain. He selected this nerve because it was the direct extension of that branch of the ophthalmic, the nasal, from which the eyeball received its nervous supply. It was readily reached by an incision along the margin of the orbit running from the pulley to the upper margin of the tendon of the orbicularis muscle, and is to be taken up with a hook, with its accompanying vessels, and stretched and torn by pulling directly forward. Badal, in 1883, had reported his results

in twenty operations, nearly all in cases unpromising for any operation. Pain was relieved at once in ten cases, rapidly in one, and gradually in five, and the result was not stated in four. Tension was relieved quickly in four, relieved gradually in eight, and not relieved in six, and the result was not stated in two. Sight had been long lost in seven. It was improved in four and not improved in four, and the result was not stated in five. Dr. Prout had performed the operation nine times on five patients. All the cases had been unpromising. In one there was for a time decided improvement of vision, in one there was temporary relief from moderate, and in one from severe pain. One was a case of glaucoma simplex operated on without benefit, another a case of hemorrhagic glaucoma, not benefitted. Others had reported much better results. The operation had been shown to deserve further trial. Especially in cases unfit for operations on the eyeball, it could not make matters worse as to the eyes; and relief of pain, even if only temporary, was worth procuring at the cost of so slight an operation.

Dr. C. S. Bull, of New York, said that in his cases, where the operation had been performed for the relief of pain in glaucoma or ciliary neuralgia, while the relief had been marked immediately after the operation, it had been temporary only, the pain having returned in every case.—*New York Medical Journal*.

Light and the Common Sources of Danger to Vision.

LEARTUS CONNOR (*American Lancet*): We have thus seen that among the common causes of eye diseases are (1) poisons introduced into the eye, as in most cases of the severe inflammation of the new born child, as in the purulent

inflammations of later years, and in many cases of granular lids.

2. Defective constitutions, as in the case of those suffering from scrofula, or consumption, or rheumatism, or syphilis, etc., the fevers of childhood and adult life. These constitutions may be inherited or acquired by modes of life suited to this purpose.

3. Overwork in an eye still developing ruins and cripples vast numbers of eyes. This takes place most actively in the schoolroom and at home, and generally the damage is at least begun under twelve years of age.

4. Overwork in a deformed eye is prolific of a long and serious train of diseases to the eye, and indeed to other portions of the body. Deformed eyes may be of three varieties—near-sighted, far-sighted, or irregular-sighted. Each of these produces its own diseases of the eye, in its peculiar way.

5. Overwork of the soundest eye will, if persisted in under unfavorable conditions, be followed with disastrous effects.

6. Bad light is a cause of eye diseases for which it would seem as if there could be no excuse. Yet as a potent factor in the causation of eye disorders, it needs the most careful attention.

7. Bad air and all its accessories is a never ending source of diseased eyes to all who live in our so called advanced civilization.

8. The habit of reading upon the steam or horse cars is constantly disordering vision, and in such a manner as to render it exceedingly difficult to cure the disorders. The habit should be avoided by all who would preserve their vision in its most efficient state.

9. Mechanical injuries can only be avoided by special precautions on the part of those engaged in trades liable to such injuries upon the eyes of the workmen.

10. Tobacco, alcohol and licentiousness form a triumvirate of great power to produce eye diseases of all sorts and varying degrees of gravity.

Santonate of Atropine.

BOMBELON (*Pharm. Zeitung, Pharm. Journal*) recommends highly this new mydriatic, which is said to be absolutely non-irritating, its action resembling that of homatropine, one drop of a 1-to-2000 solution causing dilatation of the pupil, which persists for nearly twenty-four hours.—*Ibid.*

DISEASES OF THE SKIN.

Acne.

Acne, or acne vulgaris, as it is sometimes called, is one of the most common of the diseases of the skin. It constitutes quite a respectable percentage of the grand total, but relief is not sought as often as its frequency would seem to indicate. It consists essentially in an inflammatory condition of the sebaceous glands, and manifests itself in the form of papules, pustules and tubercles, distributed for the most part about the face, neck, back and shoulders. The most common forms are the papular and pustular, so named from the predominance of the lesions existing at the time. The forehead is perhaps the portion of the face most frequently attacked, other portions being also implicated, however, quite frequently. There are no subjective symptoms connected with this disease, unless it be a slight pain upon pressure when the disease is in its acute form. The trouble, generally, begins as a papule, varying in size from a pinhead to a split pea, and this may remain as such or become a pustule through the inflammatory action which is present. Should it remain a papule, it undergoes more or less resolution, or may enlarge and become a little more

indurated and infiltrate a portion of the underlying tissues and thus become a tubercle. When a pustule forms, it develops to its acme, the pus is discharged, a small crust forms and it heals spontaneously. Successive crops are continually making their appearance, so that it may happen that the patient is never entirely free of the disease for years.

Acne occurs in both sexes about equally, and as a rule, first makes its appearance at puberty. At this time the whole cutaneous system undergoes a greater or less disturbance, the hair in various portions of the body begins to grow, and the sebaceous glands are prepared for a greater functional activity than they have hitherto possessed.

The causes of acne are varied and numerous. Among those which hold a first place, however, may be mentioned disturbances of the gastro-intestinal tract. Constipation especially is a very fruitful cause of this disease, as also dyspepsia and allied disorders. These are conditions very often found more especially in young women. Besides this we have uterine disorders, such as dysmenorrhœa, amenorrhœa and genito-urinary disturbances. Renal troubles act as exciting causes of acne, at times. There seems, also, to be a certain tendency to the disease, in certain families, so that it would almost seem as if some hereditability was attached to it. In addition to the internal causes, a few of the principal ones having only been mentioned, we have external agencies producing the so-called *acne artificialis*. Tar and similar agents are the active agents in its production, whilst the internal use of certain remedies, notably iodide of potassium, produces an artificial acne generally classified under the medicinal eruptions.

The diagnosis of acne is not very difficult. It must be distinguished from

eczema, syphilis and small pox. From the first mentioned disease it is easily distinguished by the absence of itching, and from the fact that eczema of the face is rarely papular or pustular in character. The history, moreover, would serve to distinguish the two very easily. The papular and pustular syphiloderma must be examined a little more closely, especially the acne form syphiloderm, which sometimes occurs upon the forehead, as the *corona Venereis*. The history, the presence of other lesions, the tendency of syphilitic lesions to group, and the length of time the lesions exist, if carefully considered will make the diagnosis clear. As to variola, the history would be sufficient. The chronic nature of acne, the comparatively short period of time between successive crops, the locality attacked, the age of the patient, the inflammatory nature of the lesions, the absence of subjective symptoms, and the anatomical seat of the disease (the sebaceous glands), should never be forgotten. It is an uncommon thing to see acne in a child before puberty, or in a person beyond the forty-fifth year.

The treatment of this disease should be constitutional and local. The general measures employed should be such as will tend to bring the patient to as normal a condition as is possible by therapeutic means. The condition which is most common and most constantly demands attention is the constipation which exists. To overcome this the diet, in the first place, should be so regulated as to insure the greatest amount of nutrition with the least amount of labor on the part of the stomach and arranged so as to preclude the condition of constipation or a tendency thereto. To make the bowels more regular, fluid extract of cascara sagrada, or the aperient mineral waters

are useful. An occasional dose of calomel will be of benefit. The following aperient mixture given by Duhring gives excellent results: \mathcal{R} . *Magnesiae sulphatis*, \mathfrak{z} jss; *ferris sulphatis*, gr. xvj; *acidi sulphurici dil.* \mathfrak{z} ij; *aquæ*, \mathfrak{z} viij. *M. Sig.* Tablespoonful in a tumbler of water. This should be taken about twenty minutes before breakfast or, if necessary, before supper also.

Besides the general remedies indicated in the case we have some which do good occasionally. Sulphide of calcium, in quarter grain doses four times a day, is sometimes indicated in the suppurative form. Arsenic is useful in the indurated forms or where the papules are imperfectly developed and may be given in two or three drop doses of Fowler's solution in wine of iron or in one drop doses of a one per cent. alcoholic solution of bromide of arsenic thrice daily after meals.

The local treatment is to be either soothing or stimulating according to the indications which are present. In the greater number of cases the latter plan must be adopted. Soothing applications and lotions and bland ointments should be employed where there is a high grade of inflammation. The methods of stimulating are numerous. *Sapo viridis*, pure or diluted, may be applied at night, following this with a bland ointment. The pustules should be opened and their contents squeezed out. Hot water cloths applied at night and followed in the morning with cold douches and frictions are valuable. Sulphur is a very good remedy to apply, and may be prescribed in ointments or lotions in strength varying from twenty grains to two drachms to the ounce.

The following lotion recommended by Bulkley is good: \mathcal{R} . *Sulphuris loti*, \mathfrak{z} j; *ætheris*, \mathfrak{z} vj; *alcoholis*, \mathfrak{z} iijss. *M. Sig.* Apply as a lotion. Sulphuret

of potassium may be used as also Vleminckx's lotion. Where more active stimulation is required, biniodide of mercury or corrosive sublimate, or protoiodide of mercury, or ammoniated mercury can be used.

The surgical treatment is often of greater value, more especially in the indurated and tubercular forms, and care should be taken to cut well into these lesions passing through the centre and applying warm cloths so as to induce free hemorrhage. In conjunction with this, the sulphur and mercury ointment mentioned in the "Talk" on Comedo will prove serviceable.

One point which should not be forgotten, is to examine male patients for urethral stricture. If such exists, bougies should be introduced or other means employed to enlarge the calibre of the urethra at the part of constriction. In a number of cases the beneficial effects of this treatment will be observed in an amelioration of the skin trouble.

The prognosis of acne depends, in a great degree, upon the cause producing it. It has a tendency to be chronic and is generally stubborn to all treatment to a greater or less degree. There is a tendency to spontaneous recovery at about the twenty-sixth year, but if the cause of the disease be corrected and appropriate local treatment instituted success will be pretty fair.—*St. Louis Medical and Surgical Journal.*

Peculiar Skin Disease of the Feet.

Before a recent meeting of the Montreal Medico-Chirurgical Society, Dr. R. J. B. HOWARD exhibited a boy, twelve years of age, of healthy family. He has angular curvature, involving the lower dorsal region, first noticed when he was three and a half years old. His

feet were first affected in his sixth year. A small "scurfy" spot appeared first on the right foot, and has spread steadily, healing at the centre. When he came to the dispensary, it appeared as a lupiginous patch about four inches across, on the right ankle and instep; smaller similar patches existed on the outside of the right little toe and left great toe, at metatarso-phalangeal joint. The patch is covered with a crust or scab of a somewhat papillary appearance. Not tender or painful at any time and never ulcerated. Dr. Howard brought the case for diagnosis. He thought it was due to some derangement of the spinal cord at the seat of the curvature, as nerves from this region supplied the skin of the feet.—*Maryland Medical Journal*.

[In all probability an affection of the trophic nerves, such as are met with in some diseases of the cord.]

A. H. P. L.

Disorders of Perspiration.

DR. J. B. JOHNSON (*Medical and Surgical Reporter*):

Dermatologists have given to these three disorders of perspiration, distinctive names. They have named augmentation of perspiration, *idrosis*, *ephidrosis*, and *sudatoria*; and they divide this into *idrosis simplex* and *idrosis maligna*. A diminution of the secretion of perspiration is called *anidrosis*, and an alteration of the secreted perspiration is known by the term *osmidrosis*. *Anidrosis* refers to that condition of the perspiratory fluid which is manifested during the continuance of febrile diseases, and *osmidrosis* relates to the character of the odor which the perspiration gives out during the existence of certain diseases of the body. These two varieties of morbid perspiration are evidently to be more respected as symptoms than re-

garded as diseases, for they are never conspicuous unless in the presence of some derangement of the internal organs of the body.

Idrosis simplex. This disorder of the function of perspiration is the most common, and is divided into subacute and chronic. An attack of subacute *idrosis* usually terminates in a week or two, and is more often partial in its appearance than general; and in two or three days after its existence a crop of vesicles show themselves about the neck, trunk, and abdomen, and usually pass to the armpits and inner parts of the thighs. This form is attended not only with feverishness, but with disorder of the alimentary canal. The only treatment this form requires is a correction of any disorder of the stomach and bowels and the prevention of its sudden arrest, lest its untimely disappearance be followed by a congestion of some of the internal viscera. This variety is also known by the name *sudatoria miliaris*. Chronic *idrosis* differs from the subacute in the particular feature that it is not apt to be accompanied by either constitutional disturbance or the appearance of miliary vesicles, but is prone to be very chronic, and in some instances will and does thus continue, independent of any other affection, in a general form for five or ten years; but its rule is to be partial, and confine itself to either one side or the other of the body, generally to the hands and feet.

I was once consulted by a female patient, who informed me that she only sweated on one side—the left side—and she had not sweated on the right side for years. The scalp, perineum, groin, and axilla are attacked by it; and in consequence of the acid character and disagreeable odor of the perspiration which belongs to *idrosis*, it becomes a

source of great annoyance to the patient. The perspiration is sometimes so profuse as to keep the inside skin of the hands and the soles of the feet in a softened, corrugated condition—like that which the skin will present after being kept in warm water for a long time. The sweat in extraordinary cases of idrosis is blue, green, yellow, and sometimes black or red; but this is a rare abnormal condition, and has received the names hæmidrosis and chromidrosis. Idrosis maligna is the name which was given to the sweating sickness of the sixteenth century.

The Treatment. There is no doubt, then, in many cases of simple idrosis, that the disease owes its origin to a chronic inflammation of the perspiratory tubes themselves, and is therefore a purely local disease; but in other cases it is evidently symptomatic of some derangement of the general system. Notwithstanding this, it is usually an obstinate disease, and requires tedious treatment for its cure. The first duty in the treatment is to regulate the secretions of the alimentary canal. For this purpose, a dose of blue mass should be given, followed by the following mixture: ℞. Sodii sulphat., ʒj; acid. sulphuric dilut., ʒ iss; aquæ carui, ʒ viij; ext. gentian. fld., ʒj; Fowler's solution, ʒj. M. Sig.—Shake well. Dose, a tablespoonful before each meal.

This should be continued until the arsenic shows its effect in producing puffiness of the eyelids and slight swelling of the face. At the same time, the following will be found very useful: ℞. Resorcin, ʒ iss; tinct. aconit. rad., gtt. xxxij; liquor ammoniæ acet., ʒij; syrup aurant. cort., aquæ distil., āā ʒj. M. Sig.—Shake well. Dose, a teaspoonful every every three hours.

The dose of tinct. aconite should

be increased gradually to fifteen drops a day.

It is reported that extract of aconite cured a case of chronic general ephidrosis which had lasted for six years independently of any other affection, and which, after resisting various remedies, did yield to the power of this drug given in the beginning, in doses of one-half grain three times a day, and gradually increased until sixteen grains a day were given, and so continued until the disease was cured. In cases needing a tonic treatment, this formula will probably be found to be very serviceable: ℞. Tinct. ferri perchlor., ʒij; liquor strychniæ, gtt. xxxvj; liquor ergotæ, ʒ ss; syrup. simpl.; aquæ distil., āā ʒiij. M. Sig.—Shake well. Dose, a tablespoonful three times a day.

Local treatment is not to be neglected in cases of idrosis of the hand and feet. As an application to the hands, I have found the following most effectual: ℞. Pure Carolina pine tar; alcohol, āā, ʒj. M. Sig.—Shake well and apply with a camel's hair brush to the hands twice a day, and keep them protected by cotton gloves.

Should this fail, a mixture of: ℞. Acid. tannici, grs. xxx; glycerinæ, ʒj. M. Sig.—Shake well and apply two or three times a day to the hands or feet.

Should this also fail, chloride of lime and tannic acid may be tried: ℞. Calcis chlorin., ʒiij; aquæ distillat., Oj; solue et cola, et adde, acid tannici, ʒiij. M. Sig.—Apply to the hands or feet two or three times a day.

The following will be found a good application to the hands and feet: ℞. Richardson's styptic col., ʒj; carbolic acid, grs. xx. M. Sig.—Apply three or four times a week.

A strong solution of alum may be tried, and for the feet, a strong brine

foot bath ought to be tried every night at bedtime. This, or whatever course of treatment is adopted, must be continued patiently, and with perseverance.

The Various Forms of Eczema in Children.

PROFESSOR GRANCHER (*Journal de Médecine*). Here we have four little eczema patients presenting very different appearances. The first has a simple impetiginous eczema of the face which appeared quite recently and which, despite its apparent severity, will disappear quite rapidly. It amounts to very little. The second case (æ. 7) is more complex. The affection commenced when the child was 5 months old, and appeared upon the cheeks and eyelids. It has since continued almost constantly. The child has had for years the appearance of wearing a sort of dripping mask. She formerly contracted varicella, a complication which made the case a very interesting one. It was observed that the eruption of the varicella was much more confluent upon the parts originally attacked by eczema than elsewhere. During convalescence from varicella, the child's eczema greatly improved. It then contracted a light form of whooping cough, followed by severe diphtheritic angina, and, following these affections, the eczema completely appeared.

In a third case, a child of 12, the eczema was symmetrical, chronic and relapsing. The first attacks (at one year of age) lasted for a month or two, and occurred oftener as the child grew older. In the intervals of attack, the apparent cure seemed almost complete. The eczema, which was almost dry, commenced in the face, whence it spread to the arms and legs. Its character was pruriginous. During the child's stay at the hospital it was taken with a chill and an angina preceding

scarlatina. Before the eruption appeared the eczema suddenly took its departure. The scarlatina rash was very abundant and was strongly marked on the eczematous regions. The pruritis disappeared for 10 days, and then the eczema returned with all of its former symptoms.

Another patient, who had been attacked three times before with eczema, followed by a scarlatinaform desquamation, came to hospital with an acute attack, accompanied by intense fever which gave way rapidly to treatment. These four cases, so different, yet all of them attributed to "eczema" show how difficult it is to fix upon the true characteristic of the malady.

A Guiana gentleman consulted the greater part of the European dermatologists for an eczema of long standing which covered his face with a veritable mask of vesico-pustules, and had extended to his arm. Various methods of treatment brought no relief. Certain topical applications ameliorated the condition of the arm to a certain degree, but the facial eruption remained stationary. Cod liver oil was prescribed, and the patient was soon able to take 12 teaspoonfuls a day. A month later there was a considerable amelioration of the trouble, and two months afterward the cure was complete. The patient has continued well for a long time, and compensates for the defect in his nutrition by taking a certain quantity of cod liver oil from time to time. The interest of the case centres wholly in the fact that it was cured by internal nutritive medication, and it is impossible not to see in it a demonstration that skin diseases are not local maladies so often as is supposed. Most of them are referable to a defect in nutrition and get well when that defect is remedied.—*Medical Abstract.*

DISEASES OF WOMEN.

Elephantiasis Arabum of the Labia Majora.

DR. HENRY J. RAYMOND details an interesting case of this disease in the *American Journal of the Medical Sciences*. The patient, a full blooded Indian woman, of twenty-eight, has lived all her life on the banks of the Klamath, in California. A venereal taint, al-

dum, suspended by a strong pedicle of horse shoe shape. The skin of the pedicle was slightly thickened, but not nodular; it was not adherent to the underlying tissues, nor abnormal in color, the pubic growth of hair being situated on the body of the tumor. The skin of the tumor was thickened, rugose, nodular in places and throughout adherent to the subjacent tissues. Pigmen-

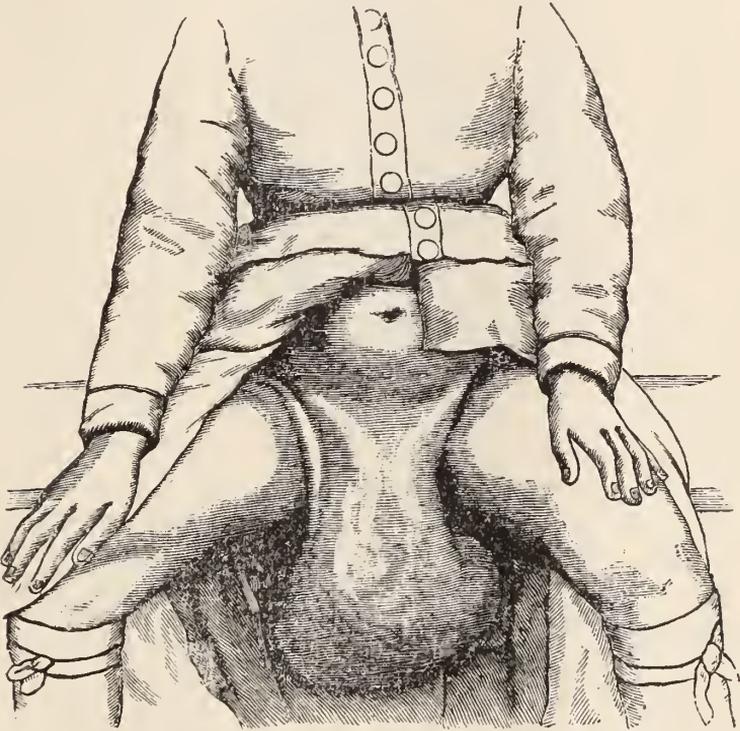


FIG. 3.—FRONT VIEW OF TUMOR.

though probable, is denied. A tumor of her genital lips, about the size of a large walnut existed from birth. This tumor increased in size after she became pregnant and increased until, at term, it had attained nearly its present dimensions.

When first seen the patient had a pendulous mass of solid but elastic consistency hanging from the puden-

tation was marked; sensitiveness not increased. A sulcus about three inches in depth extended along its posterior aspect (Fig. 4) from the anterior commissure of the vulva downward. The urine in running down the sulcus caused burning and irritation. The largest circumference of the growth was the horizontal, this being thirty inches, the antero-posterior twenty-four inches, the

latero-lateral twenty-two inches, and the shortest circumference of the pedicle eighteen inches.

An operation for its removal was made, the tumor being removed by a few strokes of the knife. The hemorrhage was trifling and was subdued without the use of ligatures.

In about two weeks healing was accomplished with the exception of a small patch which was left to cicatrize. The most interesting feature in connection with the case is the

fact that pregnancy seems to have communicated an impetus to the growth of the tumor.—*St. Louis Medical and Surgical Journal.*

Division of the Cervix Uteri Backward in some Forms of Ante flexion of the Uterus, with Dysmenorrhœa and Sterility.

DR. WILSON read a paper before the American Gynæcological Society with this title. This was an old operation, but, as a result of various causes, it had been barren of good results in certain hands, and followed by bad results in other hands. The use of stems, sponge tents and dilators had been substituted for it, but he had found no measure so safe and efficient as the knife in the classes of cases to which he should call attention. These were: 1. Those of ante flexion of the uterus, with an indurated cervix, where the body was

bent upon the neck or the neck upon the body, forming a more or less acute angle. 2. Cases of acute flexion where

the cervix was hyperplastic and indurated, as dense as cartilage. 3. Cases in which there was a hard, unyielding internal os, through which the probe passed with difficulty, and in its passage gave the sensation of passing over rough, dense cartilage, while the finger in the sulcus between the body and the neck in front felt the sensation of a strong cord tied

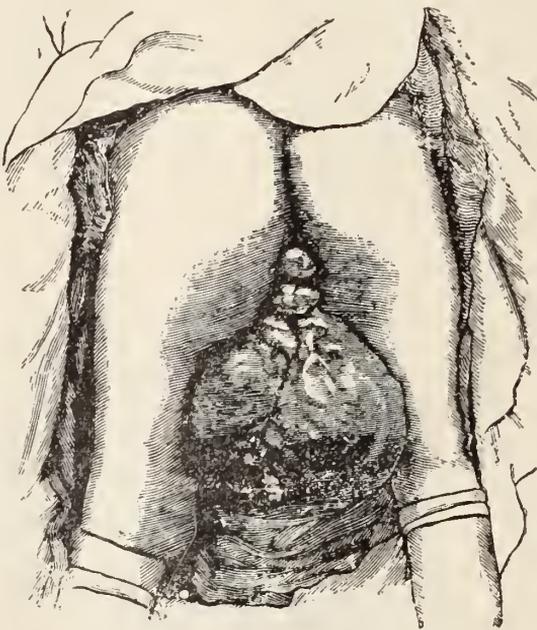


FIG. 4.—BACK VIEW OF TUMOR.

around the uterus. If the patient escaped the secondary results which sometimes followed the use of tents, they were, next to the use of the knife, the most efficient means of overcoming the difficulty. Forcible dilatation did not restore the ante flexed uterus. For the purpose of rectifying the difficulty, the knife was the surest means in the cases referred to. Where the posterior lip of the cervix was divided, and the internal os divided anteriorly and posteriorly, the circular muscular fibres were paralyzed, and the longitudinal fibres contracted and tended to rectify the distortion. With the patient anesthetized, the uterus was to be drawn downward with a tenaculum fixed in the anterior lip. The posterior lip was then to be divided with scissors up to the vaginal junction. A hysterotome was next passed, and the internal os divided

anteriorly and posteriorly to an extent sufficient to permit of the introduction of a large sound. The parts were allowed to bleed freely. A pledget of cotton soaked in a mixture of Monsel's solution, tincture of iodine and glycerin was then introduced into the cervix, and the vagina lightly tamponed. The tampon was not removed until the third day. All manipulation of the uterus was avoided for at least two weeks. The patient was allowed to recover fully from the operation, which usually required a month. All treatment was then suspended for a month to allow the endometrium to improve. Intra-uterine applications of Churchill's tincture of iodine were then made two or three times a week. The treatment was again suspended after the lapse of a month, to be resumed in the course of one or two months. If this after treatment was not carefully and properly carried out, the operation had better not be done. The author had performed the operation four hundred times, and had never produced such good results with any other method. No death had occurred which could be attributed directly to the operation.

Dr. T. A. Emmet, of New York, considered mechanical dysmenorrhœa a myth. There were two conditions of flexion: one a flexure of the neck, a congenital defect, and the other a flexure of the body of the uterus due to preceding inflammation outside the uterus. Sterility resulting from this latter cause was not relieved by the operation, and its performance was attended with great risk to life. The congenital flexion was the only one in which he operated to relieve sterility. There were a few cases of the inflammatory form of flexion where the operation benefited the reflex symptoms by its revulsive action. Where he had

done the operation, he had drawn the vaginal mucous membrane to the bottom of the wound and secured it with stitches. This did away with the necessity of plugging and the danger of hemorrhage.

Dr. James R. Chadwick, of Boston, had not been successful with this operation in curing sterility or dysmenorrhœa. He regarded the flexion as always congenital, the result of a persistence of the infantile shape of the uterus. The defect was not confined to the anatomy of the organ, but involved its function also, and probably extended to other portions of the genital tract. The only cases in which he had seen benefit from the operation had been where there was flexion with a small external os. In a certain proportion of these cases impregnation had followed. He thought the operation should be restricted to cases in which there was flexion with a small external os, but in which the uterus seemed to be well developed in other respects.—*N. Y. Medical Journal.*

Martin's Operations for Prolapsus Uteri.

A. MARTIN has reported before the *Gesellschaft für Geburtshilfe u. Gynäkologie zu Berlin* one hundred and ninety-two cases in which he had operated for the cure of prolapsus. In all but six he was obliged to perform an operation upon the cervix; in three instances it was necessary to extirpate the entire uterus. In one hundred and seventy-one cases silk sutures were used, in seventeen the continuous catgut, the latter being highly commended, although it is noted that it is not safe to depend entirely upon these, as secondary hemorrhage may occur if they are not reinforced with silk. Relapses occurred only eleven times, and those, too, in old subjects. The operations performed were anterior and posterior kolporrhaphy, with perineorrhaphy. These

statistics are highly significant in view of the statements recently urged in favor of Alexander's operation as the only sure method of effecting a perfect cure of prolapsus.—*N. Y. Medical Jour.*

The Avoidance of Fistulæ in the Track of the Sutures in Plastic Operations Upon the Recto-Vaginal Septum.

LAUENSTEIN (*Centralblatt für Gynäkologie*), contributes a short article on this subject, based upon four cases of laceration of the perinæum. He lays considerable stress upon the use of the continuous catgut suture, when buried deeply beneath the denuded surface, referring with approval to a former paper by Werth.—*Ibid.*

The Rectum in Gynæcology.

CORTIGNERA (*Arch. de Tocologie; Bull. Gén. de Thérap.*), calls attention to the intimate relations between the three principal systems of the pelvic cavity in women—the rectum, the bladder and urethra, and the ovaries, uterus and vagina. The effect of uterine deviation upon the functional action of the bladder is well known; if a woman complains of troubles of micturition our chances of making a correct diagnosis are large if we incriminate the bladder. Gynæcologists have too great a tendency to forget the rectum in the various maladies which arise in the lower pelvic cavity. An anal fistula may be the cause of utero-ovarian congestion, and its cure would cause a cessation of all the neighboring troubles. Atony of the rectum and catarrh of the same organ (on account of the accumulation of hard fecal matter), sometimes causes retroversion; or utero-ovarian congestion may take place. It is not rarely the case that contractions of the rectum give rise to amenorrhœa. The

presence of *ascaris vermicularis* in the anus and rectum, produces symptoms of congestion in the adjacent organs and often causes a menorrhagia which soon disappears after the use of parasiticides. But if the rectum is often the cause of the troubles observed in the neighboring organs, it may, on the contrary, become very useful as an aid in curing utero-ovarian maladies. The rectum is not as yet properly utilized from a therapeutic point of view. Injections which derive their value from the fact of their being of a high or low temperature are very efficacious when given by the vagina; but this is no longer the case when the injected liquid is medicated. The vagina rebels against the absorption of medicaments. It is precisely the reverse with the rectum; its absorbing power is very great. If you wish to give astringent or calmative injections for instance, introduce them into the rectum. Finally, do not fail to examine the rectum and anus in cases of genito-urinary maladies in woman. It is one way of avoiding error and loss of time.—*N. Y. Med. Abstract.*

Uterine Disease in its Relation to Eye Diseases.

DR. F. R. POOLEY, of New York, has written a paper on this subject, and summarizes as follows:

1. In certain cases there is a direct relation between irregularities in function and diseases and concomitant affections of the eyes.

2. The eye affection may be merely functional, or there may be organic disease.

3. Asthenopia exists in cases where there is ametropia, apparently due only to the reflex effects of the uterine disturbance on the organs of vision.

4. In many of these cases there is paresis of accommodation.

5. In other cases of asthenopia in which ametropia is present, and the existence of uterine disease as well, the former is not always relieved by correcting glasses.

6. Other functional anomalies than asthenopia may be observed, such as blepharospasm, diplopia, and functional irritation of the retina.

7. Long continued reflex irritation from uterine disease may result not only in asthenopia, but, as already shown by Mooren, in atrophy of the optic nerve and other organic changes.

8. Irregularity of circulation and venous hyperemia about the climacteric period may be the cause of intra-ocular hemorrhages.

9. Loss of blood from uterine hemorrhage affects the nutrition of the optic nerve and retina, leading to dangerous results.

10. A variety of pathological conditions of the uterus may be responsible for the eye troubles, but they may occur more often where the disease is of a chronic nature, as in displacements, lacerations of the cervix, and other affections accompanied by congestion, and the nature of the disease is such as to affect the normal process of menstruation.

11. The proper therapeutic measures to be adopted in such cases are : the rational treatment of the uterine disease ; the correction of any existing ametropia ; the temporary use of weak convex glasses when there is feebleness of accommodation. In some instances galvanism for the relief of supra-orbital neuralgia, and the use of tonics, proper food, and favorable hygienic conditions.

Ovarian Displacements.

T. M. MADDEN, F. R. C. S., England
(*Archiv. of Gynec., Obst. and Pædiatrics*):
Displacements of the ovaries, apart from

those caused by disease, were long completely ignored by gynæcologists, and even yet receive less consideration than from their comparative frequency and pathological importance should be the case. From clinical experience I have been long convinced that ovarian hernia and prolapse are both much more common than they are generally supposed to be. In every-day gynæcological practice, a certain proportion of patients complain, *inter alia*, of dull, sickening, left side pain, usually referred to left inguinal region. And in many instances, if further investigation and physical examination be then made, this may be found traceable to some ovarian displacement, which too often is passed over without inquiry or recognition, owing to greater prominence of other co-existing symptoms. Ovarian herniæ may be inguinal or femoral, though more frequently the former, appearing either as a direct hernia in the inguinal or femoral regions, or in the more usual oblique form, making its way through the canal into the labium. Still more common, however, than either of these herniæ is the prolapsus of the ovary, and more especially that of the left ovary, into Douglas's space, where it may be discovered on examination as a small, oblong, dense, and highly sensitive tumor in the post-cervical recto-vaginal fossa. Although in some instances congenital and occasioned by similar causes to other forms of hernia, ovarian herniæ are much more usually the result of the violent muscular efforts of the second stage in cases of difficult labor, and most frequently are observed in multipara whose abdominal parietes have been relaxed and viscera compressed by their repeated gestations. But in the most common form of ovarian displacement, viz. : that downwards into Douglas's space, the causes

are more generally gynæcological than obstetrical, the ovary being either extended from its normal position by the *vis-a-tergo* of abdominal, uterine, or peri-uterine tumors or enlargements, or else dragged down by the tension of uterine displacements on the ligaments. The *symptoms* of ovarian displacement are the sudden occurrence in either the inguinal or femoral regions, the labia or in the recto-vaginal fossa of an ovoid tumor, which in its ordinary condition is usually about the size of a small walnut, which just before the menstrual period becomes enlarged, as in one case recently in my hospital to the size of a Tangerine orange, and this gives rise to a dull, aching pain, which in the interspace gradually subsides until the functional activity of the displaced gland is again stimulated by the approach of the next catamenial epoch. In some instances, however, the dull sickening pain and discomfort thus occasioned never subside but increase to an unbearable extent until relieved by appropriate treatment. Formerly ovarian herniæ were generally mistaken for enlarged inguinal or femoral glands, or labial abscesses, as well as for other hernial protrusions, whilst ovarian prolapsus into the recto-vaginal space was then, in like manner, confounded with pelvic abscess, hæmatocele, sub-peritoneal fibromata, or even as the retroverted or retroflexed fundus uteri. From enterocele an ovarian hernia may be distinguished by not being smooth and globular, nor giving rise to gurgling on compression, or resonance on percussion, whilst from epiplocele it may be differentiated by absence of the peculiar soft, doughy feeling, and irregular, ill defined outline of the latter. From enlarged inguinal glands a displaced ovary may be diagnosed by the smaller size and simultaneous appearance of

several glands in the same situation in the former case. From pelvic, psoas and other abscesses in the groin, ovarian herniæ may be recognized by the history of the case and the physical character of the firm, ovoid, well defined tumor, if ovarian. The *treatment* of ovarian protrusions must obviously be dependent on the situation of the displacement, *i. e.*, whether it be at either of the abdominal rings, or downwards into the labium, or into the recto-vaginal fossa. In the first form, whether the ovarian hernia be above or beneath Poupart's ligament, an effort should primarily be made to reduce it, if possible. In the majority of cases, however, these herniæ are not reducible when seen by the gynæcologist, and even in those which are reducible the pressure of a truss is neither endurable nor effectual. And in the majority of cases we must be content to protect the hernia from any further protrusion or external injury by a well-fitting hollow truss. Before the application of this an attempt should be made to lessen the local hyperæsthesia by topical sedatives, poultices, etc., or, if necessary, by leeching. At the same time this constitutional irritation, always present in all ovarian displacements, should be allayed by free doses of bromide of potassium, which may generally be combined with tonics in these cases. A prolapsed ovary in Douglas's space may be distinguished from a posterior uterine displacement, or tumor, by recto-vaginal examination and the use of the sound, whilst in the differentiation of this condition from a tumefaction caused by cellulitis, rectocele, a small parovarian cyst, or a pedunculated fibroma, the same methods of examination will enable us to determine not only the presence of any uterine malformation, but also the character of the tumor and the

existence of any fluctuation. If the uterus be found normal in size and position, and if there be no fluctuation, in the case of any small, well-defined, firm ovoid tumor in this situation, which, on being touched, gives rise to a peculiar dull, sickening pain, we may confidently conclude that we have to deal with a prolapsed ovary. When, however, such measures prove ineffectual to relieve the intolerable constant, dull, aching pain, aggravated into acute suffering at each monthly recurrence of the menstrual period, when the patient complains of marked gastric irritation, and repugnance to all food is increased to positive sickness of stomach whenever the tumor is touched, and when her health is thus broken down, and her life imperiled by the consequence of this apparently trivial and too often neglected displacement, then we should urge the extirpation of the dislocated and probably diseased gland, in whatever situation it may be extended.—*Medical Press and Circular.*

Warm Medicated Enema for Acute Menstrual Pains.

For the relief of the violent pains that in some women precede the menstrual flow, Dr. MENIERE (*Rivista Balleare*) gives a warm water enema containing 30 grains of chloral and 30 grains of bromide of potassium. For young women only half the above quantities should be prescribed.—*Maryland Medical Journal.*

Observations and Suggestions in Regard to the Method of Operating During the Same Anæsthetization for Lacerations of the Cervix Uteri and Ruptured Perineum.

DR. T. A. ASHBY, in an editorial in the *Maryland Medical Journal*, of Aug. 14th, 1886 (after stating that he almost

invariably restored both organs at one operation), says in conclusion :

The method of procedure is this : The patient is first prepared for operation by so many days or weeks of prior treatment as her condition demands. When she is in suitable health a day is set apart and the early morning selected, say the hour of 10 o'clock, for the operation. The patient is anæsthetized, and then placed in Sims' position. The edges of the torn cervix are properly pared and brought together with antiseptic catgut sutures. Beginning at the angle of the flaps the sutures are passed in parallel rows and as near to each other as they can be conveniently inserted. Three, four, five or six sutures, or more, if required by the length of the flaps, are employed. The wound is now brought into close apposition and the sutures are tied, commencing with the one nearest the angle of the wound. After the flaps are in this way drawn together and adjusted a single wire suture is passed through each flap on both sides at the cervical opening. These are twisted to the required degree and the ends so cut off that the end points cannot irritate or wound the vaginal tissues. This is best accomplished by converting the wire into a spiral and turning the end points into the hollow of the spiral. The wire sutures are used as fixation sutures and on the theory that the strain upon the suture is greatest at the end of the cervical stump. It has never been found necessary to use more than one wire suture on each side, though in a case of an unusually long flap or very thick cervix, either silk or wire would be employed if necessary. The catgut suture has acted very satisfactorily in our experience. By the end of the eighth or tenth day it will most probably have disappeared by absorption, but in this

there is an evident advantage. Primary union must result in from 48 to 72 hours, if it takes at all, and the catgut suture, if of any value at all, will continue to hold the flaps in apposition until this time. We have found the catgut suture in position as late as the fourteenth day after the operation.

Having closed the cervix after the manner described, the patient is changed from Sims' to the recumbent posture, the perineal border is abraded of its mucous surface, and the tissues are brought together after the method of the perineal operation as advised by Dr. Emmet, or such modifications of it as may be indicated in the case. The perineum thus closed the patient is lifted into her bed and treated as after an ordinary operation for the closure of the perineal body. At the expiration of eight days the perineal sutures are all removed. The wound is bathed in antiseptic washes and the vagina is likewise syringed out with antiseptic injections. The patient is enjoined to remain quiet for the next five or six days, and usually by this time the perineal wound is so far well that the finger or speculum can be used to examine the cervix. Usually the sutures from the cervix are removed on the fourteenth or sixteenth day after the operation. Convalescence is rapid after this. During the operation every attention is given to cleanliness, and antiseptics—chiefly the bichloride of mercury 1 to 4,000—are carefully employed. Hemorrhage has never proved to be a troublesome complication of the two procedures. The time required for both operations is from one hour to one hour and a half. This can be expedited by having an abundance of needles, sponges, and other instruments required for expeditious work. If the operator stops in the middle of an operation to talk, or

to thread needles, or to sponge, he should not charge this delay to the operation.

The Perineum as a Supporting Structure.

DR. C. D. PALMER, *Medical and Surgical Reporter*.

The author, after ascribing* to Ambrose Paré due credit for having first devised and executed an operation for the cure of laceration of the perineum, reviewed the list of names that had been prominent in advancing the operation towards perfection, and entered into the discussion of the question: To what extent is the perineum a supporting organ? in answer, said:

It will be safe, I think, to formulate the following propositions:

1. As the perineum is made up of muscular and other tissues, entering into the lower structure of the floor of the pelvis, it follows that lacerations of it do impair, both directly and indirectly, the forces which sustain the vagina, and through this organ, the bladder and rectum.

2. Perineal lacerations, even complete ones, may occur and not be followed by displacements. Complete splitting of the sphincter ani, leading or not to rectal incontinence, greatly diminishes the chances for vaginal displacement, in that it lessens ordinary intra-abdominal pressure at rectal evacuation. The absence of any change in the vaginal walls implies that the laceration, however extensive, has involved to a great extent only the base of the pyramidal body.

3. Perineal lacerations do not produce uterine dislocations directly. Through vaginal subinvolution, the formation of a rectocele, a cystocele, then traction upon the pelvic floor, they may do so indirectly.

4. Uterine displacements to a great

degree, and vaginal displacements to considerable, though less degree, are due to a weakening of the pelvic floor or diaphragm (from which the first named organ is suspended), by injuries sustained chiefly during parturition, but aggravated by causes operative afterwards.

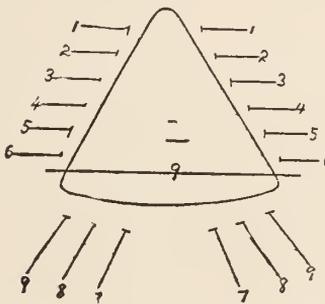
Good results in perineorrhaphy, as in plastic and uterine surgery, depend upon the attention to many little details, before, during, or after the operation itself. But aside from all these, the two chief features of the operation consist of a thorough denudation of a surface, proper in size, shape, and location, and the correct adjustment of the sutures. Two very common errors are made—

like in action, the true function of this structure.

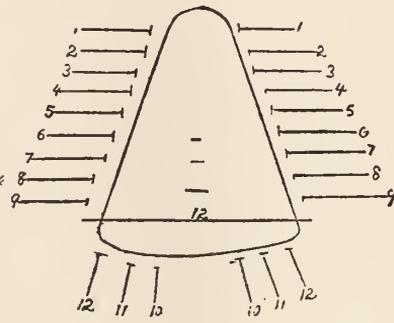
Suture No. 9 enters the integument and makes its exit on undenuded mucous membrane in the vagina about one-fourth inch below No. 6. When the triangle is folded together, all this suture, shown running across the base of the triangle, is drawn out by tightening the outward ends.

The external sutures are removed in from seven to ten days; the vaginal in from ten to fourteen days.

The advantages of this method of placing the sutures (the greater number by far being intra-vaginal, not external) are: less after-swelling and pain, greater



SHORTER TRIANGULAR DENUDATION.



LONGER TRIANGULAR DENUDATION.

one to denude the vulvar orifice too far forward and to take off too much skin; the other not to extend the vaginal dissection sufficiently upward.

Thorough and complete coaptation of the undenuded borders of the two lateral denuded surfaces can be effected only by the use of vaginal sutures. These may be so placed as to not only bring these borders together, edge to edge, but take up and bring into apposition the ruptured, separated muscular fibres and deep pelvic fascia of the perineum and pelvic floor; to reconstruct a new pyramidal body, in substance to fill the normal interspace between the rectum and vagina—a body not only wedge-like in shape, but wedge-

ease in self-urination, and little or no pocketing of the posterior vaginal wall within the vulva. In my experience, a thicker, stronger perineal structure is built and a better vaginal support is given than by any other operation.

The operation, as described by the author, would, he felt sure, prevent sagging of the posterior vaginal wall and pelvic floor, by reuniting its muscular and fascial connections, thus largely, if not entirely, restoring the functions of these most important structures.

Perineorrhaphy.

The operation for ruptured perineum has recently been discussed in the British Gynæcological Society and in the

British Medical Journal. In the latter journal, DR. FANCOURT BARNES publishes a note on twenty-seven cases of perineorrhaphy. Sixteen of these were done by the old method—dissecting off an area of mucous membrane and bringing the freshened surfaces into symmetrical apposition. All were successful, but, as is usual in all such cases, morphia suppositories were necessary till the sutures could be removed. The last eleven cases were done after Mr. Lawson Tait's method, which Dr. Barnes had since learned. This operation is difficult to understand without illustrations. The best description of the operation is that in Dr. Arthur Edis' Manual of Diseases of Women. At least Mr. Tait himself gives Dr. Edis' this credit. He (Tait) had previously described it. The method differs from others in that there is no removal of tissue, and therefore, if it fail, the patient is in as good a condition as ever for successful operation. The recto-vaginal septum is split with a pair of curved, sharp pointed scissors in such a manner that the lower flaps are opposed and turned into the rectum, while the upper are turned upwards to the vagina and also opposed. The stitches are inserted at the point of reflection of the two flaps, made by splitting the septum. They are not passed through skin at all. By this method it is claimed that no pain severe enough to require morphia is suffered. The bowels are kept open by daily enemata. The operation, Mr. Tait claims, can be done, splitting the septum and putting in sutures, in from five to eight minutes.—*Brit. Med. Jour.*

Hydrastis Canadensis in the Treatment of Uterine Hemorrhage.

M. A. MENDES DE LEON, of Amsterdam (*Arch. f. Gynäk.*, xxvi, 1; *Centbl. f. Gynäk.*), reports his experience in the

treatment of about forty women with *Hydrastis Canadensis*. The remedy seems to have afforded the best results in cases of menorrhagia accompanied with severe dysmenorrhœa, as a consequence of determination of blood to the generative organs; in catarrhal inflammations of the body and neck of the uterus; in chronic pelvic cellulitis, with severe abdominal pains at the periods; in prolonged and painful menstruation connected with displacements, especially retroflexion and retroversion; and in hemorrhages at the menopause. Instances are given of each of these five sorts of cases. In almost all of them the drug diminished the bleeding, and generally it overcame unnatural frequency of menstruation. The author observed no untoward effects beyond slight digestive derangements, except in two cases; on the other hand, the appetite was improved. In the two exceptional cases, nervous symptoms made their appearance—the pulse became very weak and frequent, the patients were depressed and had hallucinations, and one of them suffered with transitory delirium and loss of consciousness. The drug was usually given for fourteen days before a menstrual period, in doses of from fourteen to twenty drops [preparation not specified] four times a day; in a few cases it was given during the whole intermenstrual period. Like Schatz, the author attributes the efficacy of *hydrastis* not so much to any action on the muscular tissue of the uterus as to its exciting vascular contraction and consequent diminution of pelvic congestion.

DISEASES OF CHILDREN

Hysteria in Children.

DR. HERZ, in a lengthy article on this subject (*Wiener Med. Woch.*), says the most important predisposing causes

are heredity, faulty nutrition, modern methods of bringing up children, intellectual cramming, and, according to Jacobi, masturbation. The exciting causes may be either local or general. Among the former are enumerated phimosis, adherence of the prepuce to the glans, and an elongated and inflamed clitoris. The general exciting causes are typhoid fever and the various blood poisonings. The author has met with a case in which the latent predisposition was evoked by so simple a cause as aphthous stomatitis. Psychical conditions—fear, fright, irritation—are frequent excitors. The child during an attack may lose consciousness, or it may be in a condition of semi-sleep, in which it hears and sees accurately, but is not fully conscious of what is going on about it. Convulsive contractures of the extremities may occur. The author follows Hænoch's classification rather closely, and in the second category ranges cases with convulsive phenomena. To this category belong particularly cases of vocal and respiratory spasms and singultus. Chorea laryngis has also to be mentioned here. Disturbances of sensation form a third category. These are not so common in the hysteria of children as in that of grown up persons. They take the form of paræsthesiæ, hyperæsthesiæ, hemianæsthesiæ, and neuroses of the joints, especially of the hip and knee. A fourth category comprises motor disturbances. These are manifested by clonic and tonic contractions of the muscles, contractures which may persist for years, spastic dysphagia, eructations, and vomiting. The disposition to jump, climb, and run, which often is confounded with chorea magna, belongs to this class. Paralysis of the most various grades, affecting different groups and at times a single muscle, are frequently met with. Tro-

phical changes and derangements of the secretions and excretions commonly occur. Hænoch mentions a case of hæmatemesis, and other authors have observed cases of hyperidrosis, salivation, polyuria, oliguria, chyluria, etc. The author's own experience has brought into prominence two important facts in the hysteria of children: (1) The great frequency of anæmia and chlorosis, and, as a consequence, defective nutrition of the central nervous system; and (2) the frequent affection of the central nervous system during the first years of life, the cause of which was obscure. The diagnosis in many cases must rest upon the exclusion method. For the treatment of these cases the author depends upon (1) strengthening the weakened system by hygienic, dietetic, and medicinal means; (2) calming the bodily and mental excitement by moral suasion and proper medicaments. The genitals should be examined in every case, and, if any source of irritation exists, it should be removed. During the hysterical attacks chloral and morphine must be chiefly relied on, and sometimes even inhalations of chloroform will be required. The author has also had good results with hydrobromate and bihydrobromate of quinine. He gave them in doses of from gr. iv to gr. viij, three or four times a day. He found warm baths much more beneficial than cold baths.

[In a monograph by Dr. A. Jacobi, a reprint of two articles that appeared in the *American Journal of Obstetrics and Diseases of Women and Children*, in February and June, 1876, a most valuable and instructive description of hysteria in children is to be found. Dr. Jacobi cites several cases in which masturbation played the chief factor in the causation of the train of functional nervous disturbances. It is particularly interesting to note that the habit was

observed in a child only nine months old. The acts of masturbation in so young a subject have a strong resemblance to epileptoid seizures, but are distinguished from them in that *they never occur when the child is asleep.*]—*New York Medical Journal.*

Treatment of a Form of Diarrhœa in Children.

DR. JAMES BRAITHWAITE, thus writes in the *British Medical Journal* :

There is a form of diarrhœa in children, usually occurring after weaning, and from that period to four or five years of age, which is characterized by the most horrible offensiveness of the motions. This is so marked, that it is generally at once mentioned by the parents. It is commonly met with in summer, but is not strictly what is known as infantile diarrhœa, in which disease the stools are sour, but not necessarily fetid. Probably this form of diarrhœa differs from the diarrhœa of younger infants, in being caused by the growth of the ordinary bacteria of putrefaction. It is not amenable to treatment by any astringent, nor has any alteration of diet much effect upon it.

It may, however, be successfully treated by disinfecting the bowel contents by means of salicylate of iron, as in the following prescription, which is suitable for a child two years of age : Sulphate of iron, ℥j ; salicylate of soda, ℥j ; glycerine, ℥iij ; water to three ounces. The iron and the salicylate should be dissolved separately, and the solutions mixed. The color is darker than port wine, and the taste not unpleasant. One teaspoonful must be given every hour, until the stools become well blackened, which happens in about twenty-four hours ; or a larger dose may be administered at longer intervals. The medicine should then be

given every three or four hours, and occasionally a small dose of castor oil, to clear the bowels well out and to get the secondary constipating effect of the oil.

I have employed this mode of treatment for many years. It was one result of a long series of microscopic observations upon the action of reagents upon the bacteria found in putrefying animal fluids, which I read before the Leeds and West Riding Medico-Chirurgical Society, eleven years ago. The addition of the salicylic acid to the iron I made more recently.

In hospital practice, and amongst the poor, it is not so successful as it would be if it were possible to remove the child from the family living room, the air of which is usually very impure, and is made worse by the smells incidental to cooking, and the presence of a sink.

Large Doses of Iodides and Bromides in Meningitis.

DR. J. F. STEVENS, of Shabbona, Ill., reports in the *Medical Record* a case of meningitis occurring in an infant 8 months of age. The disease when the child was first seen had so far advanced that parallelism of the eyes was lost, strabismus ensuing. The little patient was evidently failing rapidly, was unconscious, with head retracted somewhat. This condition had come on slowly. There had been no convulsions or convulsive movements. The bowels were extremely constipated, with the abdomen somewhat retracted. The respiration was irregular, and pulse somewhat quickened. A powder containing 5 grains of calomel was given, and was followed in one hour by a full dose of castor oil. Blisters were placed behind the ears and mustard to the feet, taking care to cover the soles thoroughly, and an ice bag was placed at the head. In about one hour the patient aroused

somewhat, and in an hour and a half, by which time the bowels moved, cried out several times. ℞. Sodii brom., $\bar{\zeta}$ ss; aq.; syr. simplex, āā q. s. ad $\bar{\zeta}$ iiii. Sig. One full teaspoonful every hour.

10 grains of bromide of sodium were given every hour, and $\frac{1}{2}$ grain of iodide of potassium was given every second hour. At the end of twenty-four hours the latter was given only once in three hours. The bromide of sodium was given in doses of gr. x every hour continuously, for four days. Under this treatment the condition of the patient slowly improved, but any attempt at reduction of the dose was sure to be followed by bad symptoms. At the end of four days the bromide was given once in two hours; from this to once in four hours, and then three times a day. The iodide was persisted in until symptoms of iodism manifested themselves, when the medicine was gradually withdrawn. During all this time the ice cap, filled now with simply cold water, was used. The bowels were kept open with the oil.

Some fourteen days after the case was first seen small abscesses appeared on the scalp, which would discharge about a teaspoonful of pus when opened. These continued until ten were formed. On the eighteenth day the treatment was changed, citrate of iron and ammonium in cod liver oil three times a day. Small doses of brandy were also given from time to time. The patient is now steadily improving, and bids fair to recover. Both ears have discharged fetid pus freely.—*Therapeutic Gazette.*

Treatment of Whooping Cough by Carburetted Hydrogen.

DR. W. T. GREENE, writes in the *London Medical Press*, as follows:

I remarked, in London, that the poorer classes were much in the habit

of taking their children, when afflicted with the whooping cough, to the gas factories, where, it was popularly believed, they derived no small benefit from inhaling the pungent fumes; but as they also frequently contracted bronchitis, and sometimes pneumonia from exposure to cold after leaving the gas works, this mode of treatment could scarcely be looked upon as altogether satisfactory. Strange as it may seem, although the clue was thus, so to speak, placed in my hands years ago, a considerable time elapsed before I thought of the plan I have since adopted. One of my children sickened with the disease, which gave every indication of gravity; but after a day or two, the severity of the initial symptoms gradually subsided, and all traces of the whooping cough disappeared in about ten days. What was the cause? Simply this: just at the head of the child's cot there was a slight escape of gas and the little boy got rid of his whooping cough in a marvelously short time. I lost no time in repeating the experiment, and with the like gratifying result. This, then, is the remedy for whooping cough. Let the patient inhale frequently, five or six times a day at least, the ordinary illuminating gas, which mainly consists of carburetted hydrogen, though probably the vapors of the volatile liquid carbides of hydrogen that are associated with it, are not without their share in producing the result. Let this be done regularly, and, in from three to ten days, the attack of whooping cough will be a thing of the past. The mode of administration is quite simple; procure a piece of ordinary gas tubing, of sufficient length to reach from one of the gas burners to the floor, turn on the gas sufficiently to make its odor perceptible, and make the patient inhale it for a few

minutes, as often as convenient ; it will not make him cough, but on the contrary, afford him a grateful sense of relief, and after a few more inhalations the more formidable symptoms of the disease will disappear, and the complaint will altogether cease to manifest itself after a few days. I have proved the efficacy of this simple plan of treatment in so many cases of whooping cough, that I have no hesitation in recommending it.—*Weekly Medical Review*.

Headache in School Children.

PROFESSOR N. J. BYSTROFF has examined 7,478 boys and girls in the St. Petersburg schools during the last five years, and found headache in 868 ; that is, in 11.6 per cent. He states that the percentage of headache increases in a direct progression with the age of the children, as well as with the number of hours occupied by them for mental labor ; thus, while headache occurred in only five per cent. of the children aged eight, it attacked from twenty-eight to forty per cent. of the pupils aged from fourteen to eighteen. The author argues that an essential cause of obstinate headache in school children is the excessive mental strain enforced by the present educational programme, which leaves out of consideration the peculiarities of the child's nature and the elementary principles of scientific hygiene. The overstrain brings about an increased irritability of the brain, and consecutive disturbances in the cerebral circulation. Prof. Bystroff emphatically insists on the imperative necessity for permanently admitting medical men to conferences of school boards. Of palliative measures he mentioned methodical gymnastics, mild aperients in well nourished children, steel in anæmic, bromides, inhalation of oxygen, and, in

severe cases, a temporary discontinuance of all studies.—*British Medical Jour.*

Iodide of Potassium in the Treatment of Infantile Broncho-pneumonia.

DR. ZINNIS, of Athens (*Arch. di Pat. Inf.; Rev. des Mal. de l'Enfance*), has been employing this drug for nearly ten years, with most satisfactory results. He states that it is most useful in the early stage of primary broncho-pneumonia, and in the case of well nourished children between the ages of one and five. It acts more rapidly in the sub-acute than in the acute form of the disease. When given in doses of from eight to twenty grains, dissolved in three ounces of water, it lowers the temperature within two or three days, reduces the frequency of the respiration, and assists the expulsion of mucus, while a marked improvement in the local condition will be noted. If this effect is not obtained within three days after beginning the use of the drug, it is useless to continue it. Zinnis regards the iodide as a true specific in broncho-pneumonia.—*N. Y. Medical Journal*.

OBSTETRICS.

The Early Diagnosis of Pregnancy by Means of the Sound.

MASSARENTI (*Rivista Clinica*) has for several years practiced successfully a novel method of determining the existence of pregnancy during the early weeks. Having, on several occasions, passed a sound into a gravid uterus without the occurrence of any unpleasant results, he determined to utilize for diagnostic purposes a procedure which is commonly regarded as most reprehensible. He uses a flexible wax bougie about four millimetres in diameter ; this is introduced to the fundus uteri and the depth of the cavity is carefully noted. He has recognized the existence

of pregnancy as early as the sixth week.
—*New York Medical Journal.*

The Application of Forceps to the After-coming Head.

LOMER (*Ztschr. f. Geburtsh. Gynäk.*), reports three cases, out of one hundred and twenty-nine extractions, in which he found it necessary to extract the head by means of forceps. He deprecates a resort to this measure except on the part of experienced *accoucheurs*, and criticises severely the statistics of Freudenberg, of Cologne, who applied the forceps in 34 per cent. of his cases of extraction.—*Ibid.*

Immediate Extraction after Version.

WINTER (*Ibid.*), after a careful study of this subject, based upon upward of three hundred cases, arrives at the following conclusions :

1. The erroneous teaching with regard to the advisability of not extracting promptly after version, arises from the common notion that the conditions present after version has been effected, are the same as in spontaneous footling presentations.
2. The true cause of the foetal mortality after rupture of the membranes, is not merely the premature escape of the amniotic fluid, but the violent contractions (often tetanic) of the uterus. Every effort should be made to deliver before this condition of tetanus occurs.
3. In simple cases of immediate extraction, the prognosis for the infant is very good.
4. When, for any reason the version is precipitate, the child's life is imperiled unless extraction is effected without delay ; pressure on the cord, premature detachment of the placenta, and the entrance of air into the uterus, are the common causes of the death of the foetus.
5. If the membranes are intact, extract immediately after turning ; if they have ruptured, wait until the cervix is sufficiently di-

lated, then extract promptly after performing version. 6. *Rapid version* should only be performed under special indications, and solely in the interests of the mother.—*Ibid.*

Clinical Observations on the Third Stage of Labor.

ROEMER (*Arch. f. Gynäk.*), publishes a series of observations conducted with the view of determining the average time after the birth of the child at which the placenta is expelled. From a study of between seven and eight hundred cases, he decides : 1. The later the period at which the membranes are ruptured, the earlier is the separation of the placenta. 2. The placenta is detached sooner if the bag of waters has been ruptured artificially. A further series of observations led Roemer to infer : 1. The after-birth comes away in the majority of cases, after the lapse of an hour, with expectant treatment. 2. The later the rupture of the membranes, the shorter the third stage of labor. 3. If the membranes are not ruptured until just before the expulsion of the head, the third stage will usually be completed in less than an hour. To summarize : The separation of the placenta is effected by the pains of the first stage, therefore, the longer the membranes remain intact, the sooner the placenta is expelled. Roemer next considers the management of the third stage of labor, with special reference to Credé's method. He decides in favor of the latter, preferring to employ expression after waiting from a quarter to half an hour, rather than to allow two or three hours to pass before attempting to remove the placenta.—*Ibid.*

Suppression of Pain in Labor by the Local Application of Cocaine.

DR. JEANNEL records his observations made during the past year in La

Maternité de l'Hôtel Dieu, Saint Eloi. He first applied the cocaine in the form of an ointment with vaseline. He got no results, partly because the vaseline is not absorbed, but mainly, as he believes, because corrosive sublimate injections were made, which drug decomposes the cocaine—a fact worthy to be borne in mind. Aqueous solutions were then employed, and it was found that a five per cent. solution was sufficiently strong. In the first stage of labor a speculum was used, and the solution painted over the neck and vagina, or a tampon saturated with the solution, may be introduced. In the second stage the tampon is introduced directly, without the aid of the speculum, and the liquid should also be carefully applied over the vulva. The operation must be repeated several times.

The pains of labor are due to the following causes, according to Prof. Doléris:

1. The muscular contraction of the uterine walls. The pains from this source are usually slight, and cannot be affected by cocaine.

2. Pains are produced by the dilatation of the neck and of the vaginal walls, the nerves of those parts being pressed upon and torn. These pains are relieved to a remarkable degree in many cases by cocaine.

3. Pains of an acute and severe character result from pressure of the child upon the nerve-trunks of the pelvis. Cocaine is powerless to relieve these.

4. Some pain is felt from the stretching of and pressure on the mucous membrane. This is suppressed by cocaine.

5. Most atrocious pains are produced in the expulsion of the head by the stretching of the vulva and perineum. These, also, according to Doléris and Jeannel, are relieved by cocaine.

The total result of the analgesic application seems to be that in most cases

the patient feels but slight pain in the pelvis, and only complains of a dull pain above the pelvis, and pains in the loins.

It yet remains to determine whether the amount of cocaine used is ever sufficient to cause constitutional effects, or to affect the normal contractions of the uterus.

It appears very certain, so far, that cocaine is not so effective or convenient as chloroform, and its claim for adoption must be based on its greater safety and absence of any bad after effects.

At present the most satisfactory use for cocaine at the time of labor is probably in case of lacerated perineum. Here a hypodermic injection of a few drops allows the immediate and painless suture of the parts.—*The Med. Record.*

The Amount of Pressure Exercised upon the Fœtal Head by the Forceps during Traction.

MARINS REY: The pressure upon the fœtal head consists of three factors: (1) The "active" compression made by the hand of the accoucheur, while locking the handles; (2) the "traction-compression," exercised by the forceps as the result of traction; (3) the "passive" compression, effected by the pelvic walls. During the act of traction the pressure, as expressed mathematically, is directly proportional to the resistance offered by the head, and inversely as the friction and extent of the surfaces in contact. The power exerted by the hand of the accoucher is inversely as the cosine of the angle between the blades, directly as the breadth and inversely as the length of the handles. The practical corollary is this—that it is desirable to increase the extent of the surfaces which are in direct contact with the fœtal head; the ideal forceps should have short parallel blades and long handles.—*New York Medical Journal.*

CONSTITUTIONAL DISEASES.

Piperine in Intermittent Fever.

DR. C. S. TAYLOR thus writes in the *British Medical Journal* :

As many cases of intermittent fever seem to resist the use of quinine, and all the other remedies in ordinary use, the following cases, which fell under my observation, will, I trust, exemplify piperine as an excellent addition to our knowledge of the treatment of this disease.

Case 1. M. J., aged 18, had suffered periodically, upwards of two years, with intermittent fever. It appeared that she had taken sulphate of quinine in great quantities, and in large doses, with the effect of only subduing the disease for a short time. She was sent abroad for a change of climate, and every other means had been used to cure the disease, without success.

Treatment.—She was directed to begin as soon as perspiration commenced, without regard to the heat of the skin, or quickness of the pulse, 3 grains of piperine every hour, until 18 grains had been taken ; and on the following day, when intermission was complete, the same quantity every three hours. This has, in every case, succeeded in checking the paroxysm, and as soon as that is accomplished for some days, the following pills, taken in the morning, noon, and evening, will be found beneficial :
℞. Pilulæ hydrarg., gr. j ; piperinæ, gr. ij ; quinae sulph., gr. iij ; syrupi, q. s.

Should the second paroxysm be escaped, the following pill should be taken every third hour : ℞. Piperinæ, gr. v ; mucil. gum. acaciæ, q. s.

It is now upwards of three years since the patient was treated, and she has continued free from the malady.

Case 2. Mrs. C., aged 34, had had several severe paroxysms of tertiary

intermittent fever, but very irregular in its attacks. Infusion of cinchona, as well as sulphate of quinine, had been freely taken, but to no advantage. On April 15, while taking a cold bath, she was seized with ague. At 7 A. M. I found her shivering severely. I ordered warm drinks to be given frequently. At 12 o'clock, cold shivering continued, and the symptoms were alarming ; the pulse was scarcely felt. The skin was cold, universally clammy, and unpleasant to the touch. The lips were of a slate color. The countenance was contracted, the eyes sunken, and the patient evinced marks of great agitation and alarm.

Treatment.—Hot flannels were applied over the chest and abdomen ; the legs and feet were rolled up in hot cloths, and stone vessels, filled with hot water, were constantly kept under her arms, and along the inside of the thighs and legs ; and warm brandy toddy was given frequently in small quantities. At 4 P. M., finding the reaction could not be brought on, five grains of piperine were given. This was with great difficulty swallowed ; it was, therefore, washed down with an ounce of brandy, in half a tumbler of champagne. Afterwards, full doses of the aromatic spirits of ammonia were ordered to be taken every third hour, and the champagne to be continued. At 6 P. M. reaction commenced, and, as the heat increased, the hot applications and stimulants were suspended. At 8 P. M. heat was general, and in proportion to the cold stage. On the following morning, the sweating stage commenced ; and, as soon as it was general, five grain pills of piperine were ordered to be taken every second hour, and continued for four days. On physical examination, the liver and spleen were found to be enlarged and hard, yet free from pain when pressed.

The following pills were prescribed, and the patient was ordered to take one every two hours; ℞. Piperinæ, gr. xxxvj; pilul. hydrargyri, gr. xij. To be made into twelve pills.

In case the bowels were not open, a wineglassful of the following mixture was to be taken when required. ℞. Sulph. magnesiæ, ʒ iss; sulph. quiniæ, ʒ ij; acidi sulph. dil., ʒ ij; aquæ puræ ad, ʒ xx.

It is now three months since she first had an attack of the disease. Health perfectly restored.

There are a great many patients having an objection to taking quinine in consequence of its affecting the head; but the piperine, although a powerful stimulant, carminative, and febrifuge, does not in the least degree, from personal observations, affect the sensorium.

Malarial Fever: What Changes Does it Produce in the Blood?

For many years Dr. JOSEPH JONES, of New Orleans, has studied this subject with great care. Some of his conclusions he gives (*Journal American Medical Association*):

1. The phenomena of malarial fever in the human organism are due to the introduction of a morbidic ferment.

2. The micro-organisms concerned in the production of malarial fever attack chiefly the red blood corpuscles of man.

3. The phenomena of malarial fever are due in part to the destruction of red corpuscles, in part to the derangement of the normal chemical changes in the blood and organs, and in part to the toxic action of the chemical compounds developed by and resulting from the action of the micro-organisms.

4. The chemical and physical changes excited in the blood and organs of the human body by the action of the ma-

larial micro-organisms are in their highest and final results inimical to the development and multiplication of the essential potential elements of the malarial ferment.

5. The active febrile phenomena of malarial fever are, in their ultimate results and products, antiseptic; they tend to destroy the morbidic ferment of malarial fever, or to inhibit its development.

6. Many of the most fatal or destructive effects of malarial ferment occur in cases in which there has been comparatively little elevation of the temperature, and in which the paroxysms succeed each other in an almost imperceptible manner.

7. The recurrence of paroxysms in malarial fever is due to the partial destruction of the micro-organisms during the active and pronounced chemical changes of the fever. When not wholly destroyed during the febrile stage, the micro-organisms are reproduced, and again, at definite intervals, induce disturbances of the nervous system, alterations of the blood, and oscillations of the temperature.

8. Such agents as quinia, arsenic and the preparations of mercury, act as poisons to the micro-organisms of malarial fever, excite an antiseptic effect upon the blood, bind the oxygen more nearly or chiefly to the hæmoglobin and proteids, and directly promote the elimination through the alimentary canal, the skin and the kidneys of the noxious products of the morbidic ferments, and of the increased and altered chemical changes.

9. The changes induced by morbidic malarial ferments upon the blood differ, chemically and microscopically, from those induced by other morbidic organisms, as those of yellow fever, small-pox, typhoid fever, etc.

10. The micro-organisms which we have observed in the blood of patients suffering from malarial fever, may be thus enumerated :

(a) Minute globular bodies, from one ten-thousandth to one thirty-thousandth of an inch in diameter, having the general appearance and chemical features of the spores of bacteria.

(b) Globular bodies of larger size than the preceding, often of a dark opaque character, found not only in the liquor sanguinis, but also in the colored blood-corpuscles and the colorless blood-corpuscles.

(c) Ovoid-cylindrical and rose-shaped bodies, not destroyed by acetic acid, and stained by aniline dyes. These bodies increase during the cold stage, and are also more numerous in pernicious malarial fever.

(d) Colorless blood-corpuscles containing minute pigments, granules, and dark spherical bodies, surrounded by protoplasm, and about twice the diameter of the colored blood-corpuscles of normal blood. Their behavior under the reaction of reagents, and also during the process of staining, leads to the view that a portion, at least, of these bodies must be regarded as vegetable organisms. These large pigment cells appear to be characteristic of malarial fever.

(e) Masses of hæmatin of various forms, irregular in size and shape, but most generally the sides and portions seen in profile are angular. The deposit of dark pigment masses in the liver and in the brain, in malarial fever, and especially in cases of repeated paroxysms, finds its origin in the changes of the blood-corpuscles induced by the morbid ferment or micro-organisms of malarial fever.

There is actual destruction of the colored blood-corpuscles in the living blood and within the walls of the living

capillaries and blood vessels in malarial fever. This destruction is referable either solely or originally to the action of the bile acids accumulated in the blood as a consequence of biliary congestion or obstruction during the febrile stage of malarial fever.

(f) Marked variations in the size of the colored blood-corpuscles. These variations from small corpuscles to what might be called giant cells, twice the diameter of normal blood-globules, appear to be characteristic of malarial fever.

11. The destruction of colored blood-corpuscles does not take place with equal rapidity in all parts of the organism, but appears to be most marked in the spleen and liver. The blood-pigment resulting from hæmatin of the blood-corpuscles is frequently observed in the blood as it circulates in the vessels and capillaries, in masses of various sizes, and in the form of cellular elements.

Without doubt, local congestions may be caused by obstruction of the circulation in the capillaries by these pigment particles and cell; and such congestions and hemorrhages thus resulting are especially significant when occurring within the structures of the brain and spinal cord.

The white blood-corpuscles absorb the remnants of the broken down red blood-corpuscles and the colored spores of the malarial bacillus.

12. From the causes mentioned the blood becomes watery, the proportion of red blood-corpuscles being reduced fifty per cent. or more.

13. The fibrin is reduced so that the tendency to hemorrhages is greatly increased.

Posology of Some of the Newer Remedies.

The *Rundschau Leitmeritz*, which is, by the way, one of the very best of the

German pharmaceutical journals, gives the following useful information concerning the dosage of the remedies which have come into general use since the last edition of the Pharmacopœia.

Osmic acid.—Best administered in pill form (made up with Armenian bole). The dose is $\frac{1}{60}$ grain, which may be repeated several times a day.

Agaricine.—Best administered in combination with Dover's powder. Dose, $\frac{1}{12}$ to $\frac{1}{6}$ grain.

Aloin.—From $\frac{1}{3}$ of a grain to $3\frac{1}{2}$ grains, in pill form.

Antipyrine.—Dose from 75 to 90 grains, divided into 3 portions, one of which is to be taken every hour.

Bismuth salicylate.—Dose from 5 to 7 grains, in pill form. In typhoid this dose may be doubled and repeated every hour, up to 10 or 12 times.

Canabinone.—From $\frac{2}{3}$ to $1\frac{1}{2}$ grain. Best administered mixed with finely ground roasted coffee.

Caffeine.—To commence with, the dose should not be over 3 grains, but this may be repeated every hour until 4 doses are taken—or say 12 grains per diem. This may be increased to double the amount mentioned. The benzoate of sodium and caffeine is a double salt which contains one-half its weight of pure caffeine. It resembles the salicylate of sodium and caffeine, but the latter contains more caffeine (10 parts of caffeine to every 16 parts of the double salt.)

Colocynthin.—Use subcutaneously. The dose is from $\frac{1}{6}$ to 1 grain. It may also be administered in pill form, by the mouth, the requisite dose being from $\frac{1}{3}$ to 1 grain.

Convallamarine.—Internally, in pill form. The dose is from $\frac{3}{4}$ to $1\frac{1}{4}$ grains, and it may be repeated every hour, until a total of 15 grains is reached.

Euonymin.—Best given in pill form, combined with extract of belladonna or

hyoscyamus. The dose is from 3 to 10 grains.

Helleborcin.—May be given in pill, solution, or in suspension in some mucilaginous vehicle. The dose is from $\frac{1}{6}$ to $\frac{1}{3}$ grain, repeated four or five times in the course of the day.

Tannate of Mercury (protoxide) may be given in a wafer. The dose is $1\frac{1}{2}$ grains, repeated thrice daily.

Nitroglycerin is best given in alcoholic or oily solution. The dose is from $\frac{1}{350}$ to $\frac{1}{60}$ grain, repeated several times a day. Rossbach prefers ether as a solvent. His formula for its use is as follows: Dissolve $1\frac{1}{2}$ grains of nitroglycerin in sufficient ether, and add the solution to a mixture, consisting of 2 ounces of powdered chocolate and one ounce of powdered gum arabic. Mix very thoroughly and divide into 200 pastilles. Each pastille will thus contain $\frac{1}{333}$ grain of nitroglycerin.

Picrotoxine.—In aqueous solution. Dose from $\frac{1}{8}$ to $\frac{1}{6}$ grain.

Sulphate of thalline.—May be given dissolved in wine or water (with some corrigent). The dose is from 4 to 8 grains.—*St. Louis Med. and Surg. Jour.*

The Metric System.

The following rules are by Dr. OTTO A. WALL, of St. Louis, the editor of the *National Druggist*. Mathematical exactness is claimed to be superfluous under ordinary circumstances. When necessary, tables of equivalent quantities should be consulted.

Dr. Wall's tables are as follows:

Equivalents of Fluid Measure.

15 minims, about 1 cubic centimetre.
1 fluidrachm, about 4 cubic centimetres.
1 fluidounce, about 30 cubic centimetres.
1 pint, about 0.5 litre, or 500 cubic centimetres.
1 quart, about 1 litre, or 1000 cubic centimetres.

Equivalents of Weights.

1 grain, about 0.06 gramme, or 6 centigrammes.
15 grains, about 1 gramme.
1 drachm, about 4 grammes.
1 Troy ounce, about 30 grammes.

For use in constructing a metric prescription, it becomes necessary to adopt some easy rules for conversion from apothecary's to metric weights. The simplest method is as follows :

Multiply ounces by 30 to get the number of grammes. Multiply drachms by 4 to get the number of grammes. When there are less than 60 grains, divide by 15 to ascertain the number of grammes. If there is a remainder, or if the number of grains is less than 16, we may reduce to fractions of a gramme, as follows : Assume the gramme (written 1.00 Gm.) to be equal to 15 or 16 grs. To convert any number of grains less than 16 into centigrammes, think what fraction that number is of 15 or 16, as may be most convenient, and then take that fractional part of 1.00 gram. to express the metric equivalent, ignoring fractions beyond the second decimal place.

The following will make this clear :

- 1 grain, 1-16 of 16 grains ; 1-16 of 1.00 gramme, 0.06 gramme.
- 2 grains, $\frac{1}{8}$ of 16 grains ; $\frac{1}{8}$ of 1.00 gramme, 0.12 gramme.
- 3 grains, 1-5 of 15 grains ; 1-5 of 1.00 gramme, 0.20 gramme.
- 4 grains, $\frac{1}{4}$ of 16 grains ; $\frac{1}{4}$ of 1.00 gramme, 0.25 gramme.
- 5 grains, $\frac{1}{3}$ of 15 grains ; $\frac{1}{3}$ of 1.00 gramme, 0.33 gramme.
- 6 grains, 2-5 of 15 grains ; $\frac{2}{5}$ of 1.00 gramme, 0.40 gramme.
- 8 grains, $\frac{1}{2}$ of 16 grains ; $\frac{1}{2}$ of 1.00 gramme, 0.50 gramme.
- 9 grains, 3-5 of 15 grains ; 3-5 of 1.00 gramme, 0.60 gramme.
- 10 grains, $\frac{2}{3}$ of 15 grains ; $\frac{2}{3}$ of 1.00 gramme, 0.66 gramme.
- 12 grains, $\frac{3}{4}$ of 16 grains ; $\frac{3}{4}$ of 1.00 gramme, 0.75 gramme.

Or we remember that a grain equals 0.06 gramme, and multiply this by the total number of grains. For instance, 20 grains = 20×0.06 gramme, or 1.20 grammes ; 35 grains = 35×0.06 gramme.

—*Weekly Medical Review.*

Treatment of Pleurisy by Prof. Da Costa.

1. *Acute Pleurisy.*—In the early stage, when effusion has not yet taken place,

the question arises, Shall we employ local blood letting? In a young, vigorous adult it is good practice to withdraw from f \bar{z} viij—xij of blood. Follow the cups by a poultice, on which place sufficient laudanum. This is a comfortable application. If we do not employ venesection, poultice at once and use counter-irritants. Subcutaneous injections of morphia in small doses near the inflamed pleura are of great value. It is of importance to keep the patient under the influence of an opiate. Dover's powder is a convenient form. Control the circulation by the use of tincture of aconite, in drop doses every hour, as indicated by the heart.

When effusion has taken place, do not cup ; nor is aconite indicated, since the heart is displaced. At this stage, the acetate of potassium and digitalis are of great value, \bar{z} ss of the acetate to be given in liquor potassii citratis, in the twenty-four hours. Digitalis may be advantageously combined with the above. In a strong man, when the effusion persists, jaborandi is often of decided value. The iodide of potassium is a most useful agent when the effusion tends to linger. During its use, add small blisters, repeated occasionally. Often in these cases a gentle mercurial impression will start the effusion ; then follow up with diuretics as well as diaphoretics. Sustain the strength, especially in lingering cases, by the use of stimulus.

When the effusion is overwhelming, the question of paracentesis comes before us. When delirium begins, and circulation and respiration become irregular, then it is time to tap. If the effusion be double-sided, then aspirate ; but, as a rule, a double sided pleurisy occurs in tubercular patients, so that tapping will not materially lengthen life.

2. *Chronic Pleurisy*.—This is both medical and surgical. In the medical treatment we have two remedies of great value, to wit: Basham's mixture, f ʒ ss ter die, with strychnia, gr. $\frac{1}{80}$, ter die. Begin their use before pus has formed, for then only surgical means are of avail. The second remedy of utility is the iodide of potassium, to which add the use of small blisters. When irritative fever sets in, use quinia and digitalis. In weak persons, ol. morrhuae is of great benefit. Chronic pleuritic effusion may sometimes be removed by half-drachm doses of fluid extract of jaborandi, given two or three times daily, just sufficient to keep up free action of the skin and kidneys.

When surgical treatment becomes necessary, some advise tapping when fluid is present. Prof. Da Costa does not frequently employ tapping: the after results are not always favorable. Select your cases for the operation.

The following directions are suggested for the operation of tapping: 1. Never tap until you have tried medical means. 2. Don't wait a day, if pus be present. 3. In doubtful cases better tap, since medicine will not remove pus. Suppose your patient should take medicine for six months, and no result, when suddenly some fever develops: you may not fully believe that pus has formed in this case, but "tap, anyway." 4. Better tap more than once than leave a drainage tube in the cavity. 5. In large, purulent effusions the tube may be used, but it produces fever.

Injections.—Prof. Da Costa prefers tincture of iodine; carbolic acid may be used, or corrosive sublimate in weak solution.—*Coll. and Clin. Record*.

Alcoholic Liquors.

DR. F. M. PETERSON, in his annual address as President of the Alabama

Medical Society, formulates the following propositions as the result of his professional experience:

1. Alcoholic liquors are never necessary in health.

2. They are always injurious in health in any case.

3. They are never necessary as a food for man any more than they are for the lower animals.

4. They do not warm and give strength to the body, but diminish both.

5. They do not increase the powers of resistance and the endurance of mental and physical fatigue.

6. They do not increase mental vigor.

7. They do not give tone to the heart, but the accelerated action, which is always temporary, is followed by a reduction of tonicity.

8. They may for a short time increase nerve tension, but are followed by relaxation and debility, and the nervous system is more quickly worn out under their influence.

9. They build up no tissues in the body, but in severe cases they cause a deposition of adipose tissue, which is a source of weakness and destruction to the heart and to all other muscles.

10. They are specially harmful to brain-workers who take but little exercise.

11. They produce a tendency to apoplexy and paralysis.

12. They are never necessary nor in the least beneficial in a physiological condition of the system in any quantity, either large or small, but are often beneficial in disease, in which they should be prescribed by an expert.

As medicine they are often very important, and whilst every possible restriction should be thrown around their improper sale and use, physicians should be able to obtain them as readily

and easily as quinine or other leading articles of the materia medica.—*Alabama Medical and Surgical Journal.*

Potassium Chloride.

(*Kali Chlorici, Merck, Darmstadt.*)

DR. W. THORNTON PARKER, writing to the *New York Medical Journal*, says :

I have found it difficult to explain to medical brethren that such a preparation really does exist, and that it is very different, in the action at least, from the harsher and less reliable preparation of the chlorate. The use of kali chlorici in Germany has won for it great favor, and it has certainly proved itself more valuable than the older and rougher preparation of the chlorate.

I find the following a convenient formula for its use; ℞. Kali chlorici (Merck's), ʒ iv; syrup, simple, ʒ vi; aquæ distil, ʒ vi. M. S. ʒ i every hour.

Very often the action of the chlorate of potash will seem decidedly poisonous, but the milder chloride will be found very useful and valuable. The imported preparation is the one I always use.

Lewinin as a Substitute for Cocaine.

The *American Medical Journal*, quoting the *Medical News*, states that DR. HARRISON ALLEN, after experimenting with a fifty per cent. alcoholic solution of lewinin, reports that, in practice, he has found a number of cases of nasal trouble in which the drug could not only be availably substituted for cocaine, but in which its action was more satisfactory.—*Louisville Medical News.*

Anæmia.

PROF. DA COSTA showed, at the Pennsylvania Hospital, a strongly anæmic, rheumatic young man with mitral and aortic regurgitation, who suffered every

two or three days with severe *epistaxis*, losing from ʒ vj-xij each time. He was treated with ergot, styptic preparations of iron, gallic acid and tincture of matico, without avail, and he was much reduced by the repeated hemorrhages. He was then placed on copper sulphate, gr. 1-12, which was successful. He has had but one slight hemorrhage for the last week.

The Danger of Syncope in Hot Baths.

It is surprising, says the *Lancet*, that deaths by syncope during the use of hot baths are not more common than the coroner's court returns would show them to be. The peril of faintness by the mere determination of blood to the surface of the body, thus quickly depriving the heart of its usual normal support and stimulus, is very great. In cases of muscular weakness of the heart this danger must be imminent whenever the "hot" or even the "warm" bath is used. Apart from this obvious risk, however, there is always a possibility that in weakly or too impressionable states of the nervous system the peripheral stimulation produced by the application of heat to the whole of the cutaneous extremities of the afferent nerves may so act on the centres as to arrest the evolution of energy by an inhibitory influence. It is doubtful whether we lay enough stress on this consideration when prescribing the use of such external agents as act on large areas of surface and strongly impress the nerves there commencing. We know how burns of even moderate severity may kill by the impression they produce on the centres of vitality from the periphery. There is much to learn in regard to the nature and extent of the central effects which may be thus caused. Whether for good or evil, the application of heat or cold to the whole surface is a potent

measure, and one that ought not to be recklessly resorted to, more especially in cases of great susceptibility, involving such excitability of the nervous centres as often co-exists with fairly good health in a weakly body.—*Maryland Medical Journal*.

Paraldehyde.

Paraldehyde is so unpleasant to the taste that the following formula, which is ELVY'S, and is adopted by Spanish physicians, and is said to form an agreeable mixture, will be acceptable: ℞. Paraldehyde, 1 to 4 grammes; distilled water, 70 grammes; simple syrup, 30 grammes; tincturæ vanillæ, 25 drops. Half for dose.—*Med. and Sur. Reporter*.

Antifebrin; A New Antipyretic.

In the *Centralblatt für Klinische Medizin*, DR. A. CAHN and DR. P. HEPP, assistants at Kussmaul's clinic at Strassburg, bring forward a new antipyretic agent that, if further experience bears out their statement, is somewhat remarkable. They state that the substance itself is not a new one, being the neutral principle known as acetanilide or phenylacetamide, the formula of which they give as $C_6H_5NHC_2H_3O$. The formula may otherwise be written $C_6H_5.N.(C_2H_3O).H=C_8H_9NO$. It is a white, crystalline, odorless powder, producing a slight burning sensation when placed on the tongue, almost insoluble in cold water, more readily soluble in hot water, and freely soluble in alcoholic liquids, including wine. It melts at $113^{\circ}C.$, and boils unchanged at 292° . Besides possessing neither acid nor basic properties, it is indifferent to most reagents. Although closely related to aniline chemically, it was found not to cause poisonous effects when given to dogs and rabbits in comparatively large doses, nor did it affect their temperature.

On the human subject the authors have tried it in eight cases of typhoid fever, five of erysipelas, two of acute articular rheumatism, four of pulmonary phthisis, and one case each of pulmonary abscess, leucæmia with fever, pyæmic fever consequent on cystitis and bed sore, septicæmia, and ambulant pneumonia. The doses varied from four to fifteen grains, and thus far no more than thirty grains has been given in the period of twenty four hours. The size of the dose needed cannot be told beforehand; as with other antipyretics, it depends on the nature, severity, and stage of the disease and on the peculiarities of the individual, but a given amount, such as four grains, is said to produce the same effect as four times the quantity of antipyrine. The authors think it probable that decided remissions of fever are more likely to be produced by single large doses than by repeated small ones, although that has not yet been shown to be the case. Tabular statements are given of the temperature variations under the use of the drug in two cases of typhoid fever, a case of erysipelas of the leg with lymphangitis, and one of pulmonary phthisis. In two of those records the comparative action of acetanilide and of antipyrine may be noted. Ordinarily the effect of "antifebrin" begins to show itself within an hour, reaches its maximum in about four hours, and lasts from three to ten hours, according to the size of the dose, but usually provided the temperature has been brought down to or below the normal point, from six to eight hours. No chills have yet been observed, but, as in the case of antipyrine, in a few instances the patients felt cold. Hand in hand with the fall of temperature goes a notable lowering of the frequency of the pulse, associated with an increase in its volume, as ascertained with the

sphygmograph. No unpleasant effect on the digestive organs has been observed; in a few instances the appetite returned, probably as a result of the temporary freedom from fever. In still other cases unusual thirst and decided diuresis were manifest during the remission. None of the patients complained of the drug; their general condition was perfectly good during the hours that they were free from fever. In one of the cases of rheumatism the articular pain, which had been severe, was allayed *pari passu* with the fever. At first the experimenters felt somewhat anxious on account of a pronounced cyanosis of the face and extremities in some of the patients, but this gradually disappeared and they ceased to regard it with apprehension. In a few cases, as in the experiments on animals, the patients fell into a tranquil sleep during the remission.

Besides the efficiency of the drug in comparatively small doses, its advantages are said to be that it does not disturb the stomach, that the sweating it causes is relatively moderate, and that it is cheap. The authors warn their readers against the use of an impure article. They also mention as a matter of theoretical interest the fact that, while the other antipyretics are either phenols (such as carbolic acid, hydroquinone, resorcin, and salicylic acid) or bases of the quinoline group (including quinoline, kairine, antipyrine, thalline, and quinine), we have in acetanilide an indifferent body of widely different constitution. The authors have experimented with the acetyl derivatives of toluidine and naphthylamine, benzamide, salicylanilide, and some other complex compounds.—*N. Y. Med. Jour.*

Photographic Diagnosis.

HENRY DE PARVILLE, in *Le Gagne-Petit*, tells of a case in which the sen-

sitive plate for a photograph showed some very peculiar dark specks. When the sitting was made the subject had peculiar sensations of the skin, but nothing was visible. Two days after the sensitive plate announced that something was wrong, the woman was taken sick with an eruptive fever.—*Medical and Surgical Reporter.*

DISEASES OF THE NERVOUS SYSTEM.

A Compound Tincture of Capsicum for Local Use.

℞. Tincture of capsicum, 200 parts; ammonia water, 100 parts; essence of thyme; chloral hydrate, $\bar{a}\bar{a}$ 10 parts; alcohol, 1000 parts. M. This combination is highly recommended as a local application in rheumatism and neuralgia.—*Bull. Gén. de Thérap.*

Drunkard's Epilepsy.

The *Medical News* tells us that in view of Magnin's assertion that in France the frequent cases of epilepsy occurring in drunkards are due, not to alcohol but to absinthe, Moeli has reviewed the German statistics of the subject, which may be thus summarized:

In Germany, 36 to 40 per cent. of the subjects of delirium tremens are also victims of epileptic attacks. An attempt to determine whether the occurrence of such attacks was correlated with the abuse of any special kind of distilled liquor was unsuccessful, but it was found that in twenty-six almost exclusively beer and wine drunkards only one was epileptic.—*Medical and Surgical Reporter.*

Plugging the Trachea in Lesions of the Pneumogastric.

In an article in the *Nordiskt Mediciniskt Archiv*, Dr. JENS SCHOU, of Copenhagen, discusses at some length the treatment of traumatic lesions of the

pneumogastric nerve by means of permanently plugging or tamponing the trachea. Dr. Schou gives a succinct description of the doctrine propounded by Traube, that the pulmonary affection caused by section of the pneumogastric nerve is a pneumonia by aspiration—a theory which has lately been supported by other observers, more especially Gärtner. It appears that with animals the unilateral section of the pneumogastric or of the recurrent nerve is generally harmless; but in the human subject it causes pneumonia by aspiration. The reason seems to be that in animals the sections are effected without complications, whilst in men they are as a rule the result of some serious operation capable alone of causing a state of collapse from which pneumonia by aspiration might result. Here, one of the vocal cords is paralyzed, which serves to increase the effect of the lesion. The treatment indicated is, then, permanent tamponing of the trachea till the end of the collapse, by which time the healthy cord will be accustomed to replace the diseased one. Below's method—namely, tamponing above the canula—is recommended, an india rubber ball above. Dr. Schou, however, prefers to introduce a tampon of some antiseptic material such as iodoform gauze. A tampon of this kind is easily applied by means of a cannula open above. If it be necessary to cut the pneumogastric or recurrent nerve, tracheotomy and tamponing should be immediately resorted to, in order to prevent the development of pneumonia by aspiration. Should some time have elapsed before pneumonia by aspiration fully developed has been discovered, it is still necessary as quickly as possible to do the tamponing in hopes of arresting the progress, for in these cases the nerve

may be paralyzed for some time.—*Lancet*.—*Maryland Medical Journal*.

Convulsions.

Convulsions may frequently be cut short, like magic, by turning the patient on his left side. The nausea as an after effect of chloroform or ether narcosis may generally be controlled in the same manner.—*Northwestern Lancet*.

Constipation and Epilepsy.

DR. J. S. JEWELL thus writes in the *Neurological Review*:

The general profession has yet much to learn in respect to the bad influence upon health of habitual distention of the colon with fæcal matter. It has also much to learn as to other efficient means for emptying the bowel than the ordinary purgative, such as the pills and cathartic powders, extracts, salts, and natural mineral waters charged with the same. In many cases it is not only desirable, but entirely practicable, to cease the use of drugs to purge the bowels. Where the colon is much weakened in its muscular coat, and chronically dilated, it cannot possibly be fully emptied by such means. I have known distention of this part of the intestine to be so great that from one to more than two gallons of matter have been removed in the course of two or three days devoted to the task of emptying the colon of rotting materials. I wish to repeat my conviction that no other point in respect to the hygiene of epileptics more worthily challenges the persistent attention of the physician than the one just referred to. In cases where there is reason to believe filling up of the bladder with urine, and unusual distention of the seminal vesicles, irritate the organs in question, and by consequence the copious nerve supply of the same, I am accustomed to direct at least that the

bladder shall be emptied at an earlier period than that upon rising, so as to anticipate the fit. In bad cases of epilepsy, in females, in which by consequence marriage is out of the question, I have been led to seriously consider the desirability of removing the ovaries, and of thus putting an end to the menstrual history. My opinion is that in bad cases of epilepsy, occurring in early and middle life, plainly connected with and dependent on menstrual disorders, the operation in question ought to be attempted, with the prospect of greatly ameliorating the attacks. Then, again, I am accustomed to direct my patients to avoid as far as practicable serious fatigue, whether physical or mental, and all undue emotional excitement at those periods when they are known by experience to be likely to have the attacks. For, in case of great fatigue, both the sensibility of the nervous system, as a whole, is sharpened, and its inhibitory power diminished. These, it need scarcely be said, are prime conditions, not to say causes, of attacks of epilepsy. —*Medical and Surgical Reporter.*

DIGESTIVE TRACT.

The Treatment of Constipation by Massage.

In the introductory lecture to the course of Pharmacology and Therapeutics delivered at the Westminster Hospital Medical School, Dr. MURRELL referred at some length to the good results recently obtained in the treatment of habitual constipation by means of massage. The method he employs is a modification of that originally introduced by Mezger and Von Mosengel. *Petrissage* of the abdomen is of essential value, the manipulations being performed in the direction of the ascending transverse and descending colon. It is usually associated with various

forms of *tapotement*, for the production of which the open hand, the partly closed hand, or its radial or ulnar border, may be employed. Vibratory movements are resorted to in obstinate cases, and it was stated that the action was usually remarkably prompt and certain. The best results were obtained in cases of constipation associated with obesity, especially when the patient was unable to take much exercise. It probably acts in three ways,—(1) by increasing the intestinal and other secretions; (2) by stimulating the peristaltic action of the intestines; and (3) mechanically, by pressing the accumulated *fæces* towards the rectum. The treatment is well known in Europe, and will, doubtless, in time be generally recognized in this country.—*Medical Press.—Maryland Medical Journal.*

A Study of Some New Purgatives.

DR. DESNOS (*Bull. Gén. de Thér.*) has been making a study of the physiological effects of the following four new purgatives: baptisine, sanguinarine, juglandine, and phytolaccin. He has given these purgatives to 48 different individuals in the following proportions: Baptisine to 14, sanguinarine to 4, juglandine to 13, and phytolaccin to 17. They were given in pill form in doses of 10, 20, and 30 centigr. ($1\frac{1}{2}$, 3, and $4\frac{1}{2}$ grs.) The first dose was administered at 10 A. M., and the second dose at 10 P. M. The four drugs had the common property of causing no disturbance whatever of the stomach. In some of the cases purgation occurred after the first dose, in the majority of cases not until some hours after the second dose, and in a few cases of obstinate constipation no effect followed until an enema had been given. Baptisine proved to be an efficient cholagogue, and, excepting a few failures in patients who were

in bed, it showed itself a faithful purgative. The dose employed ranged from 10 to 30 centigr. (gr. $1\frac{1}{2}$ -4 $\frac{1}{2}$). Sanguinarine did not fulfill the expectations derived from experiment with that drug. The author has given it in as large a dose as 60 centigr. (gr. 9) with negative results only. Juglandine exhibited marked cholagogic properties in doses of 10 to 20 centigr. ($1\frac{1}{2}$ -3). Phytolaccin is also an efficient cholagogue in the same doses as the preceding. The author prefers it to all the others. It produced easy and copious stools containing considerable bile. In large doses it provoked vomiting, followed by depression, and in a few cases even by convulsions. In conclusion, the author states that baptisine and juglandine are destined to render incontestable service as laxatives in spite of some inconveniences, and that phytolaccin, being most certain and attended with fewer inconveniences, will form a valuable acquisition to the therapeutics of constipation. Sanguinarine, on the other hand, does not deserve to come into favor.—*New York Medical Journal.*

Gaseous Medication per Rectum.

The ingestion of gaseous medicines by the lower bowel was the subject of a recent communication by M. L. BERGEON to the Paris Academy of Sciences (*Comptes Rendus*). His research has extended to a variety of diseases, but for the present he only records his experience in the treatment of pulmonary phthisis. After having tried a variety of balsamic substances of parasiticide or antiseptic repute, M. Bergeon gave the preference to sulphurous mineral waters (Eaux Bonnes, Challes, etc.). A current of from four to five litres of carbonic acid gas traversing from 250 to 500 grammes of the sulphurous mineral water was introduced per rectum

twice in the twenty-four hours. After a few days' use, cough was notably diminished and almost suppressed, the expectoration greatly modified in quality and quantity, the sweating stopped, and the general state improved; and that not only in incipient, but also in confirmed phthisis. Daily auscultation established the disappearance of moist râles.—*Medical and Surgical Reporter.*

DISEASES OF THE URINARY ORGANS.

The Connection between Glycosuria and Biliary Obstruction.

DR. W. A. WYATT says it has been demonstrated by Dr. Wickam Legg, and confirmed by Von Wittich, that ligature of the bile ducts causes the disappearance of glycogen from the liver, and that after ligature glycosuria cannot be produced by puncture of the floor of the fourth ventricle or section of the cervical sympathetic. It is presumed that the retention of bile within the liver interferes with the nutrition of the hepatic cells, and so prevents them from carrying on their natural function of glycogen formation.

The following clinical case appears to me to support the conclusion drawn from the above mentioned experiment. A lady, aged 60, has for some time suffered from glycosuria, and latterly albumen has been present in addition; the amount of sugar excreted usually ranges from 10 to 12 grains per ounce, and no material alteration in this quantity occurred when the urine became albuminous. The urine has been always highly saccharine, even when a strictly nitrogenous diet was enforced, a symptom pointing to the fact that a too rapid metamorphosis of hepatic glycogen was the probable source of the excess of sugar in this case. A short while ago this patient became jaundiced, the urine containing both biliary acid and coloring

matters, and with the appearance of the jaundice the sugar diminished from its usual amount to a hardly perceptible trace, Fehling's reagent, the picric acid and indigo carmine tests, giving almost negative results. The disappearance of the sugar could in no way be accounted for by alterations in diet, for the appetite and manner of living remained the same as usual. In this case, however, there was undoubtedly some obstruction to the bile ducts, as no bile could be detected passing with the stools, so that a pathological condition was here established analogous in its result to the experimental ligature, for in each case the escape of bile was effectually hindered. If, then, it is correct that the retention of bile within the liver prevents the formation of hepatic glycogen, it necessarily follows that the same retention must greatly diminish the amount of sugar in a case of glycosuria of that type in which the disease is chiefly dependent on a too rapid metamorphosis of glycogen into sugar. In making deductions from a single case, it is well nigh impossible to separate the *post hoc* from the *propter hoc*; but at any rate, in this case, coincident with the retention of bile, the amount of sugar excreted fell to zero, and remained so as long as the obstruction lasted—speedily, however, regaining its usual amount of 10 grains per ounce as soon as bile was again poured into the intestines.

The whole subject of glycosuria, up till now, has been elucidated more by the experimental physiologist than by the physician. However valuable such experiments may be, the results obtained from them are often very fallacious, the condition under which they are conducted in many cases, being far removed from anything existing in nature, so that confirmation of such observations by clinical work is always highly satis-

factory. Of course the phenomena of this case may bear an interpretation differing widely from that which I have assigned to them; still I venture to think that the biliary retention being accompanied by an almost entire absence of sugar in the urine was not a mere coincidence, but that the two symptoms were related to each other as cause and effect.—*Lancet*.—*Journal American Medical Association*.

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Urinary Casts ; Their Formation and Significance.

DR. WILLIAM H. PORTER (*Quarterly Bulletin*) : There are two principal types of casts : the blood and the hyaline ; in connection with the latter, there is a large modification as may be seen by a single glance at the following table :

CASTS.	SMALL.	LARGE.
Blood.		
Hyaline,		
Epithelial,		
Nucleated,		
Finely Granular,		
Coarsely Granular,		
Fatty,		
Tubular,		
Cork Screw.		

The *Blood Cast* is simple, and easily understood. It is produced by an exudation of all the constituents of the blood, and a matting together and entanglement of the blood corpuscles by fibrin elements in the lumen of the uriniferous tubules, so that they are discharged from the tubes in masses, representing perfect casts of the same ; they are found in the urine as little plugs of blood corpuscles with parallel sides and rounded ends. This variety is only met with in acute congestion, hemorrhagic infarctions, hematuria, acute diffuse nephritis and acute exacerbations of the chronic diffuse nephritis. The presence of blood casts in the urine is the only positive evidence of hemorrhage from

the kidney. Their presence alone does not indicate organic renal disease. Some call the hyaline, with a number of blood corpuscles attached to them, blood casts, but this is erroneous. Blood casts are not common.

The *Hyaline Cast* is not so thoroughly understood, but it is generally believed that a peculiar fibrinous substance is thrown out of the blood into the uriniferous tubules, and when discharged from the same, independent of the epithelial cells, it is known as a hyaline cast, but with attached epithelial corpuscles, in various stages of retrograde change, the various forms tabulated are produced.

A single cast of this variety may be found in urine without indicating any renal lesion. But their continuance in any appreciable number always does.

By an *Epithelial Cast* is meant one in which the epithelial corpuscles are attached to, or implanted, in this hyaline plug, and have been separated from the basement membrane, while still retaining the appearance of renal epithelial cells. Casts of this kind are usually found in the acute parenchymatous metamorphosis, and in the acute diffuse nephritis, or in connection with acute exacerbations.

The *Nucleated Cast* is one in which the protoplasm of the epithelial cells has been obliterated, and only the nuclei can be recognized as they adhere to or are implanted in the hyaline substance. The inability to recognize the protoplasm is caused by the cells becoming infiltrated with fine particles of effete material and the imbibition of an albuminous fluid until everything is indistinct but the nucleus.

This form of cast is met with in the acute parenchymatous, and diffuse lesions, and acute exacerbations, and indicates a still greater retrograde change than the epithelial cast.

The *Finely Granular Cast* is one in which the epithelial cells are not only cloudy, but are also infiltrated with fine granular particles, some of which are oil globules of minute size, and others granular detritus probably from incomplete products of tissue metamorphosis drawn from the blood, and in part from the further destruction of the epithelial protoplasm itself.

This form of cast represents a still greater destructive change, and is met with in a well established acute lesion, or in the commencement of a chronic lesion.

The *Coarsely Granular Cast* is simply one representing a more advanced degree of the former process, with more abundant and larger fat droplets, and a still greater destruction of the epithelial protoplasm.

This form is met with at the end of an acute lesion, but, more frequently indicates a chronic parenchymatous or diffuse lesion.

The *Fatty Cast* is one in which the metamorphic process has almost, if not completely, destroyed the protoplasm of the epithelial corpuscles, which has been replaced by fat droplets of varying sizes, and now easily recognizable as fat. The cast may have a large or small diameter, but usually the former.

This form indicates an advanced stage of the chronic parenchymatous or diffuse lesion.

The *Tubular Cast* is a rare variety, and is formed by a plug of hyaline matter in the lumen of the uriniferous tubule, and a thin ensheathing layer of the same material behind the epithelial cells, and in this manner the corpuscular elements are detached from the basement membrane and discharged. They appear under the microscope as a perfect ring of epithelial elements. Occasionally the central plug will be

observed protruding from one or the other extremity.

This variety might be considered as a curiosity.

The *Cork Screw Cast* is produced by a twisting of the body of the cast upon its own axis, so that it resembles the spiral of a cork screw. This opinion is based upon numerous sections of the kidney that show this peculiar arrangement in the straight tubules, some of which have the casts still lodged in them.

Some believe that all forms of casts (the blood, hyaline and tubular excepted), can be, and are frequently formed by the transformation, desquamation, and matting together of the epithelial cells without the aid of or the presence of this fibrinous or hyaline material. This may be the case in a few instances, but in the vast majority the hyaline material forms the basis of all casts. In either case the microscopic appearances are the same.

The peculiar arrangement of the tubular form looks a little as if the hyaline material clogged, so to speak, the protoplasm, and aided in cutting off the nutritive supply and prevented the free exit of the effete material from behind, thus enabling that which should come through, to push the cells from their attachment to the underlying basement substance. This view of the situation distinctly indicates the necessity of keeping the tubules well washed out in all forms of nephritic disease, if there is a tendency to the formation of casts.

It is the belief of some, that the hyaline material undergoes degeneration, and in this way they explain the various forms of granular casts. A close examination, however, of a hyaline cast, which appears to be a little granular, will almost always, with a good high power lens, show incomplete and faint outline of what once was an epithelial

cell. This tends to sustain the former view, and to disprove the latter.

The *Waxy Cast* of some writers is not included in this classification, as its existence is extremely doubtful, and probably never occurs.

It occasionally happens that the various crystals of the urine adhere to these hyaline plugs, or to a cast, and from their parallel sides might be termed crystal casts. They are, however, more likely to be seen in sections made from the kidney itself.

The distinguishing character of all casts, is that they have uniformly parallel sides, and usually at least one rounded end, occasionally the other end is broken at a right angle, or a little irregularly, but they never terminate in imperceptible lines, as is the case with bands or streaks of mucus. Casts and strings of mucus are often confounded; but by remembering the above stated facts, the one should never be mistaken for the other. If the observer will compare the diagrams of casts as seen in the books with specimens of ropy mucus from the bladder, the difference is at once apparent.

Casts are very important aids in diagnosis. They are found in acute and chronic parenchymatous metamorphosis of the kidney, in acute diffuse nephritis and in the chronic diffuse group. They are rarely found in the sclerotic, gouty and waxy kidney when uncomplicated.

Small casts of the hyaline, epithelial, nuclear and finely granular variety are found in the acute lesions, and in the early stage of the more chronic forms. Large hyaline, coarsely granular and fatty casts indicate an advanced lesion.

DISEASES OF RESPIRATORY ORGANS.

Salicylate of Cocaine in Asthma.

MOSLER, *Deutsch Med. Woch.*, 1886, No. 11, reports several cases of asthma

which were treated successfully with hypodermic injections of this compound. The paroxysms were almost invariably shortened or prevented. The simultaneous administration of bromide of ammonium augmented the action of the cocaine. In one instance prolonged vertigo followed an injection.

Treatment of the Night-Sweats in Phthisis.

ABLETISOFF, according to the *Lancet*, has made a careful study of the effect of various drugs upon night sweats. He finds that hydrochloride of pilocarpine, even in doses of one-sixth to one-eighth of a grain, not only fails to diminish the sweating in most cases, but renders the patient's condition worse, by reason of the gastro-intestinal irritation which it produces. Neither does this drug possess the superior expectorant properties that have been alleged for it. Duboisine, picrotoxin, and homatropine certainly reduce the amount of perspiration; but as the use of the two former drugs may be followed by unpleasant effects, homatropine is to be preferred in phthisical cases.—*New York Medical Journal*.

The Function of the Tonsils.

DR. R. HINGSTON FOX, in an interesting article on the "Functions of the Tonsils," in the twentieth volume of the *Journal of Anatomy and Physiology*, expresses the opinion that these glands belong to the digestive and not the respira-

tory tract, and that their function is to reabsorb certain constituents of the saliva in the intervals of meals which would otherwise be wasted. He thinks that the view of their having an absorbing function is further supported by the strong evidence of the power of the tonsil to absorb morbid poisons directly from the saliva.—*Lancet*.



DISEASES OF CIRCULATORY ORGANS.

The Diagnosis of Organic Heart Troubles.

DR. EMORY LANPHEAR contributes the following to the *Kansas City Index* :

There are no problems of physical diagnosis which so puzzle the average practitioner as differentiating between, and recognizing the significance of, the murmurs present in organic diseases of the heart.

It is quite evident that proper therapeutic agents cannot be employed until an exact knowledge of the conditions present in any particular case be obtained by the attending physician. In most cardiac affections attended by organic change there are distinct murmurs discoverable, and it is only by a proper understanding of these morbid sounds that an accurate diagnosis can be made. Therefore any guide to their meaning must be acceptable to the majority of the medical profession. To those who hear, but fail to appreciate the precise meaning of these sounds, the subjoined table will prove invaluable.

TABLE OF CARDIAC MURMURS.

Where Heard.	Time of Murmur.	Significance.
Apex. }	Systolic.	Mitral Regurgitation.
	Pre-systolic.	Mitral Obstruction, or Direct Mitral.
Base of Heart and Ascending Aorta.	Systolic.	Aortic Obstruction or Direct Aortic.
	Diastolic.	Aortic Regurgitation.
Base of Heart, conducted toward Ensiform Cartilage.	Diastolic.	Aortic Regurgitation.
Base, conjoined with Jugular Pulsation.	Systolic.	Tricuspid Regurgitation.
Region of Pulmonary Artery.	Systolic.	Pulmonary Obstruction.
	Diastolic.	Pulmonary Regurgitation.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Mollities Ossium in the Male, with Spontaneous Fractures.

DR. JAMES A. RIGBY (*British Medical Journal*):

William G., æt. 43, married, a schoolmaster, with no family history of any

tion. These increased steadily till he was unable to walk erect; then he gave way on the right side so much, that he thought his right hip was either wholly or partially dislocated.

Coincidentally with these alterations in the hips, the hands began to undergo changes, which have ultimately resulted in the present state of things. There is



Fig. 1.—HANDS.

softening of the bones, about eight years ago began to suffer from severe pains in his knees, attributed to rheumatism. Then pains came in his feet and shoul-

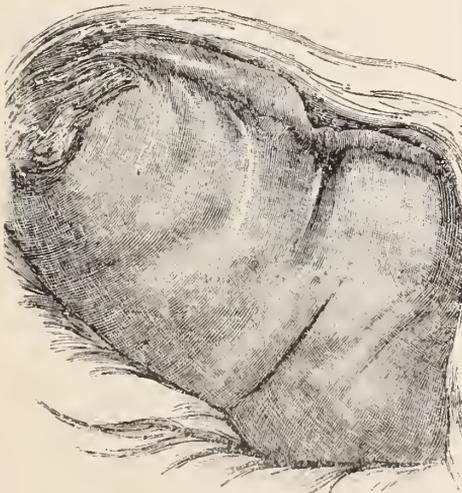


Fig. 2.—CHEST.

ders. He was also dyspeptic, and always of a costive nature. Four years ago he began to be much troubled with pains in his hips, and difficult locomo-

a more or less complete absorption of the muscular tissue of the hands; the ungual phalanges are all shortened in a marked degree; the articular extremities of the other phalanges are enlarged at the base. This is most distinctly perceptible in the thumb, of which the base of the first phalanx is so much enlarged, that it causes the extensor tendon to run in a curved direction, something like the course of the string passing over the bridge of a violin; the obvious effect of this is to cause insufficiency of length of tendon, and so dislocation backwards of the ungual phalanx of the thumb; the pad of the thumb is thus placed transversely on the end of the thumb, and looks upwards, instead of forwards, towards the palmar aspect. (Fig. 1.)

The chest has altered much in shape. It is now more or less rounded in every diameter, compressed laterally, and bulging forwards, more particularly at the lower part. (Fig 2.) There are well marked swellings at the junction

of the ribs with the costal cartilages. The sternum is sickle-shaped, the handle being upwards, and the convex surface of the sickle looking forwards.

Two years ago, the patient sustained a fracture of the right humerus, through simply trying to prevent a man from jostling him in the street.

On Dec. 29th last, the patient came under my care. He was then quite unable to walk without a crutch and stick. He had been bending down to tie his boot lace, when the right femur

The bones of the head remain unaltered. The organs are quite healthy. The mental faculties are perfect. He has no cough, diarrhœa, or perspirations; no pyrexia or hectic.—*New York Medical Abstract.*

[We print this article more especially as an illustration of the extreme degree of disease to which a patient may reach with such slight premonitory symptoms, showing the necessity of a careful diagnosis, particularly in those cases whose first symptoms of suffering are referred to the knee joint.]

Ether; an Improved Method of Administering It.

After describing several methods of administering ether, in a paper read before the Hampden District Medical Society, Dr. D. E. KEEFE, of Springfield, Mass., said :

I now come to the fourth and last method, which I claim original to myself. It may have been used by others, but I fail to find any account of it in the books or medical journals. Not that it is *prima facie* very different from that usually employed, but still there is a difference, an essential and important difference, and bespeak your careful attention while I describe it. It consists in the following points: 1st. In the ordinary method air is admitted at all times. 2d. In the "chokedown method," it is excluded at all times. My method resembles the ordinary in the first part and the "chokedown" in the remainder of administration, only there is this difference—I provide for a freer access of air than the cone and sponge can do, for I discard the sponge and use an open cone.* I consider this of incalculable advantage over both

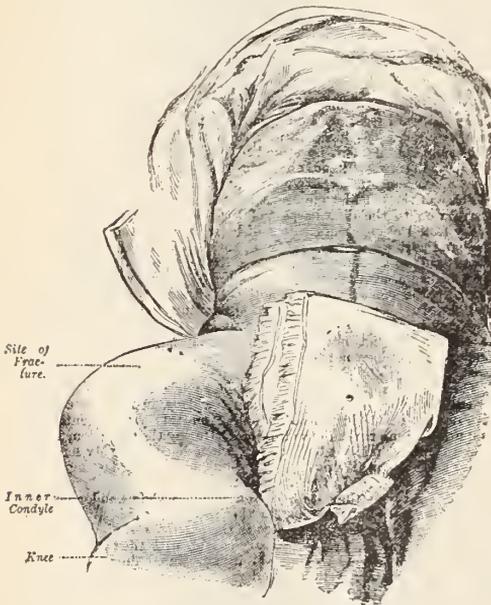


Fig. 3.—FRACTURED FEMUR.

broke through the middle of its shaft. (Fig. 3.) The fracture united distinctly in six weeks. Meantime, the patient suffered from considerable pain in the left thigh, the muscles of which wasted. While he was still in bed, the left femur bowed outwards, and seemed to rotate on its axis, so that the front aspect of the knee turned outwards. Soon after its reunion, the fractured right femur became subject to very similar alterations in shape, though a little more marked.

(* The cone consists of a good-sized towel, folded with a paper next to outside fold, and having four times thickness of towel on inside, on which the ether is poured. It is as widely open at one end as the other, and since there is nothing between sides it can be closed at pleasure.

methods just mentioned. What then is this advantage? If a close cone is used, it must be held a short distance from the face; the mouth and nostrils representing, so to speak, only a small segment of the cone. The ether vapor having almost three times the specific gravity, as air is diffusing downward outside the face. Especially is this true during expiration, whereas, if held close down on face the vapor being wholly unmixed with air will be so irritating, that after first sniff coughing is induced, and all the respiratory muscles are put in a state of tetanic rigidity, in which they remain until patient is nearly asphyxiated. The only remedy is to remove the cone, when he breathes more air than ether, and physician inhales nearly as much as his patient. The open cone and sponge (usual method) if held away from face is more objectionable on account of allowing escape of ether into room than the close one; but if held against face, and being of proper size, the face acting as a cushion prevents loss downward, while on inspiration a draft is caused through cone; the ether being the heavier keeps the lowest plane, and is driven by ingress of air into the lungs, accompanied by a large quantity of air. It is self-evident that a cone without a sponge has as much advantage over that containing one as the latter has over the close cone, for here, there is nothing but the diffusing ether to obstruct the ingress of air. Moreover, evaporation of the ether takes

place more rapidly, and there is no danger of liquid ether running down the trachea and causing death, as in the case reported by Dr. E. L. Holmes, in *Chicago Medical Journal*, 1876.

Another and great advantage is that the patient gets such a large percentage of air with first inspiration, and that so intimately mixed with ether that little or no irritation is caused, and he has not so keen an appreciation of the want of air and does not stop breathing as when air is completely excluded; you are thus enabled to gauge the toleration of mucous membranes at once and finding them tolerant, the administrator can close the cone at once and completely exclude air, which he is generally able to do after two or three inspirations. This is just what he could not do if ordinary cone and sponge were used without first removing sponge, and he would remove most of his ether with it.

It is right here I claim the prime advantage and originality; for here my system merges into complete exclusion of air or "choking down." I think the foregoing sufficiently explains my method, and any careful and disinterested reader can understand and appreciate its advantages. In 105 cases where this plan was pursued results were: average time required, $2\frac{3}{4}$ minutes; average quantity of ether, $1\frac{4}{8}$ oz., vomiting, before, 2%; vomiting, after, 12%. For the better comparison I submit the following results:

METHOD PURSUED.	No. of cases.	Quantity Ether. Average.	Time required. Average.	Vomiting before.	Vomiting after.
(Ordinary method) Open cone and sponge, free access of air.....	50	3 1-4	$\bar{5}$ 14 min.	No record.	60 %
(Chokedown) Close cone, complete exclusion of air.....	50	1 7-8	" 3 1-4 "	2 %	14 2-3%
Dr. Adams' inhaler.....	5	3	" 15 "	20 "	80 %
My new method, open cone.....	105	1 4-6	" 2 3-4 "	2 "	12 %

Shortest time, 1 minute; longest, 10.

Surgical Relations of the Ileo-cecal Region.

DR. J. MCF. EASTON (*Weekly Medical Review*): A thorough investigation of the morbid conditions of the ileo-cecal region leads to the following conclusions :

1. That certain modifications are corrected spontaneously, or by the process of involution under treatment.

2. In this early stage of ileo-cecal disorders, medicinal or mechanical means are advantageous.

3. That extra peritoneal punctures and incisions are beneficial in cecal inflammation with or without fecal abscess.

4. Disorders involving the peritoneum, when not promptly relieved by general treatment, warrant exploratory opening of the abdomen.

5. Impediments to the intestinal canal, or morbid accumulations in the abdominal cavity, accompanied with meteorism, call for immediate surgical interference with laparotomy.

6. In cases of simple stenosis or malignant growths involving the ileo-cecal connections, ileo colostomy is indicated.

7. Gangrenous portions of the intestinal canal necessitate resection, and either direct restoration by suturing the ends, or the formation, temporarily, of an artificial anus.

8. Operative measures in ileo-cecal derangements should not be delayed until the physical powers have become prostrated, but resorted to while there is capacity for reaction of the vital forces.

Report of Five Cases of Knock-Knee Treated by Macewen's Method.

In an article written for the *Albany Medical Annals*, by DR. S. R. MORROW, in speaking of the pathology of knock-knee, says :

In further explaining the pathology of this affection, we must consider for a moment its *causes*. Dr. Little believes that the prime factor in the etiology is atony of structure and the unfavorable action of gravity. This atony of muscles and ligaments is often due, according to Little, to improper or insufficient feeding, and is most often seen in the children of feeble parents, or in those who are hand fed. Such children are not rhachitic, but simply feeble, and their tissues lack tone. He remarks that atonic genu valgum is related to several other disorders in which weakness of fibrous and muscular structure exists ; for example, prolapsus ani, prolapsus uteri, ectropion senile, hernia, flat-foot, etc. In such atonic subjects, the action of gravity is very unfavorable ; consequently in their limbs we are apt to see the ankle and tarsal joints first affected (causing flat-foot), next the knee (genu valgum), next the hip (a certain waddling gait), lastly the spinal column (scoliosis).

There are two periods in the age of man when growth is extraordinarily rapid. The first period is from birth until the ninth month, and the second is at the approach of, or during puberty, say from the tenth to the sixteenth year. Now, it is near these two periods of rapid growth that genu valgum is most often developed, but the cause differs somewhat with the two periods. In the earlier period, up to five or six years, rickets is the predisposing cause, although, as before stated, Little holds that many cases, even in this period, are simply atonic. As to the cause of the deformity at puberty, it is probably, as Poore states, that the formation of new bone elements is more rapid than the ability of the system to furnish the earthy salts necessary for their calcification. Hence, the new material is liable

to yield in any direction under persistent force. At any rate, rickets cannot be the cause of these late developing cases, for that is a disease of childhood rarely seen after the sixth year.

Psoas Abscess; When and How to Open It.

At a recent meeting of the British Medical Association, MR. EDMUND OWEN read a paper on the above subject. Mr. Owen said there was no disease the treatment of which had derived a greater impetus from the introduction of antiseptics than psoas abscess. By antiseptics he did not mean the use of the spray. The spray was now cooling down in more senses than one, and the surgeon did not now have to look through a cloud of carbolic vapor at his patient. By the use of antiseptics, he meant antiseptics as used by the great masters in surgery, whether by Tait, Gamgee, Savory, or Lister. Twenty years ago every surgeon preferred to leave a psoas abscess alone, so long as it remained unopened. Stanley, writing forty years ago, said a psoas abscess might disappear. Could it? Mr. Owen said that in an extensive out-patient experience, extending over years, he had only seen one case in which, after a fusiform tumor had been detected ascending along the iliac fossa, he had seen it disappear. Aspiration was useless, for it refilled. When evacuation of the abscess was performed, it should be done thoroughly, and no useless temporizing measures made use of. During delay the pus would be burrowing out for itself an extensive ramifying cavity. A free anterior and posterior opening should be made, and the wound thoroughly drained. The sac should be washed out with a warm antiseptic lotion, and a drainage tube the size of a cedar pencil passed through. The

wound should be covered with sublimate gauze, then some oakum placed over it and the dressings changed as seldom as possible. He had employed as the antiseptic lotion a warm solution of corrosive sublimate (1 in 1,000). He should, however, in future, discard the use of the sublimate, as he had had a case which died in four hours with black urine, due, he believed, to the absorption of the sublimate. Mr. Owen, in concluding, summed up his conclusions as follows:

1. Spontaneous absorption of psoas abscess is impracticable. Sooner or later it must be evacuated, either by nature or art, and the advantage is on the side of art.

2. The sac should be opened both in front and at the back, and irrigated. For a small abscess a single opening at the back might suffice.

3. Antiseptics should be employed.

4. The operator should bear in mind that pus might collect on the opposite side after evacuation of the abscess. If any rise of temperature take place, a second abscess should be suspected, and, if found, evacuated at once. Bilateral abscesses should be attacked simultaneously, as their cavities frequently communicate. In reply to a query from a member as to the source of his method, Mr. Owen replied that it was neither English, French, Scotch, nor Italian, but Welsh, thereby signifying that the idea was his own, and that he had not borrowed it from any one.—*Medical Record*.

Anal Fissure.

DR. J. P. LYTLE writes to us as follows: Anal fissure, or irritable ulcer of the rectum, is almost, if not quite, as easily treated as ulceration elsewhere, if the application is made directly to the ulcer. This cannot be done without a

speculum so arranged that only that portion of the mucous membrane affected is exposed to view.

If that is done, any remedy applicable to indolent ulceration elsewhere will answer here.

I use an 80 per cent. solution acid carbohc applied with probe directly to the ulcer. The after treatment is distilled extract hamamelis, as an injection, once or twice daily. Teaspoonful of the extract in two tablepoonsful of starch water.

The main point is to expose the ulcer to view.

If there is much tenesmus, an injection of cocaine five or ten minutes before examination will enable the operator to explore the rectum readily and cause the patient very little discomfort. The bowels must be kept regular.

It is rare that more than one application of the acid is necessary. When a repetition of the application is required it should not be done oftener than once in ten days or two weeks. The milder the after treatment the better. I have found that an inflamed eye will bear a solution the strength of which an irritable rectum could not tolerate. I have used a great many speculums, of many kinds, and I have found the easiest manipulated and capable of the most extended use to be one manufactured by Dr. G. W. Powell. Armed with such a speculum, it is immaterial whether one use acid carbohc, zinc chloride or silver nitrate, he will cure 99 per cent. of his cases in a short time and not disturb the integrity of the sphincter muscles.

Sharpening Hypodermic Needles.

A fruitful cause of abscesses in hypodermic medication is dull and rusty needles. The rust may be avoided by wiping the needles from time to time

with rouge or crocus cloth, purchasable from any cutlery or hardware establishment. The finest emery cloth is too coarse for this use. Every physician ought to be able to sharpen his needles himself. The best hone for the purpose is that known as the Hot Springs or Washita razor hone. Thrust the needle with the wire in it, through a bit of soft velvet cork long enough to come within a quarter of an inch of the commencement of the bevel point of the instrument. The cork will serve as a handle for the fingers and at the same time holds the needle stiff and taut. It is also a guide in preserving the proper bevel of the point. A few light rubs upon the hone will put a keen point on the dullest needle.—*St. Louis Medical and Surgical Journal.*

Furniture Polish.

Melt three or four pieces sandarac, each of the size of a walnut, add one pint of boiled oil, and boil together for one hour. While cooling, add one dram of Venice turpentine, and if too thick, a little oil of turpentine also. Apply this all over the furniture, and, after some hours, rub it off; rub the furniture daily, without applying fresh varnish, except about once in two months. The *Scientific American*, which gives this formula, says water does not injure this polish, and any stain or scratch may be again covered, which cannot be done with French Polish.—*Maryland Medical Journal.*

Radical Operation for Hernia.

An improved operation for the radical cure of hernia has for some time past been practiced by Drs. SVENSSON and ERDMANN, surgeons to the Sabbatsberg Hospital at Stockholm. A ligature is applied to the neck of the hernia, and the sac is cut off below the ligature, the contents being previously examined by

means of an incision into the sac and returned; or, if only omental, excised together with the sac. In congenital hernias the upper part of the sac only is removed, and where the large bowel is included in the hernia and adherent to the sac wall, this, after being separated from the surrounding tissue, is returned, together with the large intestine, and the rents of Poupart's ligament united by sutures. The dressing employed is iodoform and boracic acid, the wounds being washed with sublimate solution. Since this has been substituted for carbolic gauze, abscesses which used to occur frequently, have become rare. Of the forty-eight cases thus operated on, none of which were selected, thirty-eight were permanently cured—at least no return of the hernia occurred within six months; and in the cases where a return did take place, which amounted to twenty per cent., the condition was very much less painful and distressing than it had been previous to the operation. The Sabbatsberg Hospital has now been opened six years and a half, and during that time 300 cases of hernia have been admitted, about two hundred of these being operated on with the knife; a milder procedure, consisting of alcoholic injections, being employed in most of the earlier cases. Not a single case proved fatal, though some of the hernias were very large, some reaching within three or four inches of the knee.

—*Medical and Surgical Reporter.*

In Obstinate Ulceration.

MR. TAIT speaks highly of cantharides, employed both internally and externally, in obstinate ulceration.

Internally he gives: R. Tr. cantharid., ℥xij; potassii iodidi, ℥ss; tr. cinchonæ co., ℥i; aquæ, ℥vij. M. Sig. Two tablespoonfuls three times a day.

Externally: R. Tr. cantharid., ℥xij; acidi nitrici dil., ℥xx; tr. cinchon. co., ℥xij; aquæ, ℥i. —*Louisville Medical News.*

Ulceration of the Sigmoid Flexure.

DR. J. G. CARPENTER (*Am. Prac. and News*): The inverted position of trunk in persons who are old or have atheromatous blood vessels, diseased lungs, or heart, might lead to disastrous consequences.

Frequent examinations of the above reported case justify the following statements: (1) The function of the sigmoid flexure is a receptacle for the feces as they pass from the descending colon, being closed at its lower end by circular muscular fibres separating the sigmoid cavity from the rectum. (2) The shape of the sigmoid flexure lessens or breaks the force of gravity in the feces downward; if the bowel at this point was a straight tube, the intestinal contents would descend at once to the anus and cause continual inclination to defecate in the sitting or erect position. (3) When the sigmoid flexure becomes filled normal reflex action by the spinal nerves is produced, causing contraction of the circular muscular fibres and retraction of the longitudinal muscular fibres, by which the length and lumen of the bowel are made less above; the circular muscular fibres of the lower end of the sigmoid flexure and those of the rectum, the sphincter ani included, relax, and with the volition of the patient defecation is accomplished, the lungs being inflated, and the diaphragm and abdominal muscles contracted, thus lessening the contents of the abdominal cavity. (4) Physiologically the rectum is a closed and empty cavity (except during forced expiration and defecation), and separated from the sigmoid cavity above by contraction of the circular muscular

fibres of the latter at its lower end. (5) The rectum has the following mucous folds, viz. : the longitudinal fold at the lower part of the bowel, and Houston's folds, each being a half inch wide and semilunar in shape, generally three or four, sometimes only two. One is situated on the right side of rectum near its upper end ; one on the left side lower down. The anterior and largest one on the anterior rectal wall, opposite the base of the bladder, the posterior fold on the back wall of the rectum an inch from the anus. (6) These folds, with the circular muscular fibres of which the sphincter ani is composed, together with the levator ani and coccygeus muscles, support or act as a pillar to the sigmoid flexure when it is filled with fecal matter. (7) When defecation is postponed, though the desire is present and urgent, and feces have passed into the rectum, the latter by contraction of its circular and longitudinal muscular fibres (the mucous folds acting as valves or elevators) returns the feces to the sigmoid cavity. (8) After the desire to defecate is passed, the rectum is found to be empty. (9) But, should defecation be habitually postponed from day to day, or two or three times a week, though demand is urgent, the bowel gets habitually distended after a time, fails to contract or retract, and the rectum then, instead of being physiologically empty, becomes pathologically distended and relaxed. (10) Constipation or diarrhœa would then cause the same relaxation of the involuntary muscular fibres. (11) Distension of the bladder causes its posterior or rectovesical wall to project far into the concavity of the sacrum and rectum. (12) When the suprapubic operation of lithotomy is done, the rectum is filled with sponges to push the floor of the bladder (recto-vesical wall) up, or raise the blad-

der upward and forward, thereby causing the distended viscus to rise high above the pelvis, drawing the peritoneum out of the way and increasing the space for the suprapubic incision. Both of the latter conditions prove the ease with which the anterior wall of the rectum can be moved and held out of the way in ocular inspection of the bowel.

A New Method for the Restoration of Respiration Lost under Chloroform.

DR. R. MILNE MURRAY describes a new method for the restoration of respiration lost under chloroform, which he terms "perflation," as follows :

Disconnecting the rubber tubing, I take the end of the branch with my finger, and make one or two aspirations of the lungs, compressing the chest gently at the same time. This removes a considerable quantity of vapor from the upper passages. Then, opening the branch, I make a series of deep inspirations.

The air rushes in by the branch, and no doubt the greater part passes into the mouth ; yet some of it enters the lungs, and a current is thus established by which a very large quantity of the chloroform is rapidly expelled, as can be proved by the taste of the air coming through the tube. After two or three such inspirations, the taste of the vapor becomes fainter, and as soon as this is noticed, I reverse the process, now blowing air into the tube, with force just sufficient to cause the chest-wall to move in the slightest possible degree—the branch tube being open all the time. Generally, after one or two such perflations, the heart shows signs of vigorous action, and shortly thereafter breathing commences and continues in a perfectly natural manner. Should it not return so rapidly, and after I am assured by the absence of taste or smell in the

expired air that the chloroform has been almost entirely removed, then I close the branch tube, and commence gentle inflation of the lungs in the ordinary way.

Speaking broadly, as regards the difficulty of resuscitation as indicated by the time required to effect it, I have observed that the time required to restore respiration varies inversely as the concentration of the dose, and directly as the time required to stop respiration—in other words, the more concentrated the dose the easier was the reanimation, and the longer respiration continued under the action of the vapor, the more difficult was the reanimation.—*Edinburgh Medical Journal*.—*Maryland Medical Journal*.

Bismuth Subnitrate in Burns.

DR. A. M. CARTLEDGE, (*Progress*):

The parts should be as perfectly cleansed as possible with warm carbolicized water. I usually puncture any large vesications in second degree burns. Then if the burn be of small superficial extent, powder it over with bismuth, over this a good thick layer of absorbent cotton, and over all a bandage. If the injury covers considerable extent, so as to render the too free use of bismuth dangerous, make a solution in water of the bismuth and paint it over the part. This last permits of a uniform distribution of a minimum quantity. I have used this dressing in several cases of burn, and in one extensive scald of the leg, second and third degree, and so far have not witnessed any evidence of bismuth poisoning.

The results have been very satisfactory, in two or three cases scarcely any suppuration occurring. I have not used it in burns involving as much as one-fourth of the surface of the body, but think with care it may be used safely.

A dressing of this kind promotes to the greatest degree healing by scabbing, which is the method to be desired in burns. After removing the cotton, because of suppuration it may be, it is not necessary to remove the bismuth scab entirely, but cleanse any point of suppuration and powder a little bismuth on, then re-apply fresh cotton. This method saves the surgeon much labor, the patient much pain, and does much to save life from septic absorption and suppurative exhaustion. Finally, by promoting healing by scabbing instead of by granulation, it will do much to lessen subsequent contraction in burn cicatrices.

An Application for Ivy Poisoning.

DR. H. HAHN, writing to the *Therapeutic Gazette*, states that he has employed the following remedy with success: Carbolic acid, 1 drachm; strong ammonia water, $\frac{1}{2}$ drachm; olive oil, 3 ounces. Apply every two or three hours on compresses. If there is excessive pain, an ice bag may be placed over the compress.

Dr. Buzzell, in a letter to the same journal, recommends for a similar purpose this formula: Olive oil, 8 ounces; sulphate of zinc, $\frac{1}{2}$ ounce. Shake thoroughly and apply to the affected surface on old linen cloths. Two applications will generally be sufficient.

On Contusion as a Determining Cause of Neoplasms.

PROF. VERNEUIL (*Medical Times*): We all know how much the question of the rôle of contusion has been discussed in the development of cancer and tumors in general. For my part, I have always admitted this cause not only for the malignant new growths, but also for the most benign, such as cysts, lipoma, etc. One of my internes, M. Le Clerc, has, under my directions, accumulated

a quantity of material, and has prepared a thesis giving the actual state of our knowledge upon this subject. The following are the conclusions reached in his thesis. 1st. Contusion has an undeniable rôle in the etiology of neoplasms. 2d. It acts by exaggerating the reparative process going on in the centre of the tissues, and by creating in the wounded part a *locus minoris resistantiæ*. 3d. It is, however, only a localized cause, and cannot produce by itself a neoplasm; to do so it needs a diathesis that we will call neoplastic, which is secondary and depends upon arthritism.

The Immediate Restoration of Parts to the Normal Position After Tenotomy.

DR. R. H. SAYRE, in a recent paper on the immediate restoration of parts to the normal position after tenotomy, read before the Orthopedic Section of the New York Academy of Medicine, thus concludes:

1. That after tenotomy the parts should immediately be restored as nearly as possible to the normal position, and there retained during ten days or two weeks, after which time whatever subsequent treatment may be necessary to vitalize paralyzed muscles, or complete the restoration of natural functions, should be carried out as may be necessary.

2. That this proceeding is accompanied by the least discomfort to the patient, and annoyance to the surgeon, and with a vast saving of time.

3. That there is no more danger of non-union of the ends of the divided tendon in this manner than by other modes of proceeding.

4. There is less apt to be a thin, imperfect bond of union between the ends of the tendon than when the gradual reduction of the deformity is practiced.

5. That this mode of operation is applicable at the foot, knee, thigh, or neck, where there is no ankylosis to be overcome; but that, in cases of long standing ankylosis at the knee, when tenotomy is but preparatory to *brisement forcé*, the latter should be deferred for forty-eight hours, to avoid possible risk from gaping of the external wound due to the violence of the manipulations.

Should the deformity at the knee be due simply to contracted muscles, immediate replacement may be practiced here also.—*Alabama Med. and Sur. Jour.*

A Test of Corning's Method of Prolonging the Anæsthetic Effect of Cocaine.

DR. M. D. HOGE, Jr., of Richmond, Va., concludes an interesting paper on the "Therapeutics of Cocaine," read before the Richmond Medical and Surgical Society (*Virginia Medical Monthly*) as follows:

Determined to test the methods of Dr. Corning, Dr. McCarthy injected a half grain in ten minims of water in my right forearm on the radial side. This was followed in five minutes by exsanguination of the arm from the fingers, making a long skip with the bandage at the point of injection, and compressing the brachial artery above the elbow. Before applying the bandage, the area of anæsthesia was 1 x 1½ inch; twenty minutes later, after compression of the artery, it was only 1¼ x 3 inches, which gradually diminished. After the effects of this had worn off, the brachial artery was compressed above the elbow, and one quarter grain injected into the ulnar side. Twenty minutes later a large sewing needle was inserted one inch straight into the arm without the least pain. Thirty minutes after the injection, the anæsthetic area was 5 x 8 inches for superficial and deep pricks of the needle. This method

seems to have decided advantages over the first. In order to see what effect a deep injection would have, the artery was compressed as before, and the hypodermic needle inserted one inch straight into the tissues, and then one quarter grain slowly injected. Eight minutes later, the anæsthesia had only a diameter of half an inch long. In testing the sensibility in this experiment, the ulnar nerve was evidently injured, as proved by the fact that, on introducing the needle, an intense pain shot down the ulnar side of the arm, and that side was perfectly numb for more than forty minutes. As the area of insensibility did not extend, and the soreness of the flexor digitorum communis increased, this method of very deep injection was abandoned.

The opposite of this was tried—namely, a very superficial injection of one quarter grain just under the skin after compressing the artery. The area was long and narrow. Six minutes after injection, it measured $2 \times 3\frac{1}{2}$ inches; fifteen minutes later, $2 \times 6\frac{1}{2}$ inches.—*New York Medical Journal*.

Treatment of Severe Cases of Burning by Hebra's Water-bed.

In the *Glasgow Med. Jour.*, Dr. W. T. LAURIE has a short article calling attention to the value of Hebra's water-bed in the treatment of severe burns and other extensive skin wounds from whatever source, and pointing out the advantages it possesses over the ordinary treatment by dressings. Hebra's water-bed, according to the description quoted from Kaposi, consists of an iron framework in the form of a bed suspended by chains in a zinc trough, and carrying a mattress on which the patient is laid. When in use, the trough is filled with warm water, and the patient is gently lowered into it, so as to be en-

tirely immersed, excepting, of course, the head. The temperature of the water is then adjusted to his comfort, and it seems the best temperature is about 104° F. He is kept constantly in the bath, leaving it for functional purposes only, till the wounds have sufficiently healed to allow him to leave it for good.

The advantages claimed for the water-bed are : 1. That it abolishes pain and the consequent need for opium. 2. It does away with the torture and danger of repeated dressings. 3. It provides perfect facility for the removal of discharges, and is absolutely aseptic.—*Medical and Surgical Reporter*.

VENEREAL DISEASES.

Subpreputial Medication.

The *Medical World* claims advantages in the treatment of gonorrhœa by what is termed subpreputial medication. The method consists in rubbing up morphine and cocaine in lanolin (wool-fat), and inserting it under the prepuce after thorough cleansing. Dr. Taylor claims that this at once relieves all pain by producing complete numbness of the whole organ. He claims that the advantage of lanolin over other vehicles is the readiness with which it is absorbed.

[Marine lint placed over the meatus and held in place by the prepuce, causes in a day or two a sodden water-graphed areola about the meatus of fully 1 cent. diameter. It benumbs half of the glans penis, reduces inflammatory action and lessens or entirely prevents the stinging pain on micturition.] A. H. P. L.

Speedy Cure for Gonorrhœa.

DR. CHAS. C. EDSON, *Chicago Medical Times* :

In reply to your question column I will give my three-day cure for gonorrhœa. R̄. Oil sandal wood ; fl. ex.

quillea sapo, aa ʒiv. M. and shake. Add glycerine; aqua cinnamon, aa ʒiij. M. Sig.—Teaspoonful four times a day.

℞. Morphia sulph., gr. iii; muriate berberina, gr. x; zinci sulphas, gr. viii; bismuth sub. nit., ʒiv; aqua rosa, ʒiv. M. Sig.—inject small amount after each micturition. Keep the glans penis well covered with cloth so as to prevent the discharge from soiling the linen. This is a very necessary precaution for a speedy cure, as matter upon the clothing reinoculates and continues the disease indefinitely.

Gurjun Balsam in Gonorrhœa.

The *Centralblatt für die Gesammten Therapie*, gives the following formula:

Gurjun balsam, mucilage, each, 1 part; infusion of anise, 10 parts. Dose, a dessertspoonful.—*N. Y. Med. Jour.*

Rupture of Bladder: Laparotomy: Death.

MR. HENRY B. MELVILLE reports in the *Cincinnati Medical News* the case of a man of thirty-eight years, who had a cart 25 cwt. heavy pass over the lower part of his abdomen. He was under the care of Mr. J. Duncan, who, on the following day, after exploring the bladder, diagnosed rupture of this viscus. There were signs of peritonitis, with almost total suppression of urine. Matter complicated by the presence of a urethral stricture and false passages. Abdominal section was performed and a rent $2\frac{1}{2}$ inches long discovered in the posterior vesical wall. The belly was full of blood and urine. A perineal catheter was placed in the bladder, and also a glass tube through the abdominal opening to the bottom of Douglass' cul-de-sac. The wound was sutured. Patient felt better in every way. Temperature below 100° F. Had several relapses, but rallied each time. There

was considerable urinary suppression on the night of the fourth day, when he died in collapse. The autopsy showed commencing union in the rent in the bladder. There was slight exudation of lymph and adhesion between the contiguous serous surfaces around the glass tube, and a retro-peritoneal extravasation of blood extending up to the left kidney. The kidneys gave evidence of interstitial change and were also a little fatty.

Fifteen Hundred Cases of Syphilis Treated by Subcutaneous Injections of Mercury.

J. ASTLEY BLOXAM, F. R. C. S., in a clinical lecture, reported in *London Lancet*, gives the following interesting details of the application of the subcutaneous employment of mercury in syphilis:

The lecturer mentioned the excellent results which he had obtained at the Lock Hospital and elsewhere in the treatment of syphilis by intra-muscular injections of a solution of the perchloride of mercury. The solution for injection contains six grains of the perchloride to the ounce of distilled water, and should be made fresh for each *séance*. Since we have adopted this method, now a period of some eighteen months, upwards of 1,500 cases had been treated with the best results. The sore generally begins to heal very promptly after one or two injections, the secondary symptoms are markedly modified, and after a course of treatment extending over a year, more or less, the patient is enabled to discontinue his attendance. Towards the latter end of the course of treatment the injections may be given less frequently, and as a general rule, not more than from eight to twelve grains of the perchloride are injected in all. It is undesirable to repeat the injections oftener than once a week, as

otherwise salivation may be induced, and the quantity injected each time (one-third of a grain) is found to be quite sufficient until the next time. There are several advantages attending this method of exhibiting mercury. In the first instance it is only necessary to see the patient once a week, when sufficient mercury is injected to last until the following week; secondly, salivation is not produced, as when the patient continued to take mercury for a whole week away from the supervision of his medical attendant; thirdly, the gastric derangements which are so apt to follow the administration of mercury by the mouth are by this means avoided; lastly, the ease and certainty of the administration, which enable the surgeon to do his own dispensing with a minimum of trouble. A little quinine is generally given during the course as a tonic, but no other form of mercury is administered.

The injection itself is a very simple operation, but certain rules have nevertheless to be observed in order to obviate any inconveniences which might otherwise result. An ordinary glass hypodermic syringe is used with a fine needle (the needle is apt to become very brittle from the action of the mercury on the steel and requires to be replaced from time to time), containing twenty drops of the solution, equivalent to one-third of a grain of the perchloride. After filling the syringe the needle is freed from adhering solutions by washing, in order to avoid irritation in its track, and is then plunged deliberately into the muscular tissue of the buttock, selecting for this purpose the spot corresponding to the muscular mass of the glutei into the substance of which the injection is made. If this precaution be observed, no discomfort or abscess formation follows, the only

solitary case in which this has occurred being attributable to the injection having been made into the areolar tissue over the trochanter. The pain of the injection is but slight, and soon passes off. It is desirable that the patient should not take active exercise immediately after the injection, as it has been noticed that blood may be effused at the point of injection, giving rise to the sensation of a severe bruise of the part, which lasts for several days. The same effect has followed the puncture of a large vessel, but in any case the result is only transient, and disappears after the lapse of a few days. If for any reason the buttock be objected to as the site of the operation, the injection may be made unto the trapezius muscle at a point two inches above the superior angle of the scapula, but the injection into the buttock is attended with less inconvenience.

Mr. Bloxam mentioned that his own opinions were strongly in favor of syphilis being bacillar in origin, thus accounting for the specific action of mercury in the treatment of the disease. In support of this view he alluded to the remarkable researches of Messrs. Eve and Lingard, whom he had furnished with blood and chancrous tissue from patients at the Lock Hospital, the subjects of syphilis. They have succeeded in detecting and cultivating a bacillus which could generally be found in the blood and tissues of syphilitic patients who had not been subjected to the influence of mercury, or who at any rate had not taken it long. In a contribution to the *Lancet*, they say: "In none of the cases from which cultivations were obtained had mercury been administered for any length of time, and a long series of failures have led us to reject entirely cases which have been long under mercurial treatment." With this

fact in view, the importance of obtaining a thorough and certain permeation of mercury in the system is apparent, and without claiming any originality in this method of treatment, the lecturer wished to bring before them the extremely favorable results he had obtained from it.

DISEASES OF THE EYE AND EAR.

Ocular Disturbances Caused by Dental Irritation.

At the recent Ophthalmological Congress, in Paris, M. PAUL REDARD described a number of cases in which dental affections were evidently the source of ocular disturbance, such as glaucoma, amaurosis, amblyopia, and cloudy vision. In asthenopia, without any apparent cause, the teeth should always be examined. M. Gayet mentioned a case in which disturbance was produced by a tooth fixed on a pivot; the symptoms appeared and disappeared according as the tooth was removed or replaced. M. Fieuzal had observed so many of these cases of correlation between ocular and dental affections, that he had urged that a dental clinic should be annexed to the Quinze-Vingts Hospital for blind people. M. Suarez and M. Galezowski mentioned similar facts. M. Javal mentioned a series of cases, of an inverse order, in which dental disturbance disappeared after operating for glaucoma.—*Medical and Surgical Reporter*.

Permanent Closure of the Orbital Cavity.

After the removal of the eyeball, there are many reasons why it is desirable to permanently close the orbital cavity—that is in those who, for some reason or other, do not mean to use an artificial eye. Therefore it is we note that before an English medical society, Dr. EDWIN ANDREW exhibited a man on whom he

had performed his operation for permanently closing the orbital cavity, after excision of the eyeball, by removing all the ocular and palpebral mucous membrane, the cartilages, and edges of the lids, and allowing the cut surfaces to unite. He pointed out the great advantages of this operation for the artisan class; no dirty discharging socket was left, and it rendered the person quite independent of the weather, or of the dirty surroundings of his occupation, enabled him to dispense with a shade, or any other covering, and saved the expense of an artificial eye, which, if not frequently renewed, became a great evil. He mentioned also that this was one of many cases which showed that the fear of a lachrymal fistula from such an operation was quite erroneous, for probably the lachrymal gland not being stimulated to action wasted away.—*Ibid*.

Arterial Hemorrhage following Enucleation

DR. A. D. WILLIAMS (*St. Louis Medical and Surgical Journal*): MEYER (in the Report for 1885, of the Heidelberg Ophthalmological Society) relates that, having had occasion to remove an eye from an unhealthy girl of three years of age, when the optic nerve was cut, a profuse arterial hemorrhage followed and could not be checked until he ligated the ophthalmic artery. The child died soon afterward, and a post-mortem revealed an abnormal condition of the orbital blood vessels, thus accounting for the very unusual hemorrhage. So far as I can now remember this case is unique in ophthalmological literature.

In the same report Mr. Richardson Cross relates the particulars of a case of orbital tumor which developed suddenly and necessitated the removal of the eye and entire contents of the orbit. The hemorrhage which ensued was very profuse. Pressure upon the corresponding

carotid only partially checked it and the orbit was tamponned with similar results. The carotid was thereupon ligated and hemorrhage ceased. The tumor on examination was not considered malignant.

The writer recently operated on an orbital tumor, removing the eye and entire contents of the orbit. The tumor proved to be melanotic and filled the entire space behind the ball, so that the orbit had to be completely stripped of everything. The hemorrhage from the apex of the orbit was very profuse, but the direct application of chromic acid to the bleeding vessels at once and permanently stopped it. I will take occasion to say in this connection that chromic acid, when it can be applied directly to the bleeding parts, is very effectual in checking alarming hemorrhage.

Aural Exostoses Drilled Away by the Dental Engine.

Heretofore it has been thought best to let the hard ivory like exostoses of the external meatus alone, on account of the difficulty and danger of trying to remove them. I have turned away several such cases. More recently I have about concluded to operate on these exostoses by drilling several parallel holes through the base of each one so it could be detached and removed. Geo. P. Field, M. R. C. S. (*British Med. Journal*), reports fifteen successful operations that he had made on these aural exostoses. The plan of operating is very simple. He protects the other parts of the meatus by a spoon-like metallic plate of proper size; then with a dental engine he drills the exostosis away, saving as much of the skin as possible. This certainly is a good plan for removing these bony growths heretofore considered incurable.—*Ibid.*

Deafness Cured by Removing Tonsils.

A few days since, a little girl eleven years old called, complaining of noises and deafness in the left ear. Everything in the outer ear was normal. In the throat there was chronic pharyngitis and a very large tonsil on the left side, completely filling up the soft palate and pushing the left portion of the latter upwards against the mouth of the eustachian tube. The diagnosis was at once made that the noises and deafness in the left ear were caused by the enlarged tonsil. I excised the tonsil and in a few days trouble in the ear had ceased.

Some years since a boy about twelve years old had noises in both ears and was deaf in both. Externally the ears were normal. In the throat there was chronic pharyngitis and the tonsils were enormously enlarged. Diagnosis: The hypertrophied tonsils cause the noises and deafness, by pressing up against and closing the mouths of the eustachian tubes. I amputated one tonsil with prompt relief to the corresponding ear. In a few days I excised the other tonsil with equally prompt relief to the other ear. All enlarged tonsils do not cause noises and deafness. They must be unusually large and press up against and close the mouths of the tubes before they can directly involve the drums.—*Ibid.*

The Best Way to "Circumcise" the Cornea.

In cases of persistent pannus it occasionally becomes necessary to "circumcise" the cornea. This has heretofore been done by excising a narrow strip of conjunctiva, close to and clear around the margin. The object of this operation is to cut off the conjunctival blood vessels from the cornea and thus cure the pannus. A better, easier and more effectual way to do this operation is to burn a narrow strip of conjunctiva close around the margin of the cornea

with the galvano-cautery. The resulting cicatrix will more effectually obliterate the blood vessels.

In doing the operation the cautery must be touched to the conjunctiva very lightly, but continuously. In cases where a tuft of blood vessels passes into the cornea, causing partial pannus, and persist, they can be easily destroyed by burning across them in the conjunctiva close to the cornea. I have frequently cut across them and even excised portions, but they often re-develop.—*Ibid.*

A Tumor of the Cornea Removed by Galvano-Cautery.

A man about sixty-five years old had a flesh-like tumor on the upper and inner margin of the cornea for over twelve months. The growth was regular but slow. When I first saw it, it covered about one-fourth of the corneal surface, upwards and inwards. The tumor was a flesh color and considerably raised above the surface, but was not nodulated—the surface being smooth. It had a rather hard and horny feeling when touched with the probe. It grew from the corneal substance, was firmly attached to it, and there were a few enlarged blood vessels running into the mass from the adjacent conjunctiva. The diagnosis was a "fleshy excrescence, non malignant." In the inner cornea of the affected eye as well as the other, is a well marked pterygium, but I do not think that had anything to do with the development of the tumor.

As it would be very difficult to separate the tumor from the cornea with the knife, I determined to burn it off with the galvano-cautery. Having cocainized the eye, I lightly touched the glowing loop to the surface of the tumor, first at one part, then at another, until the entire mass of the growth was completely destroyed. The operation caused

scarcely any pain and there was almost no reaction. The burnt surface healed very rapidly, making a good result.

The cautery beats the knife in this kind of an operation. Care must be taken not to burn through the cornea, as the glowing wire goes through the flesh like a hot wire through snow.—*Ibid.*

Safety of Cocaine in Cataract Extractions.

DR. G. E. FROTHINGHAM, in the *Journal of the American Medical Association*, records thirty-nine cases of cataract extraction in which cocaine was employed, and concludes that :

1. Cocaine relieves the operator from the embarrassments during the operation for cataract that arise from vomiting, also from the agitation of his patient which results from excessive bronchial secretion or stertorous breathing. These are often very troublesome when ether or chloroform is used.

2. The danger to the result which often arises from nausea and vomiting after the extraction, when other anæsthetics are employed, is very surely avoided when cocaine is selected as the anæsthetic agent and is properly used.

3. The danger arising from the depressing effect of cocaine upon the nutrition of the cornea is no greater than in cases where ether or chloroform is used. The depression of the circulation which often arises from either of them, may affect very injuriously the corneal nutrition.

4. The disturbance of the circulation of the interior of the eye, and consequent danger of panophthalmitis from this cause, is probably less in using cocaine for this operation than in resorting to general anæsthesia.

5. The danger of sepsis and consequent panophthalmitis from the use of cocaine may be avoided by using only fresh solutions.

DISEASES OF WOMEN.

Peri-Uterine Inflammation.

In the *Medical Record* of September 18th, there appears a paper which was read by Dr. POLK, before the Society of Physicians and Pathologists, Washington, D. C. It is a remarkably clear and concise statement of the subject from the standpoint of an advocate of the etiological importance of tubal disease in peri-uterine inflammation. The absence of partisan warmth which has been no uncommon element in the consideration of pelvic inflammation in the past, makes the paper additionally interesting.

After a resumé of the history of the subject and statement of the views of the day, the writer affirms his belief that "peri-uterine inflammation is a dependency of salpingitis, and holds with Bernutz, that in the symptomatology of these masses 'the majority and the more important symptoms are attributable to pelvic peritonitis, while the uterine or tubo-ovarian affection, although of much more importance, is indicated only by obscure symptoms.' "

He then inquires :

What are the inflammatory masses commonly met with about the uterus and the broad ligaments? Are they the result of parametritis (pelvic cellulitis), derived directly from the uterus and vagina, through the medium of the parenchyma, the lymphatics, or the veins, or are they the result of a perimetritis (pelvic peritonitis) derived from the uterus through the medium of the tubes?

The solution of this question will modify the future history of the removal of the uterine appendages.

The author then formulates his convictions, which are similar to those entertained by many gynæcologists.

"1. That the inflammatory masses commonly found about the uterus, and which are described under the headings "Pelvic Cellulitis" and "Pelvic Peritonitis," are the result of salpingitis, plus peritonitis—the tubal disease being the direct result of disease of the uterus; that such masses are composed of the tubes and ovaries, with sometimes adjacent viscera, the whole being united by recent or organized lymph, the interspaces in acute cases, and sometimes in chronic cases, being filled with a serous exudate; that such swellings may be augmented by secondary infiltration of the adjacent sub-peritoneal connective tissue, but such infiltrations are subordinate in extent and influence to the peritoneal inflammation.

2. That these masses do not originate directly from the uterus or vagina as a cellulitis, except as the consequence of an evident septicæmia ingrafted upon those organs, after an abortion, a miscarriage, a labor, or after some operation; that even in such cases it is more than probable that salpingitis and peritonitis will be associated with and predominate over the cellular inflammation; that when these masses do begin as a cellulitis (the patient surviving the septicæmia), they rapidly tend to suppuration; that they end very rarely in the chronic indurations or swellings under consideration in this paper.

He then adds :

It is admitted by all that the vagina, and chiefly, the uterus are the starting points for these swellings; some hold that the ovaries are, but this I will not consider, as I do not think that the proofs of primary ovarian inflammation, outside of tubercular and cancerous deposits, being the initial factor in the production of the swellings in question, are conclusive, too few of the reports

being explicit in excluding previous salpingitis.

The uterus and vagina being then clearly admitted sources of the disorder, the question is in what way does the inflammation travel outward.

Through the tubes to the peritoneum ; by way of the lymphatics, lymphangitis ; by the veins, phlebitis ; or directly through the parenchyma of the organs ?

In one or the other of these ways, or by a combination of both, or all, inflammation travels from the genital tract outward.

In the first it gains direct access to the cavity of the peritoneum, in the other, by running in a more indirect way. Let us inquire as to which is the usual path. In septicæmia it travels by all. Excluding this condition it travels outward by way of the tubes. One of the most effective blows struck in favor of this last assertion was the discovery of the extreme rarity of acute metritis in the non-pregnant uterus. But the question of transmission by way of the lymphatics and veins is not so easily regulated."

The doctor questions whether the disturbance which usually precedes the formation of these masses are grave enough to warrant the idea of lymphangitis or phlebitis. The writer has on several occasions suffered from a well marked lymphangitis of the leg extending to the knee, which arose from an abrasion on the heel. The pain and constitutional disturbance was much less than he has observed during the development of these masses.

The author attempts to show by analogy that as in cellular tissue in other parts of the body, inflammatory masses do not commonly arise by extension through the veins or lymphatics, it should not be so with the uterus. He cites the genito-urinary tract in the male,

the prostate gland, the penis, the bladder and its inflammations, and the meso-rectum in the ulcers of dysentery. The value of these comparisons is doubtful, as the conditions are so different. Where is there an organ mentioned to compare with the uterus and its great lymphatic system?

As regards his statement that the observations made in the dead house of Bellevue Hospital which sustain his views, they would be much more valuable if he could state that he made or confirmed them personally. Not long since the writer examined a subject in the dead house, before autopsy, and stated that at the base of the left broad ligament there existed what he believed Dr. Emmet would term the result of an old cellulitis. A skillful laparotomist standing by passed his hand through an opening that was made in the abdominal wall, and after examination smiled as he remarked that both sides were alike. More extended examination proved that there was a marked difference between the sides, and microscopic examination of the mass showed it to consist largely of veins with thickened walls. This shows how easy it is for a pathologist to pass over a small mass near the base of the broad ligament. The writer has heard Dr. Emmet several times call attention to a class of cases where the impression conveyed to the finger in passing over the base of the broad ligaments was not unlike a string of beads, or enlarged lymphatic glands.

Dr. Polk quotes from a paper by Dr. Coe, that appears in the Transactions of Alumni Association, Woman's Hospital, 1886 : "Of six fatal cases of hysterotrachelorrhopy and incision of the cervix, in which I have enjoyed the rare opportunity of studying carefully the sequences, in every instance the cause

of death was acute, diffuse peritonitis. The inflammation could be traced straight up from the wound along the mucous membrane of the uterus as an endometritis, along the tubes as a pyosalpinx, and then to the peritoneal cavity. In none of these cases was there any evidence of acute cellulitis, although old cicatrices were not wanting."

The importance of these cases of hystero-trachelorrhapy seems more apparent than it really is as indicating the origin of peri- or para-uterine inflammation. The operation that Dr. Emmet performs for laceration of the cervix is for the purpose of removing the stony, hard tissue in the old cervical tear. To do this it is sometimes necessary to make a pyramidal excavation extending above the cervico-vaginal junction. If the stitches do not approximate the sides of this cavity secretions are apt to collect, decompose, and flow into the cervical or uterine canal. As the sides of the excavation are the sides of a recently made wound, and are therefore covered by lymph, it is much more likely for the septic fluid to cause the acute diffuse peritonitis by endometritis and salpingitis than by extension through the veins and lymphatics. The writer believes that all cases of this kind (hystero-trachelorrhapy with symptoms of septic absorption) can be saved by a timely withdrawal of the sutures, and he has seen among others a case with a temperature of 105° F. suffering from repeated chills, show a normal temperature in a few hours after this was done and the parts irrigated.

The author offers for consideration the histories of sixteen of his patients.

"Let me now offer the record of sixteen patients in whom the symptoms and signs present were those of "pelvic cellulitis" and "pelvic peritonitis," but in which abdominal section showed sal-

pingitis, periovaritis and peritonitis. In two of the cases there was slight œdematous swelling of the cellular tissue in the broad ligament, just beneath the spot at which an inflamed tube had rested: in the remainder the most careful examination failed to detect the slightest induration or swelling in any part of the cellular tissue that lay about the uterus or between the peritoneal layers of the ligaments.

The method of examination pursued was the following: Bimanual vaginal exploration of the uterus and its surroundings was employed in each case, both before and after the operation.

Before the operation indurated sensitive masses were present about the uterus, in each patient, and the mobility of the organ was impaired to a greater or less degree. After the operation the masses could not be found in a single case, and the mobility of the uterus was restored to about its normal range in nearly every instance. During the operation two fingers were placed astride the broad ligaments, every portion being thus readily explored. The entire pelvic floor was likewise examined by touch, and whenever the method seemed incomplete the opposing fingers of an assistant were placed in the vagina. Between the two it was impossible for any induration or thickening to escape detection.

An item of interest in many of the cases is the appearance of abortions and miscarriages as etiological factors."

We regret that space does not permit a full repetition of the cases, and we also regret that the histories are not more complete. It is noted that three of the patients are 37, 38 and 39 years of age respectively. The question of operation so close to the period of functional decline, is one that we have few observations to aid us in answering, and

the probability that the unhealthy stimulation of the diseased organ would prolong the period, must be taken into account.

In nine of the sixteen cases, no mention is made of previous labors or miscarriages. It would be of interest to know whether the cervix indicated previous labors and the amount of laceration. How does the author explain a fact that Dr. Emmet has directed attention to, that the inflammatory mass is almost always on the same side as an extensive laceration? Of these nine, two are supposed to have suffered from gonorrhœa. Two cases are spoken of as having a retroverted and bound down uterus, and another as simply having a retroverted uterus. One case suffered from constant pelvic pain which she attributed to the wearing of an ill fitting pessary; so it is to be presumed she suffered from some displacement. The writer is surprised that among the sixteen, no cases are mentioned of ante-flexion or retroflexion. In his own experience, one of these conditions is very commonly associated with cases of pelvic inflammation.

Of the remaining seven cases, six suffered from abortions, and of these five are said to trace their pain from such an occasion.

Case V. is not the least interesting of the number. After attempts at replacing a retroverted uterus by the sound, a mass was developed on the right side of the uterus in the broad ligament region, which was very sensitive. . . .

A month's treatment diminished the mass slightly and relieved the symptoms, but as she clamored for operation, I opened the abdomen and found the following conditions: On the right side a dilated tube with swollen walls. Its cavity contained a starchy muco-purulent fluid. It, together with the ovary,

was covered with recent lymph, and they were bound loosely to each other, both being attached to the posterior face of the broad ligament. There was no fluid exudation at that time, all that was present being recent lymph, some portions of it having attempted organization. . . . I class this case now as one of acute salpingitis—one, therefore which no doubt would have recovered if its course had not been interrupted by an operation.

The lesson that this case bears should not be disregarded. It is dangerous to use the slightest force in replacing a uterus by the sound, and it is not unlikely that many cases of salpingitis are caused by meddlesome interference with the cavity of the uterus.

The author considers the pathology under the heads of acute and chronic stages of inflammation. He calls attention to the relation of the ends of the tubes with abscesses and as their position varies from being low down in the pelvis to approaching the pelvic "brim" so the primary position of the abscess varies. For this reason he does not consider that any report of the origin of a peri-uterine collection of pus (pelvic abscess) is complete without a clear statement as to the position and condition of the fimbriated end of the tubes, no matter whether these abscesses be peritoneal or in the cellular planes."

The author does not consider the so called cystic degeneration to be in any respect a causative agent, and I think this is the view at the present commonly entertained.

Under the head of etiology, he considers that in order to prove that the starting point of the tubal inflammation is from the outer side of the tube, it is necessary to show cases where there is an absence of inflammation continuous from the uterine mucous membrane to the tubes.

The degree and character of the uterine inflammation determines, no doubt, the character of the tubal and peritoneal inflammation. . . . Every patient therefore, who has an endometritis, no matter how produced, has taken the first step towards a salpingitis and its results.

The author justly observes that the prognosis is worthy of the most earnest study, as on it depends the advisability of removing the ovaries.

Pelvic abscesses which are one of the most deplorable results of cellulitis, but, as Dr. Polk remarks, recovery is the rule. It is evident, then, that the large majority of cases of salpingitis and peritonitis do not die. But what is the ultimate effect of the disease upon the health and comfort of the individual? Experience shows that the majority of the cases get well, many getting so well that they not only suffer but little inconvenience, but are able to bear children subsequently. This is within the experience of every one practising in the departments to which the disease belongs.

The "cure" is indicated by the disappearance of the pelvic indurations, but especially by the freedom of the patient from pelvic pain, backache, and endometritis, and the return of a menstruation such as is normal. If the masses remain after six or eight months' treatment, the "cure" of the patient is very doubtful, in spite of the fact that some such cases will, for years, experience but little discomfort. So long as the indurations remain, so long as there is tenderness about the uterus and the organ is not freely movable, the disease is present; and, upon provocation, is liable to spring up to its original dimensions, and go even beyond into the domains of danger and death.

For the symptoms and signs we are

referred to those set down in the books as those of pelvic peritonitis or pelvic cellulitis. He insists that wherever the signs and symptoms of septicæmia are unmistakably present they indicate the possible existence of a primary cellular inflammation.

The treatment.—I have nothing new to offer you upon this subject. I only wish to reconcile differences. He who believes in the cellular origin and location of these evidences of inflammation inveighs against him that believes in their tubal origin, while he of tubal proclivities makes answer by showing the dilated, infiltrated, and pus or mucopus-containing tube. This may be a sufficient answer so far as settling the question of location of the inflammatory mass goes. But do all the advocates of tubal extirpation answer so well the next criticism of the opponent, namely: If the cases which you show me in your wards and on the operating table are cases fit for tubal amputation, how is it that so many identical cases get well in my hands? Here the issue is now joined, and it is in the interest of progress that I have tried to show that there was a mutual misunderstanding.

The cellular advocates are wrong in their pathology and half right in their treatment. The first is too little of a surgeon, the second too much.

The author speaks of the necessity of noting the distinction between acute and chronic salpingitis.

These two conditions are distinguishable, not only after opening the abdominal cavity, but before. After, by looking for the evidences of recent inflammation just described in the section on pathology. Before opening the abdomen, by a study of the patient's antecedents; for instance, the history of recurrent pelvic inflammation, or of constant pelvic pain, extending over a

period of months or years, and associated with sensitive, indurated masses about the uterus, the mobility of the organ being lessened, are conclusions of chronic salpingitis. Rectal and vesical disorders being excluded, even less distinct evidences, provided they are associated with such a history, would be conclusive. But the recent development of a mass about the uterus in connection with any of the causes known to produce salpingitis, and associated with pelvic tenderness and lessening of the uterine mobility, is to be regarded as the indication of acute salpingitis. The records of the dead house and the bedside show conclusively how largely in the majority the cases of recovery in salpingitis are. It behooves us, then, to be slow in laying operative hands upon these tubes. In acute cases never, unless to cut short a peritonitis that threatens to become general; but in chronic cases, whenever other measures have been faithfully tried and found wanting, every patient should be offered that measure of relief that surely can be gotten from abdominal section.

The doctor draws the following conclusions that: Salpingitis is not a new disease, nor a rare disease. It is, with peritonitis, the most common form of inflammation about the uterus, holding in point of frequency about the same relation to the extra-uterine surface that endometritis does to the intra-uterine. The majority of the cases get well. A minority do not, and these are capable of causing such danger and distress that abdominal section, with removal of the tubes and ovaries, becomes a necessity.

The profession is under obligations to Dr. Polk for the remarkably comprehensive and clear presentation of the subject. We think his paper and that of Dr. Coe therein quoted will do much

to bring these vexed questions to a settlement for the interest of the female sex as well as the medical profession.

A. H. BUCKMASTER.

Cellulitis.

DR. JANSEN R. GOFFE, in an article read before the Alumni Association of the Woman's Hospital, New York city, and published in the *New York Medical Journal*, said, in conclusion:

To sum up briefly the points of my paper: Cellulitis has been dethroned from the prominent position it has held in uterine pathology and as a serious complication in gynæcological cases. In its place have come salpingitis and perisalpingitis, oophoritis and perioöphoritis, lymphadenitis, and peritonitic bands and adhesions. That cellulitis does occur, I am not prepared to deny. It may indeed be present in all pelvic inflammations, but, if so, it is acute in its nature and comparatively harmless in its action, for it leaves no scars in its train. These conclusions are not based upon autopsies alone; clinical experience is accredited its right to judgment. But clinical experience in this matter has been transferred from the uncertain test of digital touch and bimanual manipulation to the crucial test of laparotomy.

If, then, the pathological processes of the pelvic serous membrane found upon autopsy and laparotomy will account for all the pathological conditions formerly attributed to cellulitis, while inflammation of the areolar tissue of the pelvis has only slight confirmation upon autopsy or laparotomy, the balance certainly swings strongly to the former. And, in dealing with inflammatory affections of the pelvis, we must bear in mind that the highest probability that the tissue involved is a serous membrane.

[It is painfully interesting to see how the Alumni of the Woman's Hospital of New York are running away from Dr. Emmet's teachings on some questions in gynæcology, a number of them giving up his favorite cellulitis. Will he not follow them ?] A. J. C. S.

Vulvo-Rectal Fistula from Violence during the First Coitus.

DR. JOSEPH PRICE reported for Dr. Barton Hinst the case of a young woman of twenty-two, who presented herself at the gynæcological clinic of the Philadelphia Dispensary, with the following history: Previous to her marriage, which took place eighteen months before, she had been a perfectly healthy woman. She dated all of her trouble from the first attempt at sexual intercourse with her husband, which caused her to suffer such acute pain that she almost fainted. The sexual act was also followed by severe hemorrhage, which persisted for a month; the passage of fæces and flatus *per vulvam* was at once noticed. Every repetition of the sexual act for the next two or three weeks was followed by renewed bleeding, and even at that time she suffered severely during intercourse. The passage of the fæcal matter through the vulva gradually increased in degree until the rectum was evacuated entirely through that opening. There had been entire inability to retain flatus and fæces. The finger, on entering the vulva, passed at once into the rectum through a patulous opening of sufficient size to admit two fingers. Inspection showed a perfectly intact crescentic hymen, of moderate thickness and rigidity, having a small anterior opening. Immediately in front of its posterior attachment was an irregular transverse tear, an inch and a half in its longest diameter, with thickened and everted edges, extending backward and upward for about one inch and a half, exposing to view the mucous

membrane of the bowel. The vagina was small and had evidently never been entered. The operation proposed by Dr. Joseph Price, and done by him, March 16th, 1886, consisted in freshening the edges of the tear, partially loosening the hymen from its attachment and using it as a flap to supply the deficiency of tissue. Shotted silk-worm-gut sutures were used, and the closure after the operation was complete and resulted in perfect union. That form of injury to the vulva was very rare, for, although sixteen cases of rupture of the vagina had been reported during late years as occurring during coition, only one of them, recorded by Blumenthal and operated on by Sir Spencer Wells at the Samaritan Hospital in 1860, bore any resemblance to the present case, which, from the careful analysis given it by Dr. Harris, was, without doubt, one of vulvo-rectal fistula. That form of fistula was much less common than the recto-vaginal. The case reported was of especial interest from the fact that the traumatism undoubtedly occurred during the first coitus, from the virginal condition of the hymen, and from the long time during which sexual relations were maintained under circumstances which must have been disagreeable to both husband and wife. There was no sign or suspicion of specific taint in either man or wife.—*New York Medical Journal*.

Frequency of Disease of the Uterine Appendages.

At the close of a paper on this subject, DR. H. C. COX, of New York, draws the following conclusions:

I. Ovarian disease is not as common as it has been represented; the surgeons, and not the pathologists, being responsible for the prevalence of the contrary opinion.

2. Because an ovary is partially diseased, it does not follow either that its functions have been materially impaired, or that its removal is imperative.

3. The expressions "cirrhosis" and "cystic degeneration" commonly applied to the ovary are mischievous terms, which are too often used in justification of unjustifiable operations.

4. Actual disease of the tubes is far less frequent than is generally believed. Lesser degrees of inflammation, especially slight "catarrhal salpingitis," are seldom appreciable to the pathologist, still less to the surgeon.

5. Many of the symptoms ascribed to disease of the uterine appendages are really due to localized peritonitis, and will *not* be removed by a removal of the appendages.

6. The physiology of the ovaries and tubes is still imperfectly understood; their pathology must then remain *sub iudice*, and operations for their removal, on the ground of limited disease alone, must be regarded as largely empirical. And I venture to add the prediction:

7. The present enthusiasm in this country in favor of Tait's operation will not endure, because it will eventually be discovered that the number of *permanent* cures is entirely out of proportion to the number of operations.—*American Journal of Obstetrics*.

Tupelo in Dilatation of the Uterine Cervix.

Ménière regards the tupelo root as preferable to sponge or laminaria, for the following reasons:

1. Tupelo acquires its maximum degree of expansion in less than an hour and a half, while sponge and laminaria require from six to seven hours.

2. Its surface remains soft, pliable and spongy, and in extracting it there is no danger of injury to the mucous membrane.

3. It returns with facility to its former size and shape, and may be used several times if subjected to disinfection in mercuric chloride after each operation.—*Gaz. de Gynécologie.—Medical News*.

Permanent Dilatation of the Uterus.

PROF. VULLIET, of Geneva (*British Gynecological Journal*), by means of dilatation, has been able to study the condition of the uterine cavity, even during menstruation, and to see in what manner the hemorrhage takes place; to take photographs of the uterine cavity and interesting casts. The patient is placed in the genupectoral position, with hips well raised, the perineum and posterior vaginal wall lifted as much as possible by means of a speculum blade on the dual aspect. The dilatation of the uterus is begun by either urethral sounds or bougies of various sizes; these are succeeded by small tampons of iodoform cotton wool, gradually increasing the number, usually leaving them *in situ* 48 hours. To make the dilatation more speedy and regular, laminaria tents, left in not longer than 24 hours, may be used, then succeeded by an iodoform tampon to remove possible germs. Proceeding in a regular manner, we are enabled to study the whole inner surface of the uterus in from 9 days to five weeks. No inconvenience is caused the patient except some uterine colic, very slight, for the first few days. M. Vulliet has applied his method to 13 cases, especially in women with uterine cancer; once the uterus is completely dilated we can easily apply whatever treatment may seem most appropriate. If the uterus be permitted to return to its normal state, and we wish to repeat the dilatation we succeed much more rapidly than in the first instance.

DISEASES OF CHILDREN.

Tetany in Infants.

DR. A. BAGINSKY spoke of this affection at a recent meeting of the Berlin Medical Society (*Deut. Med. Zeit.*). He gave a short sketch of one of the fifteen cases of this disease that he had observed. The child was three months old, and presented the following features: The ocular muscles were intact, the facial muscles were normal. Both pectorales felt hard, and were rigid. All the muscles of the forearms were remarkably rigid. When these were touched, the phalanges became strongly flexed against the palms, and the whole hand became slightly hollow. There was no rigidity of the abdominal muscles, but the adductors and flexors of the right thigh contracted on the lightest touch. Powerful contractions of the muscles of the leg set in on exercising pressure on the crural artery; but in the left leg it was not the flexors, but the extensors, that underwent strong contractions in carrying out this manœuvre. The muscular phenomena continued for some time, and the contractions were extremely painful. During the intervals the child became quiet again. The weakest faradaic current called forth the contractions. Later on the following conditions were obtained: After the diarrhœa had ceased, convergent strabismus had set in, and the excitability was so exquisite that pressure made on any muscle was sufficient to evoke violent contractions of distant muscles. Worthily of note were also the vaso-motor disturbances; the slightest pressure on the skin left a red spot. The case ended in perfect recovery on increasing the child's nourishment.

This sketch is applied to the majority of the cases observed. Regarding the ætiology, Baginsky remarked that

all the cases occurred in the summer months, and nearly all the children suffered from dyspeptic symptoms. As the children ranged from three to four months old, dentition could not be considered as a factor in the causation. French authors had observed that tetany in children might occur in epidemics, and they held that irritation played a rôle in the epidemics. Baginsky did not admit this, though he had witnessed the disease in twins and in children of relatives at the same time. He would attribute the ætiology in these cases to the similar conditions in which the children were placed. Two opinions obtain as to the pathology of the disease—one which attributed it to an organic lesion of the central nervous system, the other to an affection of the peripheral nerves. The prognosis was not unfavorable; the children never died of tetany. Seven of the fifteen succumbed to dyspepsia and intercurrent diseases. The therapeutics had reference chiefly to the disordered digestion and assimilation. When the attacks were attended with much pain, Baginsky found chloral hydrate enemata and warm baths, followed by the wet pack, very useful.

In the discussion that followed, Henoeh remarked that the picture which Baginsky had painted corresponded to that given by Trousseau of tetany in the adult. In spite of the abundance of his material, he had never met with a case that presented the combination of symptoms going to make up this picture. It was well known that contractures which were termed idiopathic frequently occurred in children, but they could not be considered as tetany in infants. In the first place, the subjects had passed the stage of infancy—they were over six months, and some had reached two years. In these

children he had seen some of the symptoms described by Baginsky, but he never could increase the contractions by pressure either on the arteries or on the nerve-trunks. The muscles remained rigid as they had been. The contractures were often painful, and continued at times for hours and days until they yielded of themselves. Henoeh has often observed in these cases œdema and cushion-like swellings of the feet and back of the hands, and, in a few cases, noticed purpuric spots in consequence of the venous congestion. He would consider them as resembling eclampsia. Certainly one important symptom was wanting—the loss of consciousness. This opinion received support from the fact that in many cases the group of symptoms alternated with attacks of eclampsia. Spasm of the larynx held the same relationship to these attacks of tetany. Henoeh had never seen a fatal termination, thus forming another element of difference from Baginsky's cases, seven of which had proved fatal.—*New York Medical Journal*.

Urinary Incontinence of Children Treated by Anodynes per Rectum.

DR. EDWARD T. WILLIAMS thus writes in the *Boston Medical and Surgical Journal* :

It is safe to say that the modes of treatment usually recommended for this distressing infirmity are frequently ineffective and disappointing. I find that morphine alone relieves for the time being, but does not cure. Belladonna and atropine are curative, when continued long enough, though I find them to be better borne in combination with a little morphine, which counteracts some of their bad effects, and enables them to be given more continuously. Furthermore, the requisite dose of belladonna

is smaller when combined with morphine. When these medicines produce headache or undue nervous excitability, I use the bromides as a corrective, or suspend their administration for a time. I have found no case where they could not be borne when properly given.

As to the mode of administration, a fifteen grain suppository of cocoa butter is most easily handled, and that which I prefer. They should contain a proper amount of extract of belladonna and morphine. For a child five years old, say, one-eighth of a grain of belladonna extract, and one-sixteenth grain of morphine; but the doses must be carefully adapted to the particular case in hand, beginning with a small dose, with a smaller relative proportion of belladonna, and increasing the latter and diminishing the morphine as toleration becomes established.

If an enema or clyster be preferred, it should consist of about a dram of lukewarm water, with a few drops of atropia and morphine solution added, and administered with the small hard rubber syringe (No. 2) especially designed for the purpose. The old fashioned clyster of starch water and laudanum is absurdly out of date. I have used nothing for years but morphine and warm water, mixed as for a subcutaneous injection, only that the water should be tepid, and not exceeding a dram in amount. I hardly dare claim to be the originator of this self-suggestive plan, though I certainly never heard of its being done by others before I adopted it out of my own fancy years ago, since which time I have freely mentioned it in conversation and before various societies. It is certainly the simplest form of anodyne clyster.

At the Sea Shore Home, where we do things by wholesale, I have two solutions of morphine and atropia ready

made. The first consists of one-sixth grain of morphine and twenty minims of water. The dose by drops therefrom is the same as that of laudanum, which makes it especially convenient for the nurses. The other is one-sixtieth grain of atropine to twenty minims of water. Reckoning one-sixtieth of a grain as an average commencing dose for an adult, the dose for a child may be graduated by drops precisely as with laudanum. For a child five years old, then, as an enema, you might give for a commencing dose from three to five drops of each solution, mixed with a teaspoonful of warm water. These doses may be differently combined or altered in any way to suit a particular case.

I mention these points because it is convenient to have both in private and hospital practice certain methods of routine, not only to save thought and labor but to lessen the chances of mistake.

Dentition; its Part in Infantile Pathology.

L'Union Méd. du Can.: According to this author, while dentition does not play the important part in the pathology of childhood which is often attributed to it, it is yet not without its influence in that direction, which varies with the individuals, with their age, their constitution, their hygienic, and their hereditary tendencies. In regard to convulsions, for example, numerous instances are cited in which they appeared much less frequently in children who had been nourished at the breast, than in those who had been nourished from the bottle: and, even in the same family, in certain instances children which had been nursed by their mother had no trouble during dentition, while those which were brought up otherwise passed through severe sicknesses. The author also found that children whose parents suffered in any way from nervous dis-

eases were predisposed to convulsions during the period of dentition. Pulmonary disorders, especially in the forms of congestion and catarrh, if not directly influenced by dentition, at least seemed to be excited much more readily during that period, if the body were chilled in the least degree. It may, therefore, be considered that dentition has a certain influence upon a child's health and general nutrition. In three-quarters of the cases analyzed by the author, in which dentition was considered of pathological importance, milky urine was passed. Except that the patients were usually in a febrile condition when this urine was passed, no peculiarity about it was observed, aside from its color. The author has been led to consider this as a diagnostic symptom of trouble which is due to a disturbed first dentition. The prognosis of diseases of this character is usually very good.—*Archiv. Pediatrics.*

Whooping Cough Treated by Insufflation of Quinine.

DR. J. BACHEM, Bonn (*Medical Record*), has treated sixteen cases by blowing into the nostrils a mixture of quinine muriat. (3 parts) and pulv. acaciæ (1 part) once or twice daily. Three weeks was the average time of cure.—*Ibid.*

A Mixture for Chronic Pertussis.

ROGER employs this preparation: Gum ammoniæ, 2 to 3 grains; syrup of orange flowers, 6 drams; infusion of serpentaria, 2½ ounces. Dose, a teaspoonful at intervals more or less frequent, according to the condition of the patient and the action of the remedy. When the expectoration becomes abundant, turpentine is prescribed. The chest is rubbed with an ointment containing a dram of extract of aconite or conium to an ounce of lard.—*New York Medical Journal.*

Tape-Worm in a Young Child.

DR. JAMES E. WHITEFORD, of Baltimore, sends us an account of a case in which a *Tænia mediocanellata* thirteen feet long was passed by a child eighteen months old. Dr. Whiteford found the patient very fretful, pale, and anæmic. She had little inclination to sleep, and when she did sleep she always lay on her stomach. Her appetite was seldom satisfied; she was always wanting the breast. This condition had existed since her seventh month. Diagnosing the case as one of worms, the doctor gave the following prescription: Calomel, 3 grs.; santonin, 1 gr.; white sugar, 10 grs. Divide into three powders, one to be taken every three hours.

The next day the mother showed him some segments of a tænia that the child had passed, and he then ordered: Fluid extract of male fern, 15 minims; fluid extract of pomegranate, 15 minims; oil of turpentine, 1 fl. dram; mucilage of gum arabic, 3 fl. drams. To be given after a fast of eighteen hours, at 6:30 A. M., and followed at 10:30 A. M. with a tablespoonful of castor oil. At 4:30 P. M. the worm was passed, head and all. The child was somewhat prostrated at first, but soon rallied and is now in good health, having a natural appetite and sleeping well. The mother had been in the habit of giving the infant raw beef to suck, to keep her quiet, and that practice, Dr. Whiteford suggests, may have been the cause of the trouble. The case, he remarks, should remind us that very young subjects may be infested with tape-worm. — *New York Medical Journal*.

Influence of Gastro-Intestinal Affections of Children on their Bodily Weight.

DR. NAKATSU MIYAMOTO, of Japan, communicates to the *Arch. f. Kinderheilkunde*, the results of his observations

on the influence of gastro-intestinal troubles of children on their bodily weight. He examined for the purposes stated, dyspepsia, ten cases; intestinal catarrh, fifteen cases; enteritis follicularis, eight cases; cholera infantum, six cases. His conclusions are thus formulated: (1) dyspepsia invariably and manifestly decreases the weight, often causing a daily loss of thirty-three grammes (one ounce). (2) Intestinal catarrh has very similar consequences. (3) In enteritis the loss is far heavier, at times amounting to twenty ounces *pro die*. (4) Cholera infantum causes, of all stated affections, the greatest reduction in weight in the shortest time, amounting occasionally to a loss of one-tenth of the entire weight within twenty-four hours. These cases, of course, are all fatal.

The Infant at Birth.

It is good practice to anoint the infant at birth with vaseline before the vernix caseosa has time to dry, and then wipe gently with an old cotton rag. If the first application, made always with the fingers, is not sufficient, repeat in half an hour, or sooner, until the whole surface of the body, including the hair, is perfectly clean. If vaseline is not at hand, fresh lard, that is, lard which is not rancid, may be substituted. This work having been carefully accomplished the nurse should be provided with a prescription for a simple antiseptic collyrium to be used if the eye-lids adhere, or if the eyes look suffused. The best collyrium in such cases may be made as follows: ℞. Sodii boratis, gr. xv; sodii chloridi, gr. ii; acidi carbolic, M. ii; aquæ destillatæ, aquæ camphoræ, āā, ʒi. M. ft. solutio. Sig: Drop into the eyes *pro re nata*. In case the lids swell and a yellow discharge appears between the lids, the quantity

of the antiseptic collyrium should be increased to a pint, or more, and the nurse directed to stream it from an old rag into the inner canthus with the lids separated.—*Progress.*

Antipyrine in the Infectious Diseases of Children.

HILDEBRAND (*Arch. f. Gynäk.*), reports under this title the histories of twenty-two cases of typhoid fever in young children in which antipyrine, in doses of eight grains, invariably produced a diminution of the fever-heat of at least 2° C. In some instances five grains lowered the temperature as much as 3° C. The course of the disease was not shortened, but the patient's condition was ameliorated, the mental disturbance being less marked than usual, and the diarrhœa and bloody evacuations checked. Slight depression was observed in three cases, severe collapse in three, and impending heart-failure in two. The amount of the drug given should be carefully regulated and the patient watched with more than ordinary vigilance. In scarlet fever and diphtheria the results were not so satisfactory as in typhoid fever. In these diseases antipyrine should be employed with great circumspection.—*New York Medical Journal.*

OBSTETRICS.

The Proper Use of Ergot in Obstetrical Practice.

DR. FRANK HAMILTON POTTER, *Buffalo Medical and Surgical Journal.*

Allow me to present the following points for consideration :

1. Ergot is a drug which in any of its preparations tends to deteriorate rapidly, and should never be used, excepting when prepared from a pure and fresh specimen.

2. It is a stimulant to the tubular and non-stricted muscular structures of the body, causing them to contract.

3. It acts especially upon the muscular structure of the uterus, throwing it into a state of tonic spasm.

4. Its action on the uterus is, however, uncertain ; sometimes it contracts the entire organ, at others only a small part of it.

5. If the entire organ is contracted, labor may be delayed through the rigidity of the os, and the child destroyed by the interference of the placental circulation.

6. Or the contractions may be so powerful as to force the child at once into the world, causing any or all of the lacerations of the soft parts of the mother.

7. The life of the child may be endangered, also, through absorption of the essential oil of ergot.

8. If given after the birth of the child, and before the expulsion of the placenta and membranes, it may prevent the removal of the latter, and thus be indirectly a cause of puerperal septicæmia.

9. It may act in a similar manner in cases of abortion, actual or threatened, and cause a similar result.

10. The proper use of ergot in obstetrical practice is limited to those cases in which, after the expulsion of the placenta, the uterus refuses to contract, or having once contracted shows a tendency to secondary relaxation. Even in these cases, however, reliance should not be placed upon it alone, but its action should be supplemented by the other means used to provoke uterine contraction.

[These conclusions though valuable in the main, need qualification. While ergot in large doses tetanizes the uterus, in small doses it merely intensifies the

normal rhythmic contractions. The experience of any physician who has used ergot after labor will substantiate this statement. We must take exception also to the author's fourth conclusion. The action of a good preparation of ergot properly exhibited is by no means uncertain. There are few things in medicine more certain than the action of ergot upon the parturient or post partum uterus. We cannot, however, always trust to its prompt absorption by the stomach. It is better given in the lying-in room by the hypodermic needle.

Nor can we accept the author's views with reference to the irregular action of ergot on the muscular structure of the uterus. That it sometimes seems so to act we grant, clots of placental masses lying wholly above the os internum may become incarcerated by the complete closure of the internal os. This excessive contraction of the circular fibres at the os internum is due solely to the fact that the action of the muscles at this point is unresisted, not to the supposed irregular action of the drug. The cervix below remains normally flaccid during the first few hours after labor, in all cases, with or without ergot.

If the foreign body lies partly in the grasp of the os internum, the excessive contraction of the circular fibres at that point is resisted and the action of ergot then favors its expulsion. However, we are in accord for the most part with the author's views as to the proper limitation of the drug. Its general use to provoke contractions in the second stage deserves nothing but condemnation.

We have other means that are safer and better in mere inertia uteri during the expulsive stage of labor.

The danger of giving ergot in the third stage before the expulsion of the placenta, we believe has been exagger-

ated. It was formerly our practice for many years to administer from thirty minims to one dram of Squibb's fluid extract of ergot on the birth of the child, and we have never known any complication to arise therefrom. The placenta is generally delivered with or without the aid of Credé before the effect of the drug is developed. If retained, the evacuation of the uterus by the usual methods is not materially embarrassed by the above mentioned dose.

More in deference to current opinion than to the teachings of our own experience we have recently withheld the routine use of ergot till the expulsion of the placenta. Thirty to sixty minims of the fluid extract given at this time promotes security against hemorrhage, tends to prevent the formation of deep thrombi in the vessels of the uterus, and generally favors the evacuation of its cavity, results all tending to the prevention of sepsis. After-pains, moreover, are usually prevented by the early and persistent retraction of the uterus. While not required in every case, we believe the proper use of ergot in the third stage of labor is never prejudicial, is generally a valuable prophylactic measure and is often imperative.]

J.

Adenoma of the Placenta.

The affections of the placenta have not yet received the degree of attention to which, on account of the relations they often entertain with abortion or the progress of confinement, they are fairly entitled. Quite recently DR. KLOTZ, of Innsbruck, showed in a valuable paper appearing in the *Archiv für Gynäcologie*, that the placenta is liable to an affection which has hitherto been never observed, viz., the adenoma. The following theses embody the principal conclusions of Dr. Klotz's paper :

1. There exists a true adenoma of the placenta starting from the spongy portion,—*i. e.*, from the ectatic gland spaces of the decidua serotina.

2. The formation of the adenoma begins with the gradual fusion of the cells of the decidua into an homogeneous protoplasmic mass resembling embryonic connective tissue and having a nucleus; besides, the glandular epithelium is reduced to a tissue of its own, from which new epithelial cells are formed.

3. The fusion mass grows by budding of its connective tissue constituents; hence the adenoma of the placenta belongs to the connective tissue tumors.

4. The adenoma of the placenta is liable to return after removal, unless powerfully cauterized.

5. Death and expulsion of the fœtus are consequences of the adenoma.

6. The placenta is retained for weeks and months; its spontaneous expulsion is probably impossible.

7. Klotz observed three cases of adenoma of the placenta, in none of which (after an expiration of five years) a return was witnessed. All three women enjoy at present perfect health, but of course conceive no longer.—*Ther. Gaz.*

To Prevent Mammary Abscess.

Although DR. GOODELL ridicules the idea of aborting mammary abscesses, which he does not think can be done, yet Mr. Miall (*British Medical Journal*) says that when mammary abscess is on the point of forming, he has frequently seen all the symptoms rapidly disappear in a few hours, under the influence of fomentations with hot water and carbonate of ammonia. He uses an ounce of the carbonate in a pint of water, and when solution is accomplished the temperature of the fluid will be hardly too high for fomentation to be commenced,

with cloths dipped in the liquid. He applies them for from half an hour to two hours, at the same time protecting the nipples. He has often had immediate relief, and seldom requires to make more than three applications.

The Prophylactic Treatment of Pendulous Abdomen.

ELISCHER, of Budapest (*Central. f. Gyn.*), has had the best results from the application of a cold compress around the abdomen. For five years he has employed this method after all difficult labors, and the results have proved so beneficial that he has adopted it in normal child bed. Among the better class the bandage is continued for fourteen days, or, if possible, longer. The cloth is to be folded four thick, and covered with gutta percha or water-proof stuff. Where inflammation exists, or increased sensitiveness, the bandage should be changed every few hours; but in ordinary cases once or twice a day is sufficient. This method appears to be not only prophylactic against pendulous abdomen, but it diminishes the striæ, which so often disfigure the skin, and also lessens after-pains.

Elischer has found the danger of "catching cold" to have been greatly exaggerated.—*American Lancet.*

Sassafras as an Ecbolic.

DR. JOHN BARTLETT calls attention in a recent paper before the Chicago Gynæcological Society to the action of sassafras as an abortive, and reports two cases in which it was used with this result. It seems that this, until recently, considered inert drug, is well known among women as an abortifacient, and is used by them in the form of a tea, the root being preferred for that purpose. Hill seems to think that it has a triple resemblance to three familiar

articles : opium, strychnine and ergot. In its action as a narcotic and sudorific it resembles opium ; in its property of inducing tetanic and clonic spasms, followed by paralysis, it is similar to strychnine ; in its power hinted at of exciting the uterus, it may be linked with ergot.—*Journal American Medical Association.—Ibid.*

Intra-Peritoneal Injections in Acute Hemorrhage.

RÜTGERS (*Centrbl. f. d. Med. Wissenseh*) reports the case of a woman who had lost so much blood from post-partum hemorrhage that she was apparently moribund. The veins did not swell on applying ligatures above them, so that it was impossible to employ intra-venous injections. The following solution was injected into the abdominal cavity through a canula : Salt, 90 grains ; sodium hydrate, 5 grains ; distilled water, 34 fluid ounces. After experiencing severe pain in the abdomen for three days, during which time the temperature was subnormal, the patient rallied and did well.—*New York Medical Journal.*

Indication of Premature Labor.

DR. WALTER COLES, in a paper on this subject (*St. Louis Courier of Medicine*), says that the operation should be done :

1. In all cases where the pelvic deformity is slight (or with a diameter more than $2\frac{1}{2}$ or $3\frac{3}{4}$ inches), and the children have been found by experience to be large and vigorous at maturity.

2. In cases of first pregnancy, whenever there may be uncertainty as to the result of labor at term ; especially where the pelvis is so contracted that labor at term would probably be very difficult, or even impossible.

3. In cases of apparently normal pelvis, but where the child proves to be of extraordinary size.

4. In cases where the child dies *in utero* towards the latter end of successive pregnancies ; providing the conditions producing the result are other than syphilitic, etc.

The methods recommended by the author for the induction of premature labor are : 1. The bougie. 2. Tents or other dilators. 3. The douche.—*American Lancet.*

General Treatment of Puerperal Diseases.

KUNGE, of Dorpat, finds that large doses of alcohol, baths, and full diet of nourishing food, in the treatment of the diseases of child-bed, yields in his hands the best results. The alcohol is the most important of these and must be used in large amounts. The baths should have a temperature of 22 to 24 degrees. This treatment assists the system in resisting the toxic effects of the absorbed matters. The pulse, as in typhus fever, is improved, the inspirations strengthened, and the appetite increased.

Of nine severe cases of septic infection treated in this way only one died.

Antipyretics, on the other hand, at most only bring down the fever, and destroy the appetite.—*Cent. f. Gyn.—Ibid.*

Measurement of the Fœtal Feet During Pregnancy.

DR. GONNOR, from a large number of observations (*Journal de Medecine et de Chirurgie Pratiques*), concludes that there exists an almost constant proportion between the size of the fœtal head and feet.

By the measurement of a foot, as in breech presentations, an estimation of the difficulties presented by the passage of the head is possible. A foot measuring three inches in length will correspond to eight and one-half pounds in weight of the child. A longer foot indicates an increased size of the child.—*Ibid.*

CONSTITUTIONAL DISEASES.**Caisson Disease.**

DR. WILLIAM PEPPER, in a clinical lecture, said :

There are several points of interest with reference to this case. For some years past we have been much interested in studying a new form of disease, which has received the name of caisson disease, because it attacks those working in these submerged air-chambers, carrying on the engineering work required for the laying of the piers of bridges and the like.

This is an entirely new affection, because this method of work is a comparatively new one. These submerged air-chambers are supplied with air pumped from the surface. Working in these chambers has induced certain curious pathological changes, the symptoms of which were at first misunderstood. It was believed that the men were attacked with rheumatism, and, again, that they had low forms of fever. It is now clearly recognized that those who work under such atmospheric conditions are liable to very severe nervous symptoms, which attack them either while working in the caisson or after they come to the surface. These symptoms assume different forms. Perhaps the commonest are affections of hearing, dizziness, headache, and extreme pains through the limbs. These pains closely resemble rheumatic pains. Sometimes the symptoms are much more severe. There may be almost complete paraplegia, or even more general paralysis. As a rule, these symptoms pass away if the subject stays from work for a few days. Men may have a threatening of these symptoms and yet by working but a few hours at a time, may go along without serious inconvenience.

This man presents a combination of

the symptoms of mild caisson disease, with the subsequent symptoms of a low febrile type, so that I am uncertain what proportion to give to the work that he has been engaged in and what to some febrile element introduced into his system without reference to that work. The first attack came on so quickly after he left the caisson, that we must assume that the work has something to do with the production of the severe pains of which he complained. The symptoms which he now presents are not characteristic of caisson disease, but are like the symptoms of mild typhoid fever. He has had irregular fever, cough, slight epistaxis, loss of appetite, looseness of the bowels, and prostration. He has run through a low febrile condition, but in the absence of the characteristic eruption, it is impossible to assert positively that he has typhoid fever. It may have been a simple continued fever of severe type, coming from the unusual exertion and the peculiar conditions under which the exertion was made. That would appear to be the more probable explanation of the case. It must also be remembered that he has been working in a malarious district. The season of the year is, however, not favorable to the development of malarial affections, but it has been an open month, and there may be a malarial element in the case. This is, however, a matter of conjecture. What we clearly know is that there has been a continued, irregular affection, lasting three weeks, and appearing after an attack of mild caisson disease. It is quite possible that this febrile condition has been the result of the conditions under which he was working, and of the excessive bodily and nervous strain to which he has been subjected.

The man is evidently improving, the temperature is going down, the pulse is

moderate, the expression is good, the mind is clear, and all the symptoms indicate that he will soon be convalescent. All that is required in the way of treatment is rest, liquid diet, and very small doses of stimulants diluted. If the bowels are loose, mild astringents; if the bowels are quiet, quinia, and mineral acids will be given.—*Medical Bulletin.*

Some Practical Suggestions on the Treatment of Diphtheria.

DR. WM. PORTER (*Journal American Medical Association*):

Diphtheria is a common disease, and it is one of the most fatal. As one illustration of many, in five years there were 17,193 cases in New York alone and 7,293 deaths. It is a disease that every physician will be called to treat sooner or later, and being called must act promptly. This is not the place for a long essay upon the different theories of diphtheritic contagion and progress; rather let us enter at once upon the discussion of the practical questions involved in conducting the disease to a favorable issue.

Let me very briefly sketch the manner of invasion according to conclusions which seem most reasonable and are by many accepted:

1. Diphtheria is contagious—or rather portagious, and of parasitic origin.
2. It is most readily implanted upon a mucous membrane denuded of its epithelium.
3. It is probably always local in its incipency, sometimes becoming rapidly systemic, though in rare cases apparently systemic from the beginning.

To further explain rather than to argue these propositions, let me say that the best protection against diphtheria is a mucous membrane entirely healthy; and an ordinary acute or subacute laryngitis or pharyngitis is a condition favor-

able to the implanting of the diphtheritic germ. When the epithelial layer is intact the diphtheritic germ finds no foothold, but when there is an abrasion or denudation of the lining membrane, the diphtheritic bacteria first attach themselves to the surface so prepared for them. This is the local period of the disease and no micrococci are found in the blood—there is no constitutional symptom. Sometimes, though there may be rapid surface involvement, and free formation of the characteristic membrane, there may still be little absorption of the diphtheritic virus.

Many of these almost purely local conditions suggest a doubt as to their specific nature. It is well to give the patient the benefit of the doubt and to treat urgently all suspicious looking exudations upon the surface of the respiratory tract. Practically, a certain number of cases of diphtheria are constitutional from the beginning, the point of infection being in some recess of the naso-pharynx or larynx, and easily overlooked—or is beyond the range of vision. I am not sure but that infection may occur from primary invasion of the membrane of the alimentary canal. Klebs, in the second Congress of the German Physicians, speaks of a diphtheritic involvement of Peyer's patches, resembling the reticular appearance in the earlier stages of typhoid. In by far the greater number of cases the rapid multiplication of the bacteria—whether sphero-bacteria as are found in severe cases, or whether short and slender rods as in milder cases—produces an inflammation of the mucous membrane, exudation takes place, the epithelial cells die and the bacteria pass into the blood and rapidly multiply throughout the circulation. Even should we deny with Beale, that the contagium is bacteria, we still must admit that the hypothesis

of local infection furnishes the most rational explanation of the sequence of symptoms.

Granting this, we have two purposes in treatment in the early stages of diphtheria :

1. To destroy or render harmless the local manifestation of the disease.

2. To increase the power of resistance in the general system to infection.

In dealing with the false membrane all measures which would tend to irritate or injure the air passages, should be avoided. There should be no tearing away of the exudation, or application of caustics—nor do I think that, except in cases where there is only a small, well defined patch of membrane, the use of the galvano-cautery will prove expedient. To prevent absorption, not only should we avoid making new abrasions in the throat, but I have thought it wise, as far as possible, to cover up those that already exist.

First of all, it is well to remove from the naso-pharynx, or pharynx, if that be the site of invasion, whatever of accumulated mucus and *débris* there may be. This may be readily done by means of a small syringe, and a weak solution of salt water, or of Lysterine. This may be used either through the nostril or directly in the pharynx. To loosen the attachments and hasten the resolution of the diphtheritic membrane many means have been advocated.

When the patch can be reached, a solution of papayotin may be applied ; or better still, one of trypsin. This last used in solution, as suggested by Fairchild and Foster, or still better, a few grains with one or two of bicarbonate of soda, made into a paste with water and spread upon the diphtheritic patch, is the most rapid solvent I have known. If the local disease is beyond the reach of such an application, an alkaline solu-

tion of trypsin may be sprayed into the nose or larynx.

After several applications of trypsin within the hour, a still further attack may be made upon the local disease. Having used more or less freely most of the germicides, astringents and antiseptics commended in the treatment of diphtheria, I have abandoned all else for a solution of equal parts of the tincture of the chloride of iron and glycerine. I have cause to consider this, when well applied over the entire extent of the diseased surface, an almost complete bar to the progress and absorption of the diphtheritic virus.

1. If the potency of the disease lies in the rapid multiplication of bacteria, so strong a chlorine solution is certainly indicated.

2. If absorption takes place through the abraded surfaces and "mouths of lymphatics open," as stated by Oertel, we would from *a priori* reasoning, expect some good from the local use of iron, while the glycerine may be something more than a mere vehicle, in that it may by affinity relieve to some extent the turgid capillaries of the mucous membrane. The application should be made frequently.

Let me say, in urging the efficacy of this agent, that for two years I have not seen a case of diphtheria die where the whole of the false membrane could be seen and repeatedly covered with this solution and where appropriate general treatment was given. Thrice within the last week, and many times during the past year, I have seen the characteristic membrane shrivel up and become detached under the influence of the iron and glycerine.

When the local attack is out of reach of the direct application by means of the brush, or better still, the cotton covered probe, the case is very different.

When the invasion is in the nasopharynx, or in the larynx, the result may well be dreaded. Even in such instances I believe the best procedure is to apply the iron locally by spray and where possible by the cotton covered probe.

The covering in of the diphtheritic patch with tolu varnish, as recommended by Mackenzie, may follow the thorough use of the iron solution, and is doubtless protective.

Not only is local treatment important, but it is important to institute it early. The physician should be called at once in every case where there is a doubt. Parents should feel that they are responsible for delay, and that delay is exceedingly dangerous. Many cases that during the first twenty-four hours are easy to treat and curable, are a little later beyond the reach of the most skilful.

A few words as to general treatment. Here, too, I have no sympathy with halfway measures. First of all, in every case, I nearly always counsel the administration of enough of calomel and soda combined to thoroughly evacuate the alimentary tract. It empties the canal of any accumulated material, it stimulates important secretions, and with Ritter, though not to the extent to which he advocates it, I believe it has a favorable influence upon the general condition. At least it clears the decks for action. As soon as the bowels of the child have been well moved, and sometimes not waiting for that, the internal use of the iron and glycerine solution (the same as that used in the throat) may be begun; for we need not fear any chemical reaction. To show that others are falling back upon this well known agent, let me quote from an editorial in a recent issue of the *New England Medical Monthly*: "It is interesting and somewhat gratifying to note that after each excursion into the

domain of experimental medicine, the profession invariably returns to the older and more effective method of treating diphtheria, which consists of tonic doses of the tincture of iron and a system of extreme nourishment."

To anticipate and antagonize general invasion, the general as well as the local treatment should be instituted early. Where the symptoms demand I prescribe two drops of the iron and glycerine solution for each year of the child's age, in a little water every two hours, and midway between each dose the diphtheritic patch is to be touched or sprayed with the solution. Thus there is an opportunity for the ferric solution to be brought in contact every hour with so much of the diseased membrane as is in the pharynx.

I have not discussed much of the poly-treatment of diphtheria as practised to-day—nor have I time to outline the emergencies which may arise, as I had thought of doing. My object has been to propose a plain and direct method of treatment which any one may use and which is not an experiment.

Many other remedies are often to be added. Pilocarpine, when the skin is dry and there is spasmodic laryngeal contraction; quinine, when the fever is excessive; steam from slacking lime when respiration is labored and the respiratory tract dry; and tracheotomy or intubation when the larynx is greatly obstructed.

Let me, in conclusion, suggest that the physician demand of the people among whom he practices, that they call him at once when suspicious symptoms are observed, and that he answer quickly, act promptly, and see that his instructions are implicitly obeyed. To treat diphtheria is to fight a battle—there should be no delays, surprises nor compromises.

Mary-thistle (Carduus Marianus).

Mary-thistle, Steck-kornchen, Char-don-Marie (Carduus Marianus), a syngenesious biennial, formerly enjoyed a considerable reputation. In Germany, the leaves of this plant are used against dysentery and hemorrhage, and the seeds in the treatment of spleen and liver enlargement. Tripier had found it of value in the treatment of female diseases. The discredit and disuse into which the Mary-thistle had fallen was difficult to explain, since there was indubitable evidence that it had decided therapeutic virtues.

There was no longer any idea of employing the leaves and flowers, whose chief constituent was tannin. The seeds do not contain tannin, but 25 per cent. of a fixed oil, separated by benzine, but slightly soluble in strong alcohol and still less in 60 per cent. alcohol. It deposits, from time to time, crystals whose reaction is neither that of an acid, an alkali, nor a glucoside. On treating the seeds with 60 per cent. alcohol, a liquor results, which yields on evaporation a gummy, resinous extract in proportion of 12 per cent. of the seeds employed.

Dr. Tripier prescribes ten to forty drops of the tincture. He also uses about one-fifth of a grain of the alcoholic extract, combined with three-sevenths of a grain of aloes against constipation.

These pills do not congest the bowel, and hence do not have the tendency which aloes alone has, of producing piles. Aloes alone in the quantity given, would be useless against constipation, and its action in the present instance is due to the Mary-thistle extract which stimulates the liver, and the excessive secretion of bile therefrom resulting produces the desired effect. Mary-thistle seeds are hence of value in liver and spleen diseases and their consequences,

and hence have properties similar to those of burdock.—*Medical and Surgical Reporter.*

The Hair Roots as Indicators of Bodily or Mental Disease.

DR. J. POHL-PINCUS, of Berlin, has recently in a *brochure* entitled "Polarized Light as a means of recognizing Irritable Conditions of the Nerves of the Scalp," announced that by an examination of the hair roots by polarized light peculiar changes may be observed whenever the patient suffers from physical irritation or mental excitement. This statement is the result of investigations which have now been going on for twenty-five years, and the later observations in the course of the research have uniformly confirmed those made earlier. The hair bulbs are divided into three groups, as follows: Group A: If, in healthy conditions of the body and mind, the hairs that fall out daily are examined microscopically by polarized light, the enlarged bulbous end of the root will show a white contour, and a yellowish or brownish-red centre. Group B: In all irritable conditions of any organ, also in emotional disturbances of moderate grade, without any apparent bodily disease, the bulbous end of the hair root increases in length and breadth (in proportion to the irritation), the central part appears under polarized light of a violet, blue, or bluish-green color, separated from the white contour by bands of yellow and red. Group C: In higher grades of bodily disease or mental disturbance, the bulb becomes still larger, and the bluish centre changes to green, yellow, or orange. A few hairs of the B and C types are found in normal conditions, especially in those more advanced in life. Dr. Pincus gives thirty-one cases showing the effects of painful disease, but more especially of

depressing emotions, upon the appearance of the hair root. The conclusion to be derived from these researches is that bodily disease or mental excitement causes circulatory disturbances, and in consequence a change in the normal nutrition and pigmentation of the hair. This is only in accordance with previous observation, and the chief merit of Dr. Pincus's plan lies in his obtaining a means by which very slight and temporary changes in tissue growth can be detected and approximately measured.—*Lancet*.—*Journal American Medical Association*.

The Proper Weight of Man.

PROF. HUXLEY asserts that the proper weight of man is 154 pounds, made up as follows: Muscles and their appurtenances, sixty-eight pounds; skeleton, 24 pounds; skin, ten and one-half pounds; fat, twenty-eight pounds; brain, three pounds; thoracic viscera, three and one-half pounds; abdominal viscera, eleven pounds; blood which should drain from the body, seven pounds. The heart of such a man should beat seventy-five times a minute, and he should breathe fifteen times a minute. In twenty-four hours he would vitiate 1,750 cubic feet of pure air to the extent of 1 per cent. A man, therefore, of the weight mentioned, should have 800 cubic feet of well ventilated space. He would throw off by the skin eighteen ounces of water, 300 grains of solid matter, and 400 grains of carbonic acid. every twenty-four hours; and his total loss during that period would be six pounds of water and a little more than two pounds of other matter.—*Maryland Medical Journal*.

Squill a Poison.

The death in March last of two young children from large doses of a cough mixture containing syrup of squill, called

attention to the danger attendant on the unrestricted use of this popular cough remedy. A long paper in the last two numbers of the *Lancet*, by Dr. E. B. TRUMAN, F.C.S., public analyst for the borough of Nottingham, detailing the results of his examination of the mixture which was used, and some other experiments, recalls the circumstances of the case. The mixture which was used contained almond oil, 2 drachms; syrup of violets, $4\frac{1}{2}$ drachms; ipecacuanha wine, $1\frac{1}{2}$ drachms; and syrup of squill, 1 ounce. It caused pains in the legs, a livid appearance of the face, and quick respiration, followed in two cases by death. The post mortem examination showed that the heart had ceased in systole, a phenomenon which only results in the case of three officinal drugs, viz., digitalis, squill, and green hellebore. The supposition was that digitalis had accidentally been dispensed in place of one of the ingredients of the mixture, and Dr. Truman was asked to make a chemical examination of the remaining portions of the mixture. He did so, but found no indication of the presence of digitalis, and subsequent experiments with syrup of squill, and other ingredients of the mixture, procured from the pharmacist who dispensed it, pointed to squill as being the toxic agent. Samples of the syrup were obtained from other sources, and these, along with the first syrup, ipecacuanha wine, tincture of digitalis, and green hellebore and digitaline, were used in physiological experiments upon the heart of the frog. The result of the experiments shows that while the glucosidal residue from 30 minims of the fatal syrup of squill caused cessation of the heart's action in thirty-eight minutes, a similar quantity of another sample reduced the beats from thirty to ten in forty-seven minutes, and another had scarcely any action at

all. Ten minims of tincture of digitalis reduced the number of beats from thirty-nine to eighteen in twenty minutes and 110 minims of tr. verat. virid. reduced the number from fourteen to six in twenty-five minutes. A proportionate quantity of the fatal mixture also caused cessation of the heart's action. There was no doubt, therefore, that squill was the toxic ingredient of the mixture, and this is the conclusion that Dr. Truman arrived at. The syrup used in this instance had an intense and persistent bitter taste, like that of scillitoxine, the glucoside of squill, which arrests the heart's action in systole. From his experiments, Dr. Truman concludes that squill varies in strength, as the different effects of the three syrups show. The outer scales are stronger than the inner, because they contain more scillain; the fresh bulb is stronger than the dried, volatile oil and Landerer's extractive being lost in drying; the bulb gathered in summer is stronger than that gathered in autumn,—in summer the squill contain less sugar, and the increase of sugar in the autumn is probably the result of decomposition of the glucosides: the red variety is stronger than the white. Dr. Truman is also of opinion (1) that squill is not a safe drug to use for routine, and especially popular or lay practice; (2) that being so variable and, when strong, so potent a drug, it should be looked upon by the profession as unsuitable for use until a solution of standard strength can be produced; and (3) that in the meanwhile its use should be discontinued. These conclusions, although apparently justified by the facts of the case, cannot be accepted straight off. Dr. Truman has undoubtedly done good service in going into the matter so thoroughly, but there are several moot points remaining. The squill which was used for preparing the syrup was not forthcoming, and we

cannot therefore say whether it was exceptionally toxic or whether the preparation was improperly made. Moreover, although the pink variety of squill is admitted by the Pharmacopœia, we do not recollect having ever seen it in commerce; certainly it is so uncommon that pharmacists would not use it if it were supplied to them. We are at one with Dr. Truman on other pharmacological points, and trust that some competent pharmacist will make a thorough chemical examination of the squills of commerce, and determine, if possible, a simple means of ascertaining its strength. An isolated case of poisoning does not justify the proposed discontinuance of the drug, but the caution is necessary for mothers who give their children half-teaspoonful and teaspoonful doses of the syrup when a few drops would act sufficiently as an expectorant. If there were a much weaker syrup—for example, one containing an ounce or two ounces of acetum scillæ in a pint of simple syrup—the likelihood of fatal cases occurring would be very small indeed.—*Chemist and Druggist.*

A Suggested Alteration in the Compound Liquorice Powder.

Having found that the above preparation produced very severe griping in many instances where he had ordered it, the griping being particularly severe in some of his younger patients, Dr. MARTIN OXLEY (*Lancet*) has ordered the following formula for some time past, in which anise fruit is substituted instead of the fennel, and one-fourth part of ginger is added. The altered formula runs thus:—senna and liquorice-root, of each 2 parts; anise fruit and sulphur, of each 1 part; sugar, $5\frac{3}{4}$ parts; ginger, $\frac{1}{4}$ part. This altered preparation is quite as satisfactory in its laxative properties, is less liable to gripe, and is as pleasant to take as the officinal powder, and he

would suggest its trial in cases where the powder as now prepared produces the disagreeable effects to which he has referred.—*Med. and Surg. Reporter.*

Ulexine.

It is curious that the common furze, or *Ulex Europæus*, should have been found to yield an alkaloidal substance; for it has been so frequently examined chemically in order to ascertain its nutritive qualities, that one would have thought an active alkaloid could not have escaped detection. However, Mr. Gerrard has extracted an alkaloid that is very soluble in dilute hydrochloric acid, forms long oblique prismatic crystals, readily soluble in chloroform, and giving with ferric chloride a deep red color. The physiological action has not yet been worked out, but it has been found that the alkaloid has a paralytic action on frogs.—*Ibid.*

Tribromide of Allyl.

This compound, which has been known to the chemical world since 1857, has been found to be of value in medicine, in the treatment of hysteria, infantile convulsions, angina, and asthma. Dr. de Fleury administers it in five-minim doses enclosed in capsules, from ten to twenty minims being taken by the mouth in the twenty-four hours; the drug may be injected under the skin in doses of from two to four drops, dissolved in one or two cubic centimetres of ether.—*Ibid.*

The Influence of Alcohol on the Functions of the Stomach.

DR. GLUZINSKI has published in the *Deutsches Archiv für Klinische Medicin*, the results obtained by his experiments instituted to ascertain the influence of alcohol upon the gastric functions. We epitomize his main conclusions by the following theses:

1. Alcohol disappears quickly from the stomach.

2. Aldehyde cannot be recovered, and alcohol very probably enters, as such, the circulation.

3. The digestion influenced by alcohol can be divided into two distinct periods,—viz., one, during which alcohol is still present in the stomach, and another after its disappearance.

4. The first period is characterized by an impeded or rather slowed state of digestion of albuminates, the second by the secretion of an energetic and concentrated gastric juice.

5. The mechanical working power of the stomach is moderately diminished.

6. The secretion of gastric juice after completed digestion lasts considerably longer than without the presence of alcohol.

7. Under the influence of alcohol larger quantities of fluid collect in the stomach, and assume through the action of the bile a yellowish coloration.

Comparing these results with daily experience, according to which alcohol is known to facilitate digestion, especially after a copious ingestion of food, it must be conceded that alcohol in small doses actually exerts a favorable influence upon the functions of the stomach. Especially to be noticed is the increased quantity of free muriatic acid which, at the time when the alcohol itself has long left the stomach, effects the digestion of large quantities of albumen. The momentary slowing of digestion during the first period after the ingestion of a small quantity of alcohol, such as a glass of cognac, is of too short a duration to be at all considered. The experimenter even saw that 100 c.c. of twenty-five per cent. alcohol left the stomach in fifteen minutes, and that instead of a slowing of digestion the secretion of an active

gastric juice took place. The impediment to the mechanical functions of the stomach is, after small quantities of alcohol, likewise too trivial to require any consideration.

Different, however, are the results obtained after the use of larger quantities of alcohol. The slowing of digestion is now considerable; the mechanical functions are distinctly impeded, necessitating a longer stay of the food in the stomach. Hence it is clear that alcohol in large doses decreases the quickness of digestion.

To obtain the salutary effects of small doses of alcohol it is necessary to administer them some time before the meal, so as to bring the food at once into the second period which, as stated above, is favorable to digestion.

Another series of experiments made to ascertain the influence of alcohol upon digestion in a pathologically altered stomach, claims likewise our attention, and can be thus resumed:

The use of stronger alcoholic drinks is inadvisable in conditions of an abnormally increased or decreased acidity of the gastric juice. In cases calling for excitantia, alcohol is nevertheless to be given, though best some time before the meal for reasons intimated above.

These results throw no favorable light upon the conducive virtues of the numerous pepsin-containing alcoholic preparations, the use of which is recommended in all cases of an impeded digestion without regard to the cause. Besides, it is rather likely that alcohol precipitates pepsins, and ought for this reason not to be associated with the latter.—*Therapeutic Gazette*.

Physiological Action of Vanillin.

According to Dr. GASSET, vanillin, which gives the aroma to vanilla, belongs among the aromatic aldehydes (aldehydes

benzoic, cinnamic, etc.). Many cases of poisoning occur among workers in vanilla and persons who have eaten foods containing vanilla. These are due to vanillin. According to experiments made on frogs, vanillin has a convulsive action, exercised principally on the spinal cord; this convulsive action is succeeded by depressive action, exerted equally on the spinal cord and motor nerves; the sensory nerves remain unaffected. Vanillin has a local irritant action. Hypodermically injected into dogs it raises the temperature half a degree. In frogs, $\frac{3}{4}$ to $\frac{1}{10}$ of a grain is a poisonous dose; the toxic dose for higher animals has not yet been determined. Vanillin checks putrid fermentation, and its physiological properties seems to be a diminutive strychnine. Its best physiological antidote or antagonist is chloral hydrate.

It may be used with advantage as a gastric stimulant, especially in atonic and fermentative dyspepsias. In $\frac{3}{4}$ -grain doses it may be used as a corrigent for remedies badly borne by the stomach. In case its excito-motor properties are desired, it may be administered in a gummy vehicle in 3- to 3½-grain doses.—*Western Druggist*.

DISEASES OF THE NERVOUS SYSTEM.

Hypodermic Injections of Salicylate of Cocaine in Neuralgia.

DR. MAX SCHNEIDER has, according to the *London Lancet* and *British Journal of Dental Science*, successfully employed subcutaneous injections of 0.3 gramme (about a quarter of a grain) of salicylate of cocaine in the case of a woman suffering from a third attack of severe neuralgia affecting the second and third divisions of the fifth nerve. Her first attack, which occurred five years previously, had been cured by large doses of quinine. The second attack

lasted nearly six months, and was quite unaffected by quinine, but ultimately yielded to morphia and iron. The third attack had already lasted for four weeks, when the author commenced the use of the cocaine. He injected it into the right cheek eight times in six days, the puncture giving no pain, and being followed by no unpleasant effect. This was followed up by the employment of the constant current, the anode being applied to the painful spots, which corresponded with the points of exit of the branches of the nerve, and the cathode to the neck. The relief from pain and from the consequent insomnia afforded by the cocaine was remarkable, and Dr. Max Schneider thinks that this method for neuralgia is well worth further trial.—*Weekly Med. Review.*

Delirium Tremens.

DR. NEFF treats *delirium tremens* with beef tea, very hot, and with much red pepper in it. To obtain sleep he gives sodium bromide, ʒj, and chloral, ʒo gr., or 5 gr. if the heart is weak; repeat the sodium bromide in one hour, and both in two hours if necessary.—*Coll. and Clin. Record.*

The Firing Iron.

In one of his lectures, Dr. C. L. DANA showed the Corrigan firing iron, and spoke of its advantages. It is a small instrument, composed of a wooden handle four inches long; fastened in this is an iron rod two inches long, on which is a button of iron one-half an inch in diameter and one-quarter inch thick. The instrument is held in the hand with the fore finger resting on the rod, and the button over a spirit lamp, until the rod feels warm to the finger. The patient can then be touched forty or fifty times before the button gets cool. The firing iron is simple, cheap,

easily heated, and does not frighten the patient, although it is, in fact, more painful than a red hot iron. It is useful in sciatica and painful affections of the spine.—*Quarterly Bulletin.*

Helenin in Chorea.

On account of its alleged anti-spasmodic properties, Dr. DANA has used helenin in three cases of chorea. The patients all reported themselves improved under its use, but the drug was too expensive to be extensively tried. It was given in alcoholic solution, one-third grain, three to four times daily. It now costs about fifty cents a gramme. It has been successfully employed by French physicians in bronchitis and spasmodic cough.—*Ibid.*

Hyocyamine in Paralysis Agitans and Chorea.

As a rule hyocyamine (Merck's cryst.) relieves the tremor of paralysis agitans, when the disease is not too far advanced. In one typical case of a year's standing, in Dr. Dana's clinic, no impression whatever was made upon the tremor by this drug. The patient was then treated with glonoin, which made him worse, and electricity, which caused some temporary relief.

Hyocyamine has been used by Dr. Dana in a large number of cases of chorea, and in the great majority of cases it caused decided improvement. It is prescribed, as follows: ℞. Merck's cryst. hyocyamine, gr. i; aquæ destillat., ʒi. M. Sig.—℥viii t. i. d., increased to ℥xv or xx.

Children can generally take twelve or fifteen drops, about 1-30 grain, three times a day. In one case, a boy of twelve took nearly thirty drops, or 1-16 grain, three times daily. In large doses hyocyamine causes similar throat and eye symptoms to atropia, with which it is sometimes adulterated.—*Ibid.*

Idiopathic Tetanus.

DR. J. P. GETTER, of Allensville, Pa., writes us that on the 4th of August he was called to see a lady, twenty-four years old, the mother of three children, the youngest two years old. Her general health had always been good. At the time mentioned she was suffering from menorrhagia. A drachm of fluid extract of ergot was given every hour until the hemorrhage was checked, but she had previously lost so much blood that she was very weak. She recovered rapidly, and on the 12th she was able to sit up, and was feeling as well as usual, although rather weak. That day she sat in a draft, and in the evening she complained of slight pain and stiffness in the muscles of the neck and jaw, also of difficulty in swallowing. These symptoms grew worse, and the next day Dr. Getter was called to see her. He found her free from pain, except for slight soreness along the spine. The muscles of the jaw were rigidly contracted, and deglutition was very difficult. Her temperature was 101° F.; her pulse 110, and very weak. He ordered potassium bromide and chloral, in small doses, to be taken every hour, but, after two or three hours, she was utterly unable to swallow. A quarter of a grain of morphine was then given hypodermically, and this was repeated as occasion required. The rectum was emptied with an enema, and injections of milk, eggs and whiskey were given every three or four hours for about thirty-six hours, when the bowel became irritable, and nothing was retained. During the night hot applications were made to the neck and jaw, but without any effect. An ice-bag was then freely applied. This proved more comfortable, and after an hour or two she was able to swallow a little; took milk in small quantities, tried the bromide and chloral again, and

slept for an hour. Soon after she awoke, however, the muscles were so rigid that swallowing was impossible. On the 14th she was seen in consultation by another practitioner. By this time there was marked opisthotonos, and at times there was spasm. The temperature was 101.6°, the pulse 140, and the respiration jerky. No uterine or any other cause for the tetanus was discovered. Counter-irritation over the spine was tried, but with no effect. She continued to grow worse, and on the 15th, during a marked spasm of all the muscles, death took place by apnœa. The body was drawn almost into a bow, and the angles of the mouth were drawn backward and upward. At no time during life was the temperature above 102°, but twenty minutes after death it was 105°, and twenty minutes later 107.4°, which was the highest point reached. Dr. Getter asks if the exposure to the draught could have had anything to do with the disease, the heat of the day being from 90° to 100° in the shade.—*New York Medical Journal.*

Sciatica.

A prescription frequently used in Prof. DANA's clinics is: ℞. Olei gaulth; olei terebinth, āā ʒiv; syr. acaciæ, ʒii; aquæ cassiæ, q. s. ad., ʒiii. M. Sig., ʒi three or four times daily.—

Pilocarpine in Rheumatic Tetanus.

A. BRÜNAUER succeeded in effecting a cure in a case of rheumatic tetanus—tonic and clonic contractions of the masseters, chest and abdominal muscles—with pilocarpine, after having in vain, for five days, tried morphine, chloral hydrate, zinc, iodine salts, salicylic acid, and quinine. He administered the pilocarpine hypodermically in doses of 0.02 gm. (one-third of a grain) daily. After nine days of this treatment, the convul-

sions entirely ceased, and the patient could open his mouth. It cannot, however, be said with certainty that the result was due to the pilocarpine, as the patient had also been given nightly doses of chloral hydrate during its administration.—*Ibid.*

Subcutaneous Injections of Arsenic in Chorea Minor.

DR. F. FRÜHWALD (*Dtsch. Med. Ztg.*), recommends equal parts of Fowler's solution and distilled water to be injected subcutaneously in cases of chorea minor. He begins with one drop, and each day increases the dose by one drop until it reaches eight or ten drops; he then diminishes it by a drop daily until a dose of one drop is again reached. To prevent the formation of abscesses, the injections must be made deeply. He has never observed any toxic symptoms. A cure follows in three to four weeks, often in one or two weeks.—*Ibid.*

DIGESTIVE TRACT.

The Nature of Jaundice.

PROFESSOR KELSCH, of Val de Grace, following in the lines of M. Chauffard, writes in support of the specific nature and infective origin of catarrhal jaundice (*Revue de Méd.*). He confirms the clinical observations of M. Chauffard, especially as to the urinary excretion, but is unwilling to accept the doctrine that the condition is due to ptomaines formed in the intestinal tract, regarding an external agent as more probable. The observation of epidemics of jaundice in the army, of which he records instances, points to the conclusion that they are due to telluric conditions, and therein establishes a link between catarrhal jaundice and malignant jaundice. The latter is mostly admitted to be due to foul water supply or bad drainage; and both varieties are frequently asso-

ciated in epidemics. M. Kelsch, indeed, avers that the simple and malignant forms are one and the same affection, and therefore sums up his belief in the propositions that—

1. Sporadic or epidemic catarrhal icterus is a specific, infective disease.
2. That the infective agent is developed outside the organism.
3. That it is generated in marshes and in soil abounding in animal and vegetable matter.
4. That owing thus a common origin with malaria and typhoid fever, the coincidence of epidemics of jaundice with ague and typhoid is explained.—*Medical and Surgical Reporter.*

Aperient Wine.

The formula for MONIN's aperient wine is said by the *Progrès Médical* to be as follows: ℞ Tincture of calisaya, tincture of simaruba, tincture of gentian, tincture of bitter-orange peel, of each, f. ʒiiss; tincture of ignatia bean, ʒss; sherry wine enough to make Oij. Mix and filter. The wine is tonic, carminative and laxative. The dose is from one to two fluid ounces.

Hepatic Cancer.

For the alleviation of hepatic cancer, Prof. BARTHOLOW prescribed syrupus mangani et ferri iodidi, and minute doses of Donovan's solution. Patient is to avoid starchy, fatty and saccharine food.

Tubercular and Typhoid Ulceration of Intestine.

DR. LONGSTRETH gives the following characteristic differences between *tubercular* and *typhoid ulcer of the intestine*. In the former the ulcer is thick-based, due to deposit of miliary tubercles, and is more likely to be circular in its relation to the intestine, being developed in the course of the blood vessels. In

typhoid the base of the ulcer is thin, and may take any direction as regards its relation to the intestine.—*Coll. and Clin. Record.*

DISEASES OF RESPIRATORY ORGANS.

Sedative Cough Mixture.

DR. H. C. WOOD recommends the following: ℞. Potassi citratis, ʒj; succi limonis, ʒij; syr. ipecac, ʒss; syr. simplicis, q. s. ad ʒvj. M. Sig.—A tablespoonful from four to six times a day. When there is much cough or irritability of the bowels, paregoric may be added.—*Therapeutic Gazette.*

Nasal Catarrh.

To diminish the sensibility of the mucous membrane of the nose, Dr. SAJOUS recommends: ℞. Acid. tannic, gr. xl; glycerini, f ʒj. M. Sig.—Apply with a cotton-wrapped probe. A solution of zinc chloride, gr. ij to f. ʒj, is also useful, or of the zinc sulpho-carbolate, gr. v to f. ʒj.

To get rid of effusion when the above is of no avail, he recommends that the patient sit covered with a sheet, and place a lamp within to steam him, or use: ℞. Bismuth, subcarb., pulv. talc, āā ʒj; aluminis, ʒss; Morph. sulph. gr. j; pulv. acaciæ, ʒj. M. Sig.—Snuff up a little several times a day.

He advised that a solution of common salt should never be used as a nasal spray, and not to use any nasal spray cold. He further stated that in almost any case where a wash was required, the following could be used: ℞. Sodii bicarb., sodii biborat, āā gr. iij; aquæ, f. ʒj. M. Sig.—Use a wash or spray.—*Col. and Clin. Record.*

Tinctura Lobeliæ Inflatæ for Asthma.

DR. NUNES (*Deutsche Medicinische Zeitung*), has used as much as fifteen

grammes of the tincture as a dose without any bad effect. For asthma he uses, with great success, the following: ℞. Ammonii benzoici, 10 grammes; tinctura lobeliæ inflatæ, 30 grammes; aquæ distillatæ, 200 grammes. M. S.—Twice daily one tablespoonful.

Hager's Catarrh Remedy.

The formula recommended by Dr. HERMAN HAGER is as follows: Carbolic acid, 10 parts; alcohol, 10 parts; water of ammonia, 12 parts; distilled water, 20 parts.

Take two ounce, wide mouthed bottles, fill them to one-third with the above liquid; then introduce a bunch of (absorbent) cotton of sufficient size to soak up all the liquid.

To be used in incipient cold in the head, coryza, chronic catarrh, etc.

A stronger preparation, also recommended by Hager, is the following: Carbolic acid, 10 parts; oil of turpentine, 5 parts; water of ammonia, 12 parts; alcohol, 20 parts.

To be used in the same manner as the preceding.

Hager recommends those as prophylactics against diphtheria. He advises all those who handle and are about patients suffering from diphtheria or phthisis, to place a vial with this *olfactorium* to the nose when they approach the patient.—*Therapeutic Gazette.*

DISEASES OF THE URINARY ORGANS.

Bright's Disease and Pseudo-Bright's.

PROFESSOR MARIANO SEMMOLA, of Naples, recently read before the Académie de Médecine of Paris, a paper upon the pathology and treatment of Bright's disease which is likely to attract much attention.

The objects of the communication are announced categorically as follows:

1. The control of preceding researches by the author and an explanation of points that have been criticised.

2. The presentation of new experimental studies of Bright's disease.

3. Exhibition of the histological changes in the skin in Bright's disease.

4. The demonstration by clinical and experimental researches of the unity and constant character of Bright's disease.

5. The indication of some errors previously held as regards treatment.

True Bright's disease, according to Semmola, is a well-defined affection, not of the kidneys primarily, but of nutrition, having the following characters :

1. A peculiar etiology, viz : the excessively slow action of humid cold upon the skin.

2. There is a progressive defect reaching to complete abolition of the functions of the skin, due to a progressive ischæmia, with atrophy of the sweat glands, of the Malpighian layer, with a connective-tissue proliferation of the derm.

3. There is a chemico-molecular alteration in the ingested albuminoids, an alteration characterized by a morbid diffusibility, and, in consequence, lack of power to be assimilated. They are, therefore, eliminated by the emunctories of the body, and, of course, mainly by the kidneys.

4. There is a progressive lessening in the combustion of albuminoids, and, in consequence, a lessened excretion daily of urea, and a lessened amount in the blood.

5. There is a subcutaneous infiltration of serum, beginning in the face, and not standing in any relation with hydræmia.

6. There is a very characteristic cachexia, which is not dependent on the loss of albumen, but on a profound disturbance in assimilation.

7. There is a *secondary* development, very slowly, of an inflammatory process in the two kidneys, producing in these organs the characteristic histological changes of diffuse nephritis, of which the typical form is constituted by the large white kidney.

Professor Semmola attacks the prevalent views, which uphold the clinical unity of Bright's disease, but admits an anatomical plurality so far as the kidneys are concerned.

There is only one true *Maladie de Bright* ; but there are sharply characterized forms of what are called "pseudo-Bright's disease." These are the forms produced by syphilis, alcohol, lead, gout, etc.

Professor Semmola thinks it is never difficult to distinguish between true and pseudo-Bright's, as, for example, by the absence of œdema until late ; in nephritis of arterial origin ; by the small amount of albumin lost through gouty kidneys, etc.

The author insists, then, that the true *Maladie de Bright* is a constant morbid type, marked by a definite and peculiar etiology, evolution, anatomy, nosography and treatment.

It is upon this point of treatment that Semmola lays much stress. The fundamental therapeutical indications are :

1. To give the patients a food which is the most assimilable possible.

2. To excite methodically the functions of the skin.

3. To favor by every means possible the assimilation and combustion of the albuminoids.

To carry out these indications Semmola recommends, first, an exclusively milk diet ; second, methodical and repeated dry friction of the skin, massage, warm douches and baths ; third, residence in a warm, dry and constant temperature ; fourth, the use of iodide

and chloride of sodium, increasing it to the point of intolerance; fifth, if, after two or three weeks, the albumin is still present, Semmola gives, in place of the iodide of sodium, the phosphate of soda, or small repeated doses of hypophosphite of soda or of iron, increasing the dose until three or four grammes are taken daily; sixth, the use of inhalations of oxygen; seventh, the abandonment entirely of astringents.—*Medical Record.*

The Diuretic Action of Watermelon.

In the course of a prolonged study of remedies used in Russia as diuretics, POPOFF (*Vratch*) finds that watermelon has been commended as an extremely cheap but effective substitute for grapes in the treatment of chronic congestion of the liver, chronic intestinal catarrh, etc. It is extensively used by the peasantry in Southern Russia (especially near the river Don, and in the Caucasian districts) in the form of the freshly expressed juice, as a diuretic draught in cases of dropsy, urogenital affections (especially gonorrhœa), etc. The author experimented with the inspissated fresh juice or syrup of the fruit, and with commercial melon-honey (*arbooznyi modid*): The diuretic action proved most striking; when animals received from 50 to 100 grammes of the syrup (with food) in twenty-four hours, the daily quantity of urine was three or four times greater than under ordinary conditions; again, on intravenous injection of the syrup "the urine for several minutes flowed in a stream from a canula tied into the ureter." On the subcutaneous injection of 0.4 to 0.7 gramme into frogs the syrup rapidly slows the cardiac action up to complete arrest in diastole, and produces prostration with loss of voluntary movements, while reflex action and the excitability of the motor nerves and muscles remain intact. When very large

doses are used, in the latest stages there is observed, also, a failure of reflexes and of nervo-muscular excitability, but the phenomenon is then undoubtedly nothing but an ordinary symptom of præmortal agony. In dogs the internal administration of 500 grammes at a time produces no effect except powerful diuresis. Intravenous injection of one to two grammes of the syrup causes an immediate increase in the secretion of the urine, the latter assuming a dark color and containing sugar. This increase lasts for ten to sixty minutes, and is accompanied only by a slight fleeting decrease in the blood pressure. On the injection of 0.25 to 0.5 gramme for each kilogramme, a considerable fall of the pressure and a great acceleration of the pulse rapidly follow. An intravenous injection of 3 grammes per kilogramme produces a further fall of pressure and a fleeting increase, with a subsequent sudden enormous decrease in the frequency of the pulse, the animal dying from cardiac paralysis. Experiments show that the quickening of the cardiac action is dependent upon the syrup acting on the peripheral ends of the vagi. In all cases intravenous introduction of the syrup rapidly produced a strong sedative effect, "the animal remaining strikingly quiet, and giving no response to tactile or even pathetic irritation." Another group of experiments showed that the diuretic action of melon-syrup was dependent mainly upon its influence on the renal tissue.—*Lond. Med. Record.*

Common Salt in Bright's Disease.

In a recent number of the *New York Medical Journal*, Dr. ALLARD MEMMINGER, Professor of Chemistry in the Medical College of the State of South Carolina, follows out a process of reasoning by which he arrived at the conclusion that common salt was a remedy

likely to do good in cases of Bright's disease of the kidneys.

The theory upon which this conclusion was arrived at rested upon the acceptance of the views of Graves and Prout, that in chronic nephritis there is a local depraved cell development secondary to an abnormal composition of the blood, or perverse action of the albuminous element of the blood serum. Now, since the aid of a crystallizable substance is necessary to enable an homogenous albuminoid substance to pass through a membranous wall, it may readily be supposed that the presence in the blood of salt, in an increased quantity would favor the absorption of the albuminoids, thus protecting the tissues and freeing the kidneys from the work of separating out irritating and harmful products.

Putting this theory into practice, Dr. Memminger had the satisfaction of seeing an improvement in every case treated by administrations of salt: unfortunately, so far he has had but four cases of the disease upon which to make the trial, but in all of these the salt treatment has been followed by disappearance of headache, œdema, low spirits and general weakness, the urine showing a decreased quantity of albumen with increased chlorides and urea.

The method of the administration of the salt is by capsules containing ten grains each. At first three capsules are given daily, preferably within an hour of meals. The dose is gradually increased until five capsules are given three times a day. By this time if the condition of the patient and of the urine has improved, the dose may be gradually diminished.

Dr. Memminger hopes that the profession will make a trial of this therapeutical agent, and presents the following grounds why the value of the plan of

treatment should be thoroughly investigated:

1. It is harmless if properly administered.

2. Its effects are comparatively uniform, provided it is given for a sufficient time; that I have so far used it only in chronic cases of no long standing does not in my opinion militate against its beneficial effects, for, even should it not be found a cure for Bright's disease, may it not become an important article in our medical armamentarium; indeed if only an ameliorator of man's sufferings and a prolonger of his life?

3. It may be employed as an adjunct to all recognized methods of treatment without detriment to the patient.

Eggs in Albuminuria.

The question whether or not, in the generality of cases of albuminuria, an augmentation of food rich in nitrogen is useful or dangerous, again agitates the bosom of the medical body.

Formerly, in chronic cases, the rule was to seek to restore to the body a sufficient quantity of albumen to make up the loss, and this in the form of food, such as eggs and the like.

To-day, in accordance with the experiments of Senator, the profession has receded from that position, for, contended that author, a very small quantity of albuminoid substance suffices to compensate for the loss suffered.

In order to test the result produced by a large quantity of albumen, and in a great number of cases Loewenmeyer has undertaken a series of experiments, from which it resulted that the copious ingestion of the white of eggs does not increase the quantity of urine secreted. The author does not consider the case settled, and is to renew his experiments. — *Journal de Med. de Paris.*—*American Practitioner and News.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Excision of the Bones of the Tarsus for Tubercular Disease, with Report of a Case in which Extensive Excision of the Tarsus was Performed in Both Feet.

Dr. FRANCIS J. SHEPHERD concludes an article in the *Annals of Surgery*, with the following interesting history:

Mary T., æt. 17, a delicate looking girl, was admitted into the Montreal General Hospital, for disease of both feet.

No distinct history of phthisis or scrofula in the family, but some of relations died of "lung disease."

Patient up to one year ago had always enjoyed good health, when she noticed that both feet were commencing to swell. The swelling in the right one was over the ankle, that in the left over the dorsum of foot. The swellings "broke" some eight months ago, and have been discharging ever since. Had not walked for the last two months. On examination several sinuses were seen in each foot; in the left, they were situated below the internal malleolus and led down to the carious bones; in the right, several were situated over the tarso-metatarsal joint on the dorsum of the foot, and one was seen in middle of sole of foot. Both feet were much swollen and could not bear pressure without pain. Movements of left ankle joint exceedingly painful, but no roughness felt in movement. It was decided to remove the diseased portions of left foot first. On June 1 the patient was etherized, and an incision made below the tip of internal malleolus from the tendo Achillis downwards along the inner border of the foot in the course of the discharging sinuses. Bare bone was soon reached and several sequestra removed, the cavity was gouged out with a Volkmann's spoon and afterwards

stuffed with iodoform gauze. A jute pad was then applied, which was sufficiently firm when covered with antiseptic bandage to keep the foot in proper position. The dressings were removed once a week, and for a time the patient markedly improved, but later it was found that all the disease had not been removed, that carious action was still going on, and that suppuration was more profuse than it ought to have been. On the 15th of August, 1885, patient was again etherized and an incision made in the same line as the former one and the



FIG. I. RESULT AFTER EXCISION OF THE TARSA.

Right foot: Three cuneiform, part of cuboid, scaphoid, and bases of metatarsal bones removed.

Left foot: Lower end of tibia, astragalus, three cuneiform, cuboid, and scaphoid bones removed.

parts more freely exposed. It was found that the ankle joint was involved, and that there was disease also of scaphoid and cuboid bones. The astragalus had an abscess the size of a filbert in its centre. I removed the lower end of the tibia, astragalus, part of cuboid, external cuneiform, scaphoid, and a portion of the os calcis, but left the external malleolus, which was apparently healthy. The wound was dressed as before with

iodoform gauze and jute pads. A drainage tube was also passed through the cavity, emerging beneath the external malleolus. The patient did remarkably well, rarely having a temperature over 100° F. The dressings were changed about once in ten days or two weeks, as required.

I advised her to go home to the country for the winter and come back in the spring to have the other foot attended to. When she left the hospital the cavity in the left foot had entirely healed, with the exception of a small fistulous opening below the site of the internal malleolus.



FIG. 2. RESULT AFTER EXCISION OF THE TARSUS. Same case as Fig. 1; different view.

On the 5th of April, 1886, she returned to the hospital much improved in general health. There was still a small sinus at site of operation in left foot, which discharged a little glairy synovial looking fluid. The right foot was in much the same condition as before, the disease having kept fairly stationary, and being apparently confined entirely to the tarso-metatarsal joint. The foot was swollen and painful. Carious bone could be felt with a probe through all the sinuses.

On the 25th of April she was again etherized, and the diseased bone re-

moved from the left foot. Two longitudinal incisions were made, one on the outer and the other on the inner side of the foot. The soft parts were lifted from the dorsum of the foot and the extent of the disease seen. The three cuneiform bones with the bases of the inner three metatarsal bones were found to be in a carious condition; also the anterior portion of the scaphoid. The cuboid bone also was involved, where it articulated with the external cuneiform. But the articulations between the cuboid and the two outer metatarsal bones were healthy. The bases of the metatarsal bones were removed with a fine saw, and the three cuneiform bones taken away. The anterior portion of the scaphoid and the greater portion of the cuboid were removed also. A large space was now left, the posterior part of the foot being only connected with the toes by the soft parts. The cavity was washed out with an antiseptic solution and stuffed with iodoform gauze (freshly made), and the foot covered with a jute pad and over this an outside gutta-percha splint was moulded. The sinus in the left foot was scraped out.

From the time of the operation the progress of the patient toward recovery was uninterrupted. The wound was redressed every ten or fifteen days, in all four times, when it was completely healed. The foot, though somewhat shortened and flat, was of good shape. The temperature throughout never rose above 99.5° , and the foot never gave the slightest pain or kept her from sleeping. The sinus in the left foot after the scraping, rapidly healed. On the 30th of July patient was walking about the ward.

There was some inversion of the left foot owing to the presence of the external malleolus, which made the outer side of the foot much firmer than the

inner. This inversion was corrected by a suitably made boot with an inside metal rod fixed to the sole and fixed above to the leg by a leather collar. Had I to perform a similar operation I should remove the external malleolus, even if it was healthy, as by this means the symmetry of the foot would be preserved. I once before left it in excising the ankle joint for a badly set Pott's fracture, with good results. This case exemplifies well the advantage of conservative methods of treatment, the patient having two fairly useful feet. The accompanying cuts show the present condition.

Hagedorn's Needles and Needle-Holder.

DR. POWELL has communicated the following description from the *London Lancet* of an excellent needle-holder and needles, devised by Dr. Hagedorn of Magdenburg. This instrument is used by himself and other gentlemen in the city.

The needles are semi-circular in shape, the section of the stem being an oblong parallelogram of the same thickness throughout its length. The point has a single cutting edge on its convex surface.

The advantages which these needles have over the curved needles in use are, that the puncture they make is a fine slit at right angles with the edge of the wound to be united, and, therefore, when the suture is tightened the edges of the

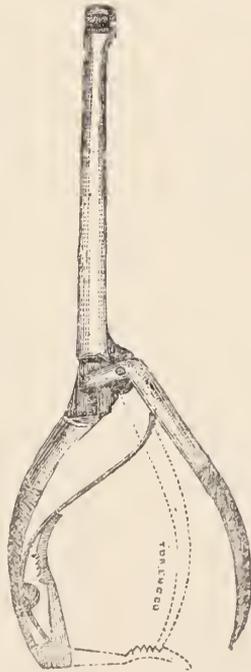
puncture are approximated, not made to gap; the puncture of the needle is also at right angles at the surface of the wound, and the suture approximates the whole thickness of the parts through which it is passed with equal tension and the needles are stronger and much less liable to break when held in a holder than those in common use.

The needle-holder is very simple in construction; it grasps the flat surfaces of the needle, and can seize and hold the point as securely as any part of the stem. The jaws are closed with a lever handle, which can be fixed by a ratchet. For special purposes these holders are made of different lengths and shapes, but any one who uses them will soon be convinced of their great convenience and merit.—*Canada Lancet*.

Plaster Dressing of Fractured Femur.

DR. A. C. GRAHAM, in the *Texas Courier-Record of Medicine*:

To apply properly a plaster of Paris bandage to this fracture involves much labor, great care, and some skill; without these it is a dangerous appliance. I provide the following items: a long strong table; a contrivance for raising the hips above the table and making extension—this consists of a small iron tripod, five inches in height, screwed to the table, on which the sacrum is to rest—a double perineal band; two iron foot pieces connected by a cross bar to which is attached a compound pulley—the pulley being used not for the purpose of obtaining powerful, but gentle and steady extension—the above enables us to apply the spica with ease; two rolls of cotton batting; twelve roller bandages into which the plaster has been rubbed dry—the best dental plaster, soft, white and well dried, not gritty and slate colored, which latter will not set well; some loose plaster; two pans



of water ; a can of ether ; pieces of oil silk ; three assistants, one to give the anæsthetic, one to manage the extension, and one to assist in bandaging.

The patient is placed upon the table, the sacrum resting on the tripod, the upper part of the body raised to a corresponding level ; the feet bandaged to the foot pieces, and the double perineal band adjusted. Ether is now given, and extension used till both lower limbs are the same length. The cotton batting having been cut to fit the limb and body as high as the umbilicus, or higher is retained as recommended by Prof. Cowling, by cotton thread. The bandages, soaked well in water, are run from the ankle up the leg, spirally or figure eight fashion, three or more successive layers—a paste of freshly mixed plaster being rubbed smoothly by the assistant over each bandage so as to assure additional strength and to amalgamate the whole. As soon as the perineum is reached, protect the plaster by the oil silk, and then proceed with the spica, carrying it six inches above the crest of the ilium. The plaster will harden sufficiently in half an hour for the extension to be removed and the patient placed in bed.

A few points call for additional mention. The plaster-bandage contracts as it dries, so that great care must be used not to apply it so tightly as to constrict the limb, or interfere too much with the blood supply, as Brodie has shown that this retards union.

The ankle and perineum must be protected by a double thickness of cotton batting. Guard against eversion of the leg ; it were better that the foot be turned a little in, pigeon-toe fashion. The bowing outward, when the fracture is above the middle, must be contracted by forcible pressure against the splint in an opposite direction as the plaster is

setting. As the spica is being applied, the plaster casing must be moulded by pressure, to all the inequalities of the hip, pelvis and lower abdomen, in this way securing a perfect cast.

For a few days it is necessary to see the patient often—to note the circulation of the blood in the toes—to obviate any undue pressure and to make the patient as comfortable as possible. “Eternal vigilance is here the price of success.”

In two weeks the plaster-case will be so loose that it will be necessary to remove it and put on another. No attempt should be made to narrow and tighten the old one.

I have purposely avoided quoting statistics that have been brought forward to prove the superior efficacy of any one of these appliances in the prevention of shortening. They only show that good results have been obtained with all of them. An accurate estimate of the degree of shortening can seldom be arrived at for two reasons :

1. It is now well known that there is normally a difference in the length of the lower extremities, this difference sometimes amounting to as much as three-fourths of an inch.

2. The degree of shortening obtained when the apparatus is removed, is increased somewhat when the patient begins to walk.

I claim, however, for the plaster of Paris bandage, superiority in the following particulars and that for these we are justified in expecting better results in practice :

1. It is the rational treatment, in that after the fracture is adjusted, perfect fixation of the fragments is obtained.

2. It exerts a gentle, even compression of the whole thigh, thus moulding, as it were, the parts into their normal position.

3. The hip-joint is completely immobilized.

4. Angular deformity, or bowing outward, when the fracture is in the upper half, is prevented by compression of those muscles that abduct and rotate the thigh outward; also by forcible inward pressure on the splint, at the angle, as the plaster sets.

5. We have perfect control of lower fragment and leg, and rotary displacement, or eversion, cannot take place.

A New Improved Trocar and Canula.

DR. JOHN S. MILLER (*The Medical Bulletin*):

The frequent occlusion of the canula by intestine or omentum in the operation of tapping the abdominal cavity, has suggested the device shown in the following cuts. The stoppage generally occurs when about a pint of fluid has been withdrawn, and various manoeuvres are resorted to, such as the endeavor to float away the obstruction by changing the patient's position, or the dangerous one of introducing a probe through the canula, and generally without success.



The device to which reference has been made, is a smaller and longer canula, introduced into that already in position in case there is a cessation of flow. It is blunt and provided with two long fenestra.

In the latter are springs which expand and push aside the obstruction on emerging from the original canula, and which are so solidly soldered as to offer no danger of breaking off in



the abdominal cavity. In reply to the query whether or not the gut can become incarcerated and wounded in the springs, it may be stated that in several operations no such accident has occurred nor were efforts successful to bring such about upon the recent cadaver. The instrument can be used with any trocar and canula above calibre 16, French.

Some Points in the Treatment of Compound Fractures.

In regard to the treatment of compound fractures, Dr. DENNIS holds that while absolute cleanliness is essential, and extension necessary, no fixation apparatus should be allowed to remain in position longer than eight days without an inspection of the parts; as otherwise, the result may be unsatisfactory. The seat of fracture should be inspected at the end of eight days, and again at ten days; after which the dressing may remain untouched as long as required. He is more and more impressed with the very great importance of the first dressing; and he thinks this should be made with the same care and attention to detail as in cases of resection of bones or laparotomy. The treatment consists, first, in securing perfect asepticism; and, second, in the application of an efficient plaster of Paris support. For some time past Dr. Dennis has instructed the ambulance surgeons in the 99th Street Hospital to make antiseptic irrigations and apply antiseptic dressings in all cases of compound fractures before lifting the patient into the ambulance; and the results thus secured have been extremely satisfactory.

The first of the special points to which Dr. Dennis calls attention is meningeal hemorrhage. In cases in which this occurs it has hitherto been the common practice to tie either the common, or the external, carotid. In a number

of cases, however, he has controlled the hemorrhage without doing this. In the first of these cases he removed the bone to the extent of about six inches, and endeavored to grasp the middle meningeal artery with the forceps, but on account of the receding of the dura mater he could not do this until he ran a tenaculum through the dura, and then brought it out in such a way as to include and raise the lacerated and bleeding vessel. In this way he was able to catch the artery and tie it easily. This method may perhaps be regarded as bold, but the results show that it is justifiable when compared with former statistics. In connection with this point he presented specimens showing that meningeal hemorrhage may be produced by *contre-coup*.

The second point of special interest is fat embolism, to which the attention of the profession was first directed by Wagener and Zenker. While this condition is usually fatal, in connection with fatty liver or tuberculosis, it is usually by no means so serious a complication of compound fractures. The symptoms, in general, resemble those of secondary shock, and the occurrence of Cheyne-Stokes respiration is not infrequent. In several cases Dr. Dennis has found an abundance of fat globules in the urine. Fat embolism is more frequent in the aged than in younger subjects. He points out the differential diagnosis between this condition, secondary shock, and pulmonary embolism, and says that one of the principal points in this is the matter of time (fat embolism always occurring within three days). Treatment consists in the administration of ether, on theoretical grounds for the purpose of dissolving the fat, and of appropriate stimulants. He mentioned a case of fat embolism now under treatment in Bellevue Hospital,

which occurred in connection with a simple fracture of the fibula. Two days after the accident the patient was suddenly seized with great dyspnoea and depression, and the temperature ran up to 104°, while the urine was found loaded with fat globules. Under the administration of Hoffman's anodyne and carbonate of ammonia the patient was relieved.

The third point is insanity following fracture. While insanity is sometimes undoubtedly due to traumatism, it is usually difficult to trace it to a fracture of the skull. Dr. Dennis has seen some such cases. In one of these the patient is now insane. In another, idiocy and imbecility resulted. In one in which constant severe headache, accompanied by more or less mental aberration, followed a fracture, Dr. Dennis trephined, and the patient was cured. In three cases of traumatic epilepsy, in which there was more or less disturbance of the mind, he also effected a cure by trephining. He is convinced, however, that in epilepsy there is little to be expected from trephining except in cases in which there is well-marked depression. He rightly speaks of the importance of always raising a depression of the skull as soon as possible after the injury, whether there be any symptom due to the depression present or not. By such a procedure the patient may be saved much trouble, and possible insanity in the future.

The fourth special point is malignant disease. Dr. Gross pointed out the fact that about one-half of all the cases of malignant disease may be traced to traumatism, and Dr. Dennis has been able, in quite an extended experience, to confirm Dr. Gross's researches; although it is not often easy to trace such disease to fractures. Sarcoma is usually the variety of malignant disease that results

from traumatism. Epithelioma may also develop indirectly; but this almost always originates in the soft tissues, in connection with a sinus leading down to the bone. When malignant disease occurs, early amputation is indicated.

The fifth point is tenotomy. Two years ago, Dr. Dennis called attention to the value of tenotomy in many cases of compound fracture; and since then he has met with a considerable number of cases which have further confirmed him in this opinion. While it is of great utility in all oblique cases, in which there is difficulty of reduction, it is useless in vertical fractures. He has practised it not only on the tendo Achillis, but also on the hamstrings, and the tendons of the arms and fore-arms.

The sixth point was healing by Schede's method. Fluid blood and blood-clots, if perfectly aseptic, are undoubtedly valuable aids in hastening and perfecting repair by primary union; but if rigid antiseptics be not carried out, they may be a source of great danger. This is doubtless the reason why this method was not adopted earlier, as it is only since the days of antiseptics that it has become practicable.

The last point is amputation. Formerly, this was resorted to in a great majority of all compound fractures admitted to large hospitals, as the procedure was necessary in order to prevent blood-poisoning. In Bellevue it was practised in every serious case; and a fracture into the knee or ankle joint was regarded as affording a positive indication for amputation. But now the case is entirely different, and the loss of a few inches of the shaft of a bone (although some permanent shortening may result), does not justify amputation. The limits of this operation are now extremely narrow and contracted; and this may be considered one of the

greatest advances in modern surgery. When amputation is found to be necessary, it is proper to defer the operation for several days in cases in which great shock is present; while formerly this was not possible without subjecting the patient to the greatest possible shock.—
Journal American Medical Association.

An Easy Method of Plugging the Posterior Nares.

In the *Therapeutic Gazette*, Dr. HAYNES, of Philadelphia, describes his method of treatment of persistent epistaxis, as follows:

A piece of fine silver wire, fifteen inches long, is doubled; the closed end is left rounded and the free ends are neatly twisted together. A slight bend is given to the bar thus formed. A stout thread, twenty-five inches long, is tied to the twisted end.

The patient sits in front of the physician, his head thrown slightly backwards, so as to make the passage of the wire into the pharynx more easy. The parts are illuminated by the forehead mirror, unless a good supply of daylight can be used.

The blunt end of the wire (with the concave aspect downwards) is pushed along the floor of the nasal passage, and through the naso-pharynx, the patient assisting by holding the tongue with the depressor. The end of the wire in the pharynx is now grasped by Gross's polypus forceps, the finger or anything else convenient, and pulled through the mouth. The thread is cut, and a piece of absorbent cotton, slightly compressed, large enough to fill the posterior nares, is tied to it, about ten inches from its mouth end. The tampon is pulled into position by drawing on the nasal end of the thread. The plug is generally caught by the edge of the soft palate, but can easily be guided past it

by the finger. The nasal and mouth ends of the thread are tied together, so as to form a loop, which is hung over the nearer ear, out of the way.

The anterior nostril is then obstructed, if necessary, by means of a mass of cotton, which will readily stay in place.—*Michigan Medical Review.*

The Immediate Closure and Rapid Cure of Fistula in Ano.

DR. STEPHEN SMITH, in *New York Medical Journal*, referring to the fact that this method of operation seems to have occurred to a number of surgeons independently and acknowledging his indebtedness to Emmet's operation for lacerated perineum, the writer describes his method as follows :

The bowel being cleaned out, the patient anæsthetized, the parts irrigated antiseptically, and a sponge, wrung out in a bichloride solution, introduced into the rectum above the fistula, the fistula and abscess cavity, if there be one, are opened freely, the pyogenic membrane thoroughly enucleated with the scalpel or scissors and all hemorrhage arrested. The chief object of the operation is to secure perfect apposition of these freshened surfaces ; to bring the whole wound into view, an assistant should introduce an index finger well into the rectum and bending it as a hook, extrude the bowel. The first sutures should be so applied as to bring the deep surfaces together and evert the margins of the mucous membrane. To accomplish this, a carbolized silk ligature with a needle slightly curved at the point is used. One of the needles is now passed just above the highest point of the incision and from a fourth to half an inch from the margins of the wound, and the thread is passed through the centre ; the needles are then passed in opposite directions, at intervals of half an inch,

in a continuous saddler's stitch so as to draw the two faces of the wound together and slightly evert the edges of the mucous membrane, but without any strain. The entire fistula track being now drawn outside by gentle traction on the ends of this suture, the edges of the wound are nicely adjusted by a continuous suture, commencing at the upper extremity of the wound. The operation is completed by passing two or three large carbolized silk ligatures entirely under the fistula and tying them over an iodoform gauze pad, rolled firmly and laid along the wound, the object being to draw the deep portion of the fistula into suitable apposition. The parts are then dressed antiseptically and precautions taken to prevent movement of the bowels. In case of a large or irregular abscess cavity he suggests two modes of procedure, (1) by employing the saddlers' stitch, taken still further from the margins of the the wound, in order to bring the deep parts together ; (2) by interrupted sutures passed in lacerated perineum completely around the cavity—a method more difficult to employ but surer than the other. The cure is complete in a period varying from eight to fourteen days. The principles to be borne in mind in the operation are (1) complete removal of the lining membrane of the fistula and of the abscess cavity which may exist ; (2) accurate and permanent adjustment of the opposing surfaces, and (3) thorough antiseptic treatment of the wound.—*New York Med. Journal.*

The Necessity of Recognizing "Reflex Spasm" by "Point Pressure" in Contractured Tissues, and of Making Proper Division of the Same before any Mechanical Treatment Can be Effectual.

DR. LEWIS HALL SAYRE, in *Virginia Medical Monthly* : Recently several cases of talipes have fallen under my

observation, where great loss of time, to say nothing of the pain and inconvenience borne by the patient, had resulted from the failure to recognize the conditions to which I shall draw your attention this evening.

Deformities are usually classed under two heads—congenital and acquired.

These two classes are subdivided into (1) deformities due to paralysis, and (2) into those due to contraction or shortening of certain tissues.

Contracted tissues may be divided into (1) contracted, and (2) contracted.

A contracted tissue is one which is simply shortened and impaired in its movements, and which can be restored to its normal condition and length by simple stretching and manipulations.

A contracted tissue is one where the parts forming the tissue have become changed in their anatomical structure to each other, and cannot be lengthened except by the severance of the resisting tissues.

Upon the recognition of which class of shortened tissue is before you will depend the selection of the means most proper for the treatment, and consequent removal of the resulting deformity. And as the two classes demand somewhat different treatment, it would be well did we have some rule to aid us in our diagnosis.

When a contracted tissue is put upon the stretch, and the parts are brought as nearly as possible into their normal position, either by means of the hands, or mechanical aids, and then additional pressure is made upon the tissue thus stretched either by making pressure upon the stretched tissue with the fingers, or by pinching it between the thumb and fingers, and no pain or voluntary spasm is caused, the tissue thus stretched and handled is simply con-

tracted, can be elongated by persistent traction and treatment.

If, on the contrary, this additional, or "point pressure," upon an already stretched tissue causes pain and involuntary contraction, or spasm of the muscles of the entire body, the tissue thus stretched has become contracted or changed in its structure, and must be severed before the parts can be brought into their normal relations.

To attempt to stretch a contracted tissue is to subject the patient to a great amount of unnecessary pain, and at the same time run the chance of producing serious disturbances of the nervous system, as the involuntary contraction or "reflex spasm" of the muscular system is produced, in a less degree may be, every time the contracted tissue is stretched. And you are all well aware of the disastrous results which sometimes follow long continued irritation of the nervous system, both from "reflex" and other causes.

Cases which have contracted tissues causing deformities, must have those resisting bands removed; this can best be done by subcutaneous tenotomy of all the contracted tissues, and the restoration of the parts to their normal position at the time of operation. To attempt to rupture these tissues is to subject the patient to the danger of a ruptured artery or nerve.

Should the skin be also contracted, as is frequently the case, it must be freely divided. In this case, the wound, of course, would be an open one, and must heal by granulation, under anti-septic precautions, being careful to retain the parts in their normal or desired position during this process, and preventing any contractions until the wound is thoroughly healed, and the new tissues have become firm and healthy.

The Removal of Loose Cartilages from Joints.

The *Northwestern Lancet* gives the following method of Dr. Sands, of New York, for the removal of loose cartilages: The cartilage is first transfixed with an awl. This he considers very important, and will not operate till this is done. The opening into the joint is made valve-like, and the cartilage removed from the joint with a tenaculum. The operation was antiseptic and no drains were inserted; the deeper tissues were not stitched; catgut sutures were used to close the wound. Dressing: sublimate gauze, wood-wool and bandages of sublimate gauze. The leg was then placed on a straight posterior splint, firmly fixed in position by plaster bandages. The heavy dressing is used, because it is thought to keep the patient more quiet. If all goes well, the patient is kept in bed two weeks, and is then allowed to get up and go out.—*Cincinnati Medical News*.

Local Anæsthesia for Electrolysis.

DR. FRANKLIN H. MARTIN, of Chicago, says: Where it is necessary to use a very strong current of electricity for purposes of electrolysis, or any other purpose, and a reliable means of measuring the current, other than by the sensations of the patient, is at hand, it is very desirable, oftentimes, to have some means of producing anæsthesia.

By utilizing the properties of the galvanic current, discovered by Haertner, viz., the direct transference by the galvanic-current of particles in solution through permeable bodies, in a direction from the positive to the negative pole of the battery (the *cataphoric* action of Du Bois-Raymond), a very satisfactory condition of local anæsthesia can be accomplished. The method adopted is as follows: Before applying the positive

sponge electrode to the surface moisten the sponge with a $\frac{1}{4}$ of 1 per cent. solution of muriate of cocaine. As the current is turned on, it will be found that the absorption of sufficient amount of the cocaine is immediately promoted to produce a complete state of anæsthesia of the surface beneath the electrode. This, of course, does not effect the point of the negative pole—the point of introduction of the needle. Cocaine can still further be utilized here by injecting hypodermatically a small quantity of the aqueous solution at the point of introduction of the needle through the skin, or by applying a solution of the oleate upon the mucous membrane of vagina or uterus, if the needle is introduced in this location. By bearing these simple facts in mind, electrolysis for fibroid tumor can be made familiar without the necessity of administering a general anæsthetic.—*Medical Record*.

Nævus.

DR. W. J. BEATTY, (*Brit. Med. Jour.*) has cured eight cases of nævus, perfectly and painlessly, by painting the effected spot night and morning with liquor arsenicalus until ulceration took place. A cure is effected in from three to five weeks.

[There may be danger of poisoning in the treatment.] A. H. P. L.

Tendon-Grafting.

A boy, aged fourteen, cut himself in the hand and divided both flexor tendons of the middle finger. Thirteen months later he came under M. PEYROT'S care. There was then complete inability to extend the last two joints of the finger. An operation was undertaken. It was impossible to approximate the divided ends of the tendons, so a piece of a young dog's tendon was interposed between them. Unfortu-

nately the wound suppurated, but cicatrization took place and partial success was attained. The finger could be semi-flexed, and was constantly held partly fixed, and therefore less exposed to injury than before; but the tendon was adherent to the scar. There seems to be no doubt that the engrafted tendon is really united to the boy's tendon.—*Lancet.—Ibid.*

VENEREAL DISEASES.

Operative Treatment of Traumatic Stricture.

In a paper on Retrograde Catheterism, first published in the *Gazette Médicale de Nantes*, and recently reprinted in the form of a pamphlet, Dr. POISSON insists on the necessity of performing primary external urethrotomy in cases of serious rupture of the perineum from a fall on to the perineum. In such cases, Professor Guyon holds, an immediate perineal incision, freely made, and extending to the injured portion of the urethra, is strongly indicated, and is as much an operation of necessity as kelotomy and tracheotomy. A catheter may sometimes be guided along the whole length of the divided urethra into the bladder; but, though the surgeon may fail in doing this through the perineal wound, he will by this incision, remove all risks attending infiltration of urine. When it is too late to act thus, and the urethra has become impermeable, and immediate operative interference is necessitated by retention, hypogastric puncture of the bladder will remove all urgent symptoms, and favor an early restoration of the patency of the canal. In practising retrograde catheterism it is necessary to have a solution of continuity behind the seat of urethral obstruction. Of the two methods of establishing this solution of continuity, namely, suprapubic cystotomy and

hypogastric puncture, the latter, M. Poisson argues, is preferable, and well adapted to the conditions of the case, being sufficient for the ready practicing of retrograde catheterism, and presenting much less risk than the major operation. By the simple proceeding of hypogastric puncture, the inflammatory condition of the injured portion of the urethra may be much relieved, and possibly the canal in the course of a few days, may be traversed by a small instrument passed by the outer meatus. In any case, under the influence of the puncture, the general condition of the patient is improved, the severe suffering of retention is relieved, and necessary time is gained for taking into consideration the re-establishment of the urethra, facilitated by the presence of a vesical fistula. In conclusion, Dr. Poisson states that retrograde catheterism, often necessary to the due completion of external urethrotomy, may be readily carried out by a hypogastric fistula, and that, in every case where it is possible, puncture should be preferred to the more dangerous operation of suprapubic section.—*Medical and Surgical Reporter.*

Endoscopy of the Male Urethra.

DR. KLOTZ, *New York Medical Journal*:

In cases of stricture the endoscope may prove useful in various ways. In a few cases of so called impermeable stricture which were treated in the German Hospital, after several unsuccessful trials to enter or pass even the finest instruments, I succeeded in discovering the entrance of the stricture, in the shape of a narrow recess eccentrically located among several hard prominences, and in introducing a filiform whalebone bougie through the stricture to the bladder. Once entrance gained,

one of Gouley's tunneled sounds was passed over the whalebone, and thus the path was opened for successful further dilatation, so that within a few weeks I was able to inspect the entire length of the urethra as far as the prostatic portion, through a tube No. 23 Charr., and found a smooth, still somewhat rigid, mucous membrane throughout the former seat of stricture. In other cases, which bled on being touched only by bougies or sounds of any caliber, so that even the smallest numbers could not be passed or entered, endoscopic examination revealed the presence of small patches of sound mucous membrane among cicatrized and granulating tissue. Here I introduced steel sounds No. 16 to 18 Char., and gradually forced them forward through the stricture, being able to make absolutely certain that the sound kept within the normal urethral channel and avoided false passages. In this way I gradually pushed on until the instrument reached the bladder; afterward further dilatation to Nos. 23 and 24 proved quite easy and free of danger. In this way I cured a stricture which for fourteen years had baffled all attempts to pass an instrument. Its deep location, extending through the entire membranous portion into the immediate neighborhood of the bladder itself, would have rendered any urethrotomy, either external or internal, a very precarious proceeding.

In every case of stricture the positive acquaintance with the configuration of the impediment to the free passage of the urine or to the introduction of a bougie which can be obtained by endoscopic examination, will prove of great value to correctly judge which course of treatment ought to be taken. The obstruction of the urethral channel may extend to the entire circumference of the urethra, or it may be situated in the

upper or lower, or in the lateral portions of the urethral tissue. Internal urethrotomy, and, to a certain degree, even external urethrotomy, are executed more or less blindly; in the internal operation the cutting is done either upward or downward, and therefore may divide perfectly healthy parts and leave the real obstructing mass untouched if situated laterally. External urethrotomy may leave the indurated upper wall intact while opening a way through the normal floor of the urethra. If a stricture has to be operated upon, the ideal way would undoubtedly be to operate under the eye through the endoscope. That this can be done has been shown by Gruenfeld. I have no experience of my own so far, but I shall certainly try to follow the example of Gruenfeld as soon as I find an occasion, and I have no doubt that, sooner or later, ways and means will be found to make urethrotomy no longer an uncertain procedure. Undoubtedly electrolysis of stricture, too, could be applied more effectively if performed after careful inspection of the obstruction.

Suprapubic Cystotomy.

From the proceedings in the section of surgery of the British Medical Association, we learn that Sir HENRY THOMPSON throws the full weight of his valuable opinion in favor of suprapubic, as against the other methods of cystotomy.

For the severe and exceptional conditions he considers the suprapubic operation an available and trustworthy resource.

Its superiority over the lateral mode is thus formulated:

1. Because in the suprapubic operation there are no important structures lying in the line of incision, or sufficiently near to be rendered liable to

injury either by the knife or by the forceps.

2. Because the space for removing a large stone above the pubes is practically unlimited.

3. Because there is little or no danger from hemorrhage; if it does occur, it can readily be dealt with.

4. Because the incisions are certainly more easy to perform than those of lateral lithotomy; while the removal of a large stone, always the most difficult and dangerous part of the operation, is safe and easy by the suprapubic route.

5. Because, during the after-treatment, the urine leaves the suprapubic wound more directly and safely than it does by the long lacerated opening which forms the communication between the bladder and the perineal surface after the lateral operation for a large stone.

6. Because antiseptic dressing can be employed in the former operation and can not be made available in the latter.

7. Because, in the suprapubic operation it is impossible to cut into the rectum, to inflict injury on the sexual organs, or to make an urethro-rectal or perineal fistula, any or all of which are liable to follow the lateral operation in a patient with a large stone.

The objections raised against the suprapubic method,—the danger of opening the peritoneum and the risk of extravasation of urine around the base of the bladder—he does not regard as valid. The risk of extravasation, he says, is small, because it can only happen as the result of unnecessary and unwarrantable interference with the tissues outside the bladder. As for the danger of lacerating the peritoneum, the experience of the modern operation demonstrates this danger as now virtually non-existent.

The writer then describes the technique of the operation at length, and

adds tables of experience with the various methods.—*Weekly Med. Review.*

DISEASES OF THE EYE AND EAR.

The Exchange of Liquids in the Eye. Experimental Studies.

SCHICK (*Arch. Ophthalmology*) gives some experimental contributions to our knowledge of the laws regulating the exchange of liquids in the eye. He reaches the following conclusions;

1. The solution of ferrocyanide of potassium injected subcutaneously in rabbits appears in the blood vessels of the eye in a few minutes.

2. No current of filtration can be shown to exist such as Ulrich has described as emanating from the choroid and passing through the retina, vitreous, zonula, zinnii, posterior chamber, iris and anterior chamber into the cornea.

3. The solution of the salt passes from the ciliary body and iris into the posterior chamber.

4. From the posterior chamber the liquid penetrates the capsule of the lens and through Petit's canal into the lens substance.

5. The salt passes through the zonula into the vitreous, enters its anterior layers and then spreads through the whole vitreous.

6. He could not determine whether the salt entered the retina from its own blood vessels or those of the choroid.

7. In the healthy eye no communication can be shown to exist between the anterior and posterior chamber at the pupillary margin.

8. The aqueous humor of the anterior chamber is furnished by the whole anterior surface of the iris; it probably comes from the blood vessels of the iris, at least by far the greater proportion.

9. The aqueous humor of the anterior

chamber is carried off through Fontana's spaces.

10. The salt does not enter the cornea by direct filtration from the anterior chamber, but from the looped blood vessels at the corneal margin.

11. When injected directly into the vitreous and under pressure in the latter, the salt enters the choroid through the retina and is absorbed by the blood vessels of the former.

12. After injection into the vitreous the salt passes through the zonula into the posterior chamber; here part of it enters the lens at its equator, while another part enters the ciliary body and posterior surface of the iris, where it is absorbed by the blood vessels of the latter.

13. A part of the liquid which had entered the iris passed out at the anterior surface of the latter into the anterior chamber.

14. The salt, when injected into the vitreous, does not enter the cornea from its posterior surface.

15. A solution of uranine injected subcutaneously into a rabbit appears soon afterwards in the blood vessels of the eye, passes through their walls, and penetrates into all parts of the eye through predetermined channels.

16. From the choroidal blood vessels the uranine penetrates the whole thickness of the choroid.

17. There is no current of liquid passing from the choroid through the retina into the vitreous.

18. The retina is nourished from its own blood vessels, and not from those of the choroid.

19. From the surface of the ciliary body the uranine penetrates the posterior chamber.

20. From the posterior chamber the uranine filters through the zonula into the vitreous, coloring first the anterior

and then the posterior layers. The coloration of the vitreous is independent of that of the retina and choroid.

21. A portion at least of the uranine passes out of the eye by the same paths by which it entered.

22. From the posterior chamber the green liquid enters the capsule of the lens at the equator, and then the lens itself. It colors first the cortex and then the nucleus and leaves the lens in the same way.

23. The nutritive changes of the vitreous and lens take place much more slowly than those of other parts of the eye.

24. In the healthy eye there is no communication between the two chambers at the pupillary margin, the regeneration of the aqueous humor taking place entirely from the anterior surface of the iris.

25. The liquid coming from the iris does not filter in a fixed zone of filtration from the posterior chamber through the tissue of the iris into the anterior chamber, but comes principally from the vessels of the iris.

26. The first greenish tinge always comes from the sphincter of the iris.

27. The coloring matter does not penetrate from the anterior chamber through the epithelium into the cornea, the coloration of the cornea always taking place from the sclero-corneal margin.

Peroxide of Hydrogen as a Therapeutic Agent in Diseases of the Eye.

DR. J. HERBERT CLAIBORNE thus writes in the *New York Med. Jour.* :

Bearing in mind its bleaching properties and presuming that the benefit alleged for it in such cases was due to these properties, it occurred to me that, in the form of a weak solution, it might be of advantage in catarrhal inflammation of the conjunctiva.

Experimentation was made in a number of cases with quite uniform results, which are appended below.

On the instillation of two drops of a ten per cent. solution into the conjunctival sac in chronic catarrh, the following was observed :

The patient invariably started as the drops fell into the eye ; that portion of the conjunctiva which was bathed in the drops became blanched and presented a "washed-out" appearance in from half a minute to one minute after instillation ; this condition lasted at least five minutes ; and immediately after introduction the bulbar conjunctival vessels became constricted ; this condition yielded to marked distension in a few minutes : bubbles rose to the surface of the fluid, and some remained clinging to the bottom and sides of the sac ; twenty to twenty-five minutes after the instillation the eyes presented an irritated appearance, the bulbar vessels remaining still distended and the palpebral conjunctiva equally as red, if not redder than before.

The patients complained irregularly of stinging immediately after the introduction, which lasted on an average from one minute to a minute and a quarter. Twenty to twenty-five minutes after the first instillation they invariably stated that their eyes felt better and more comfortable.

In acute cases the same was observed, save that the bulbar vessels became immediately distended after the instillation without apparently becoming smaller in half an hour. No exact difference can be drawn between the effect of a ten and a five per cent. solution, nor between these and a one per cent. solution, save that with the latter the stinging is less and usually lasts only half a minute.

Instillations were made also directly

upon the cornea ; there was no change in its appearance ; the stinging was no greater, and no local anæsthesia occurred under half an hour's observation ; there was no effect upon the pupil. The instillations were made every third day at the clinic.

The patients were instructed to use no other form of treatment ; they invariably returned with the eyes in a less inflamed condition.

Encouraged by the ultimate result, I was bold enough to prescribe a five per cent. solution for one patient with acute follicular conjunctivitis, and to direct him to put two drops into each eye morning and night. He returned on the third day with the eyes much worse. He complained of severe stinging on the introduction of the drops, which however, soon passed away.

The bulbar vessels were intensely congested and did not yield entirely to several drops of a four per cent. solution of cocaine.

In the light of the foregoing observations, I do not feel justified in advising the use of the peroxide of hydrogen in eye diseases, and, although no alarming reaction followed its use in any case, I gladly relegate to others its employment in the eye.

The Effect of Sea Bathing on the Ear.

DR. SEXTON thus writes in the *Medical Record* :

Persons may nearly always escape the injury to which the ears are liable in bathing, by the observance of a few simple precautions. They should not expose the face or ear to incoming waves, especially such as are just "breaking" at the height of the head—*i. e.*, they should be on their guard not to be caught unawares. In floating upon the back, water is liable to trickle into the canal of the ear, and in diving

it also enters easily. Such a result may be prevented by wearing non-absorbent cotton or sheep's wool in the opening of the ear.

On coming out of the bath no time should be lost in wiping out any water that may remain in the canal, and drying the parts; this may safely be done by rolling a small bunch of the fibres of absorbent cotton-wool on the end of a "parlor" match, from which the ignitable portion has been burned. The cotton should project well over the end of the stick to protect it, and to form a brush resembling those made of camel's hair. This brush may, with care or after proper instruction, be carried by the bather himself down into the ear for an inch, or until felt impinging on the drumhead; the use of one or more will remove all moisture, and probably prevent any further injury liable to occur from the presence of such an irritating fluid as sea water.

How to Syringe the Ear.

DR. H. G. MORSE, *Maryland Medical Journal* :

In order to syringe the ear properly, a hard rubber syringe should be used, and a thin bowl be held close under the lobe of the ear, well up into the fossa at the articulation of the lower jaw with the temporal bone. The patient himself, if he be a large child, or an adult, will hold the bowl better than an assistant. The surgeon then straightens the meatus by gently pulling the auricle in an upward direction with one hand, while with the other he uses the syringe. It is well to allow the water to first pass into the concha of the auricle, and not immediately into the canal, in order that the patient may judge as to the temperature of the water, which should be lukewarm.

The injection of water is a potent agent

in removing a foreign body from the ear. It is sufficient to remove a plug of wax, which has been impacted for years, and which has completely plugged up the auditory canal. How much more potent must be the stream of water, when there is sufficient space through which it may get behind the foreign body and wash it forward by the returning current! There are no cases on record where syringing, when undertaken before any other attempts have been made, failed to remove a foreign body from the ear.

Unfortunately, however, those who believe in the efficacy of the simple procedure of syringing, do not always see these cases at first. The foreign bodies are often impacted, or so situated that a stream of water cannot pass behind them. There is often, also, very great inflammation of the parts, caused, not by the foreign body, but by the attempts to remove it. If it be plain that the foreign body is not causing the severe symptoms, a little delay may be advised, until proper local treatment—the use of leeches, and the instillation of warm water—has subdued the inflammatory process. If it be probable that the foreign body is wedged in upon the drum, or perhaps pushed through it into the cavity of the tympanum, there is nothing to be done but to remove it at all hazards. Perhaps the best way, in case all attempts by means of delicate instruments introduced into the canal (which is at the same time well illuminated by a concave mirror placed on the forehead by means of a band) have failed to reach the body, will be to adopt Troltsch's suggestion and to detach the auricle posteriorly, and thus reach the body from behind. Having thus separated the auricle from its attachment, the membrana tympani will be thoroughly exposed, when it will be very easy to remove anything which may be upon it.

DISEASES OF WOMEN.

Fibromyomatous Tumors of the Uterus.

DR. FREDERICK LANGE reports three cases of fibromyomatous tumors of the uterus in the Oct. number of the *Annals of Surgery*. In two cases there was expulsion of the tumor masses after spontaneous sloughing; and in the third case, shrinkage of the tumor after central suppuration and softening.

Case I.—Mrs. B., æt. 45. Large abdominal tumor had existed for about three years. Within the last year she had been treated repeatedly for long periods of time with ergot administered hypodermically as well as internally, but without any notable success, in reference to hemorrhage as well as size of tumor. In view of the sufferings of the the patient, the radical operation of removal was proposed but declined. Some time later there was removed a piece of the tumor about the size of the fist, in a decomposed condition, from the vagina, and this was followed the next two weeks almost daily by others of smaller or larger size. A short time after this a particularly large piece came away, and Dr. L., who saw the case again in consultation was surprised that the enormous tumor had so much disappeared that the uterus now was not much larger than about the fourth or fifth month of pregnancy. The offensive odor ceased when the remainder of the separated tumor was removed from the uterine cavity. The doctor is under the impression that the tumor at first must have weighed at least fifteen or twenty pounds. The patient, a year afterwards, was in good health.

Case II.—Mrs. H., æt. 46, Null., had suffered for two years from profuse and prolonged menstruation. There was no doubt that her trouble was due to a fibromyomatous tumor of such a size

that the uterus, on examination reached within two finger's breadth of the umbilicus. During the time from the 12th of October to the 6th of November, about eighteen hypodermic injections of Squibbs' fluid extract of ergot was administered in the hypogastric region. They caused a good deal of pain and inflammatory irritation, which, however, by cold applications was kept down, so that no abscesses occurred. Small indurations, however, remained at the points of injection. During her menstrual period the patient rested at home; did not get any hypodermic injections, but took ergot internally 15 to 20 drops twice a day.

Two months after, the patient had a bloody and somewhat offensive discharge from the vagina and labor-like pains. The vaginal portion of the uterus was softened and dilated, and a soft mass could be felt within it. "On the following day, under chloroform, a considerable mass, about a pound and a half of sloughed fibromyomatous tumor was removed from the uterine cavity, after lateral incisions into the vaginal portion had been made." The author states that on account of the narrowness of the passages and impossibility of pulling down the cervix, that he was unable to thoroughly explore the uterine cavity with the finger, yet ascertained that many necrotic irregular pieces of tissue remained undetected as yet. Repeated irrigations were made with corrosive sublimate, 1-5000, but symptoms of septic absorption, and the formation of pus existed. Sloughed masses were removed from the uterine cavity and the pus cavity behind the cervix evacuated. The patient made a rapid recovery.

Case III.—Miss B., æt. 28, supposed to have a fibroid for four years. For about three months she was treated with hypodermic injections of ergot,

about thirty in number, but without success. Three years ago she had a fall, and afterwards she suffered from severe abdominal pains, which persisted several months. Ergot, internally, was again used but gave no relief. A deep seated phlegmon in the abdomen was now discovered, and it was found to be in a uterine tumor that had become adherent to the abdominal wall.

The patient apparently recovered.

[It is doubtful how much the administration of ergot had to do with the extrusion of the tumors in cases I and II. If the drug is of service in causing the uterine tissue to expel the mass, it is possible to conceive of its interfering with the circulation, so as to favor sloughing in the tumors. The fact that injections of this drug are so often followed by local trouble, and that all of its effects can be obtained when administered by the mouth, makes its hypodermic use of doubtful utility.

We doubt if ergot should be used in these cases unless the observer can have made himself sure of the tendency to intra-uterine expulsion, and has the cervix well dilated.]

A. H. B.

A Case of Absence of Vagina with Well-Developed Mammæ and Undeveloped Uterus and Ovaries.

Reported by J. A. CAMPBELL, M.D., F.R.S.E., in *Journal of Anatomy and Phys. Normal and Path.*, vol. xx. part iv.

A patient, twenty-seven years of age, was admitted into the Carlisle Asylum, in January, 1877. She had been insane for seven years and at intervals subject to epileptic fits. She had never menstruated. Her mental state had alternated between excitement and depression, and she was said to have shown erotic tendencies during the periods of excitement, and to have been

in the habit of exposing her person at such times.

The following is quoted from the records: "She was under-sized, had a low type of face, her lungs and heart were normal, . . . her mammæ were well developed. She had much hair over the pubes; her external genital organs were well developed, but no vagina could be found."

This patient died of phthisis nine years after, and an autopsy was made with the following results: "The external genital organs showed the appearances noted in the case. The internal organs of reproduction were almost undeveloped. The ovaries—very small, shrivelled and indurated—occupied a normal position. The fallopian tubes communicated with a rudimentary uterus about seven-eighths of an inch in length. So far as could be made out, it was devoid of an os, and lay very low in the pelvis. Examination failed to show any communication between uterus and external genital organs.

Remarks, though I am aware such cases are not unknown, yet they are of sufficient rarity to make it worth while putting such a case on record. It is, I think, highly probable that the attacks of excitement occurred at what would under other circumstances have been monthly periods. A degree of sexual excitement was distinctly present.

If the ovaries shed ova, what became of them?"

[This case is a very interesting one, but would be much more so had the doctor exhausted it.

A careful microscopic examination of the ovaries would have been an aid in answering part of his question. It might have revealed the evidences of the previous existence of that rare condition of acute inflammatory action in the ovary.

As to the latter part of his question, the ova either fell into the abdominal cavity or the fallopian tube.

This adds another to the number of cases where there is well-developed mammæ with defective development of the pelvic sexual organs, but it remains to be shown that there is a case where all the evidences of the sex are present and the ovaries congenitally absent.]

A. H. B.

Temporary Clamp.

TO BE USED ESPECIALLY IN OVARIOTOMY, BATTEY'S OPERATION, AND TAIT'S OPERATION.

DR. ROBERT T. WILSON, in St. Louis *Medical and Surgical Journal*, describes his clamp as follows :

I bring before you to-day my mite in this department of surgery (my cases are reported elsewhere), in the form of a clamp, for the control and more efficient management of the pedicle, while the surgeon secures it permanently, and to be removed at the end of the operation.



The clamp consists of two blades with a handle ; the blades are flat antero-posteriorly, and are serrated centrally. The left blade (see cut) is doubly serrated with a groove between the rows of teeth, and the right (see cut) is a single serrated blade, fitting closely and firmly into the groove of the left blade when the clamp is closed. On the end of each blade is a tooth, pointing centrally, the tooth of the left blade being grooved for the reception of the tooth of the right blade, when the clamp is closed. These teeth prevent the pedicle, when it is a broad one, from slipping out of the

clamp when the blades are approximated. Upon the anterior surface of the left blade (see cut) is a guard, which serves the purpose of a grooved director, thereby preventing the point of the scissors or knife (cold or heated) from injuring parts beyond the pedicle. The handles are easily fixed at any given point. Those who have used the clamp, say they want no other for the above operations.

Bichloride of Mercury in Uterine Catarrh.

DR. WATSON (*Therapeutic Gazette*): I have been using a solution of bichloride of mercury as an application to the cervical canal and uterine cavity in cases of chronic mucopurulent discharge. Originally it was suggested to my mind by some considerable success with the same agent in gonorrhœa, as recently recommended. The suspected relation between many chronic inflammatory conditions of the female genital organs and gonorrhœa still further suggested the use of the bichloride, though in much stronger solution. One-half to one grain to the ounce of water was the strength I employed, and, on trying it, my success was so much better than ever before that I have continued to use it in all possible cases of the kind. It has several manifest advantages. Applied with the cotton-wrapped applicator, it excites no immediate uterine contraction, as iodine, carbolic acid, and other agents generally do. This enables one to make two, three or more applications in rapid succession, and affords a much better chance for reaching the entire endometrium. It leaves behind it no coagulated mucus, or film of chemically-altered epithelium, as carbolic acid and nitrate of silver do, to be detached and expelled subsequently by a process almost necessarily involving fresh suppuration. A similar solution may as a

final measure, be applied to the whole vaginal membrane as the speculum is withdrawn, and irrigation with hot water or a very weak solution of bichloride continued for some days. In obstinate catarrh of the cervix, with almost endless ropy secretion, I have also had good success, while I do not remember, after many trials, any success worth mentioning with any agent employed previously. In nearly all the cases two or three applications entirely checked discharges of long standing. Sometimes they recurred at the monthlies, but were again checked for good apparently by another application. In two cases single applications did the work, and out of the twenty-three cases treated solely in this way, two only resisted treatment, and were entire failures.

[The record of this remedy as given above, surpasses anything yet employed that we know of. We shall certainly give it a further trial on a larger number of cases, and will report our results in due time.]

A. J. C. S.

On Vaginal Extirpation of the Uterus.

DR. BRENECKE, in the *Zeitschrift für Geburtshülfe und Gynäkologie*, states that he has removed the entire uterus through the vagina for cancer eighteen times, without a single death. His first principle is to make the parts as accessible to the surgeon's hand as possible throughout the operation. For this purpose, he has devised a special uterine clamp forceps, which takes up little room and grasps the tender and friable uterine tissues firmly yet safely. He takes special precaution against hemorrhage. He carefully cuts through the upper reflexion of the vagina, in front and behind, with a short bladed knife, Küchenmeister's, and separates the cervix from the loose surrounding

tissue. Then he isolates the denser tissue on the sides of the cervix, bearing the uterine artery and its branches. The operator then grasps the uterine appendages. Each appendage is ligatured by means of a strong S-shaped needle, resembling that devised by Olthausen, which introduces the thread with comparative facility. The uterus is then strongly retroflexed, and pressed closely against the posterior wall of the vagina; by this manipulation the vesico-uterine fold of peritoneum is most readily separated without injury to the bladder. An elastic ligature is then applied to the broad ligaments, and they are cut through. Dr. Brennecke neither drains Douglas's pouch, nor applies any sutures to its divided serous surfaces. An iodoform-glycerine plug sufficiently protects the escaping discharge from septic changes. After six or seven days the plug is removed, and the vagina is simply irrigated. Dr. Brennecke prefers total extirpation to amputation of the cervix, and even advocates vaginal extirpation for other incurable uterine diseases, in preference to abdominal section or oöphorectomy. His monograph is of great importance, and his method of operating can only be thoroughly understood by a perusal of the same. It need hardly be added that statistics of after histories are even more important in this case than after ovariectomy and myotomy. The most dexterous operator might, physically speaking, cut away cancerous growth, the limits of which are tangible, if not visible, on a breast, removing an infinitely small area of healthy tissue around the growth. We know that he does not do so, but cuts very freely, and is able to use the knife boldly, thanks to the anatomical relations of the breast. In the case of the uterus the greatest dexterity may fail to

remove all the cancerous tissue, especially if it have spread to the connective tissue round the cervix, and cutting freely is out of the question: nor can the finger always detect the extension of the disease. This must never be forgotten when any operation on a cancerous uterus is contemplated.—*British Med. Journal.*

Treatment of Apthæ of the Vulva.

SARAZIN, in cases of apthæ of the vulva occurring in children recovering from measles, recommends the following (*L'Union Médicale*): By means of a badger-hair brush a layer of iodoform to be painted on the inflamed parts, and a piece of lint covered with iodoform to be inserted between the lips of the vulva. The powder is to be removed every twenty-four hours until recovery. Appropriate internal treatment should also be given.—*Med. and Surg. Reporter.*

Hypertrophic Elongation of the Isthmus Cervicis.

DR. WM. GOODELL, at a clinical lecture published in *Coll. and Clin. Record*, recently, said:

Our first case is that of a married woman about 40 years of age, who has borne several children. She has a disease with a long name—hypertrophic elongation of the supra vaginal portion of the cervix of the uterus—which is, however, by no means an uncommon affection. It is present in many women who are supposed to be suffering with prolapse of the uterus.

The original cause of this disease is generally some injury, and the most common form of injury giving rise to it is laceration of the cervix during child-birth. It is, therefore, as a rule, a disease of married women who have had children, but not exclusively, for I have seen it in aged virgins. Just here I may

mention that in these cases it has a different appearance. In married women who have borne children the projecting cervix resembles the snout of a pig, in the virgin, on the contrary, the conical cervix, with its small os, looks exactly like the male organ in a state of erection; this at least has been the case in the few cases I have seen in virgins or married women who have not borne children.

The persons who are most subject to this condition are those who have to lift weights at a disadvantage. For instance, take a cook who has a laceration of the cervix to begin with. The denuded portion of the cervix rubs against the vaginal wall, keeping up irritation and attracting an increased blood supply and more or less inflammatory deposit, making the cervix larger and heavier than normal. Cell growth is stimulated, hypertrophy occurs, and the force of gravity constantly pulls upon the cervix. While in this condition, the cook has to lift a pot of potatoes from the fire. In doing which she contracts her abdominal muscles and depresses the diaphragm, thus tending to force the cervix down still further into the vagina and finally cause its extrusion. The washer-woman, also, who has to lift heavy baskets of clothes, is very subject to this malady. Indeed it is among persons who have to work hard that you will find it, almost without exception. It is exceedingly rare among women of means. I recall only one case of a person in affluent circumstances, and I found in that case that during a former period of her life she had been obliged to labor very hard.

In these cases the canal of the uterus usually measures five inches. I have seen it seven. In this patient the sound enters to the depth of five and a half inches. You notice that in reality the

vaginal portion of the cervix is not elongated; if anything it is rather shortened and clubbed. We find the supra-vaginal portion decidedly hypertrophied and elongated. This portion of the cervix—the isthmus, as it is called—contains few muscular fibres, and is mainly fibrous tissue. The cervix has been lacerated, it has become enlarged and increased in weight, thus producing traction upon the parts above. The fundus being kept up by the ligaments, the portion between the cervix proper and the fundus become stretched, elongated and hypertrophied. The vagina is completely everted, and the perineum is functionally imperfect.

One object sought to be attained by an operation is to promote absorption. Two operations will be needed: first, amputation of the vaginal portion of the cervix; and secondly, one to restore the perineum. I prefer not to do both simultaneously, as it is too much to perform two such operations upon a patient at one sitting.

When complete prolapse of the uterus occurs, the broad ligament yielding so as to permit the fundus to come outside the body, there will occur a secondary atrophy of the uterus, and instead of the canal measuring five and a half inches it will measure only three and a half, owing to absorption and the absence of traction.

In proceeding to amputate a part of this cervix, it is well to bear in mind the limits of the bladder in front and of Douglas's pouch on the posterior surface. The bladder we can determine with the sound, but there is no criterion with regard to the posterior *cul-de-sac*. Having found the lower border of the bladder, a straight needle armed with a double silk ligature is made to pass through from front to back, about three-

fourths of an inch from the extremity of the cervix. This is to prevent the cervix from escaping from me and getting out of reach. We shall now apply a sort of Esmarch bandage, a rubber tube, wound several times around the uterus above the point of operation, in order to prevent hemorrhage.

I am not sure but that the time may come when it will be considered proper to remove the whole womb for this disease.

Now, with a scalpel, I proceed to amputate the cervix, which I hold with a double tenaculum. I will endeavor to avoid cutting Douglas's pouch, but if I open it I shall sew it up again. I have opened it several times without losing a case; but I should prefer not to expose the peritoneum to the air of this amphitheatre.

You now see the large stump with the os in the middle. This raw surface I shall proceed to cover by using Hegar's stitches, which radiate in every direction from the cervical canal to the circumference. When these stitches are tightened the contraction opens the cervical canal, and the cicatricial tissue which is formed will have the same effect. These stitches are of silver, and are clamped with shot. Wherever there is a tendency to bleed I insert a stitch. You will be astonished to see how much diminution in the size of this uterus will occur in a week's time as a result of the operation. Much of this surface will heal by first intention, but a small part will heal by granulation, which will cause the formation of a cicatrix, and produce subsequent contraction.

The only objection to this operation is that there is a tendency to secondary hemorrhage. In such an event, I should pack the vagina as hard and as tightly as possible. This is more likely to occur where ether has been given.

After removing the rubber bandage, I find several bleeding points, to which I shall apply the Pacquelin cautery.

The objection to the amputation by the galvanic wire or the hot knife is that it produces so much cicatricial tissue. It makes the os so small that menstruation is rendered difficult and painful; and it is very hard to remedy it. Here, you observe, the cicatricial contraction will tend to draw the os open, instead of to close it. The small amount of denuded surface which has been left will granulate, and in that process will aid the retrogressive metamorphosis in this hypertrophied cervix. A granulating surface is better for this purpose than union by first intention, but I prefer to have the greater part of the wound heal by first intention; otherwise the cicatrix would be too dense and hard. In the books this operation appears to be perfect; but in practice a greater or less amount of surface is left to granulate. Two of the wire sutures have been purposely left long, in order to pull the uterus down in case of hemorrhage, so as to see where the bleeding comes from. The stitches must all be counted, so that when we come to remove them we shall not leave any, as they are liable to be imbedded in the tissues. We shall leave the stitches in for two weeks. [We venture to disagree intirely with Dr. Sovdell, in regard to the desirability of a granulating surface in the healing of the stump. We believe that union by first intention is as important here, as in the operation for laceration of the cervix.]

A. H. B.

Dry Chloride of Sodium in the Treatment of Subinvolution of the Uterus.

DR. HAL C. WYMAN, in *Medical Age*:

That peculiar enlargement of the uterus, with its accompanying train of distressing symptoms known as subin-

volution of the uterus, is a matter of such common occurrence and is so often difficult to cure that any one who has anything promising to offer, in the way of treatment, may be excused for enlarging existing literature on the subject.

The various plastic operations upon the uterine cervix which have been recommended by authorities he has found sufficient to compass a cure in the large majority of cases; but in those cases where for any reason operative surgical measures are withdrawn advisably, he has found the treatment by dry applications of sodium chloride to the swollen cervix most satisfactory. It has been in use in my practice for more than two years, and the success which has attended its use where I have applied it myself or directed its use in consultation, has been most pleasing.

The formula I use is this: ℞. Chloride of sodium, ℥j; powd. slippery elm bark, ℥iij; powd. hyoscyamus leaves, ℥j. Mix and rub in a hot and dry mortar until thoroughly desiccated.

This is applied to a diseased cervix uteri in quantities equal to an ordinary teaspoonful once every other day, and sometimes oftener.

My common plan is to take a piece of absorbent cotton, circular, and three inches in diameter, just thick enough to hold the powder placed inside. The edges of the cotton are then folded over the powder and tied with a string which is left of a length suitable to facilitate the withdrawal of the tampon thus made, from the vagina. This insures the contact of the dry salt with the diseased uterus pretty nearly, although a thin layer of absorbent cotton intervenes between the salt to be dissolved and the uterus to provide the fluid for dissolving it. In case the application proves painful, the tampon is withdrawn, and another replaced containing a larger

quantity of hyoscyamus or opium, or morphine, as I may think best adapted to the case. To apply the chloride of sodium prepared in the manner just described, a speculum is first introduced and the swollen cervix brought into view and proper position, then that end of the cotton tampon which contains the chloride of sodium, etc., is passed through the speculum and placed against the cervix. It is held in position with dressing forceps while the speculum is withdrawn. The tufted end of the tampon insures its contact with the cervix after the forceps are released.

The principle on which the influence of this remedy depends is found in: (a) The depletion of the uterus of its fluid to liquify the chloride of sodium. (b) The antiseptic properties of the salt checking and preventing putrefactive and fermentative changes in the vagina and uterus. (c) The presence of a mechanical support for the enlarged and malposed uterus favoring better circulation of blood through that organ.

In occasional cases I have observed that the patient did poorly when cotton was used to hold the powder in position. It appearing that the mere presence of the cotton adding to the bulk of the foreign body in the vagina was cause sufficient to make the patient listless and decline in health. In such cases I have introduced a small Ferguson speculum, brought the uterus into position, and thrown a teaspoonful of the powder directly upon the diseased organ. To relieve pain, I have added opium powder, hyoscyamus powder, or belladonna powder, to the salt and slippery elm.

The Operation for Recto-Vaginal Fistula.

At the meeting of the German Gynecological Association held at Munich, Dr. SCHAUTA read a valuable paper on

this subject, from which we find the following abstract given in the *American Journal of Obstetrics and Diseases of Women and Children* :

Dr. Schauta first discussed the methods used in the treatment of these conditions: freshening from the vagina or rectum, division of the recto-vaginal septum below the fistula, and perineoplasty. These fistulæ are said to be more difficult to cure than vesico-vaginal fistulæ. Winckel alone holds the opposite view; he believes that they do not always close after the first operation because the recto-vaginal septum is very thin, the surfaces to be freshened are narrow, and the rectum cannot be completely disinfected. The reader had likewise had a case in which various methods failed. In this case, the vagina being wide and relaxed, he performed colporrhaphy, instead of dividing the septum below the fistula. Only at the bottom of the wound was the fistula united by catgut sutures which, however, did not pass through the rectal mucosa. The operation succeeded. In his second case, the vagina being likewise wide and loose, he at once freshened the surfaces according to Hegar's method; the fistula was situated about midway between the middle and lower portions. The advantages of this operation are: broad freshened surfaces are obtained, the vaginal side alone is freshened, and the rectum not touched, the recto-vaginal septum is reinforced and a barrier interposed to prevent the entrance of the rectal contents into the vagina, and finally the relaxation of the vagina is removed. The method will not be feasible in every case. Not every vagina is relaxed, and not every fistula, especially if large, will be suitable for it; but then most fistulæ are not very large. Finally, only fistulæ situated in the median and lower thirds are liable to be

benefited by the operation; those higher up, only if the vagina is very loose.—
Weekly Med. Review.

Perineoplasty

Was a subject discussed *in extenso* at the same meeting. Dr. KUESTNER, of Jena, emphasized the necessity of stitching every perineal laceration, be it ever so small. Descensus of both the anterior and posterior vaginal wall takes place, owing to the great succulence at the time of laceration. Leucorrhœa, pruritus and nervous disturbances may ensue. Retrofixion of the uterus still more strongly demands perineoplasty, as no pessary would otherwise stay in place.

In considering the methods of operation (triangular and flap operations) the reader declared in favor of Freund, because it reproduces natural conditions, and a frenum is formed, and because most lacerations are not median, but run upward along the rugous column into one or two points.

For suture material, silver wire or silk-worm gut is preferred; catgut does not hold long enough. With Czerny's silk, drainage into the wound may occur, and slight suppuration as a consequence of the capillary attraction. Silk-worm gut does not share this quality.

Dr. KORN, of Dresden, followed with a paper on the same subject, reporting on thirty-five cases of complete perineal rupture. Thirty-three patients were cured, *i. e.*, discharged with complete continence.

In all cases the freshening was done according to the Simon Hegar method, and the three-sided suture inserted in harmony therewith. The reader recommended to commence the freshening as high up in the vagina as possible, so as to obtain a thickening of the recto-vaginal septum from the topmost vaginal sutures down. Silk was the suture

material in nearly all cases; only of late had the running catgut suture found employment, good results having been obtained with it in recent lacerations (more than ninety per cent. by first intention in a series of between three hundred and four hundred cases). The speaker, however, does not sew in the way recommended by Schroeder, which is very difficult; besides, he anticipates a more exact coaptation by retaining the three-sided suture. He, therefore, stitches with two threads, commencing the first suture in the vagina, where it extends to immediately above the end of the rectal laceration. Then the latter is united with a second thread which is knotted on the rectal mucosa. The vagina having been stitched down to the introitus (any desired number of turns being dropped), the perineum should be stitched only superficially. Deep perineal sutures should be avoided. The reader sees a certain advantage in his method, in so far as he is not forced to work with excessively long threads. Mention was made of a special case in which the reader closed a complete perineal laceration of seven years' standing according to this method, after a recent labor.

None of the thirty-five cases was operated upon before the lapse of two months, one patient having borne the laceration for twenty-three years.

As regards the after-treatment, in none of the cases was the sphincter ani divided, nor was a tube inserted into the rectum.

DISEASES OF CHILDREN.

Treatment of Whooping Cough.

During the last six years or more, quinine has been recommended over and over again as the best remedy against whooping cough. Several au-

thors insisted that the remedy should be given in powdered form, or if in solution, that it should be kept as long as possible near the pharynx. Nobody has yet given the reasons for this procedure, but reliable authorities united in saying that most success is obtained where the remedy is kept the longest in contact with the pharynx.

Dr. Kohlonetz conceived, recently, the idea of injecting the remedy in solution with considerable force far back into the mouth against the walls of the pharynx. (*Deutsch. Med. Zeit.*) In this manner he believes that some of it gets into the larynx and that the larger quantity of it comes into intimate contact with the epiglottis, a fact he considers of the utmost importance. He employs the following formula: ℞. Quinæ sulphatis, gr. lxiv.; acid. sulphur., ℥ xxxij.; aq. destillat., ad. f. ℥ vj. M.

During the first three days he injects a common glass syringeful of this solution every two hours into the open mouth, the tongue being depressed by the mother with the aid of a spoon. The next four days these injections are made every three hours, and after that *ad libitum*. This dose is used in children from three to four years. In younger children the method and the execution are the same, the only difference being that the syringe is not filled quite so full.

The result has been remarkably good. As a rule, the whoop greatly diminished by the third day, and in almost all cases ceased totally by the end of the first week. Whenever the result was not so satisfactory, K. convinced himself that the treatment had not been carried out strictly according to directions, and he requests physicians to give the method a fair trial. As it can easily be executed, we advise our readers to do the same. Some children suffer so intensely from this disease, that anything promis-

ing relief may well be worth a trial.—
Medical and Surgical Reporter.

Buttermilk for Babies.

DR. D. W. OTTERSON concludes an article in the *Massachusetts Medical Journal* as follows:

The manner in which the buttermilk food is prepared in Germany is this: To a pint of buttermilk is added a spoonful (0.16 gramme) of wheat flour. It must be allowed to boil only a few minutes, 3 or 4; the pap must be very thin. Sugar is added to every portion the child uses, so that it may have a sweet taste. I attach no importance to the addition of wheat flour or meal, and would omit it totally, because often too much is added, and I believe that the utility of the food lies in the buttermilk itself; but the cook says that when buttermilk is boiled alone it will separate, also with wheat flour the pap is nicer than with wheat meal, otherwise the last would be better. That the buttermilk should boil is necessary. When the child has a little diarrhœa, rice meal is often added instead of wheat flour. I prefer to have buttermilk administered in combination with suckling. I begin with it in the third week; in the beginning some teaspoonfuls are given to the baby in order to habituate it to the taste. Then I advise the use of the bottle, because nature indicates it as the best form in which a child should take its food; the best sort of bottle is an ordinary medicine bottle, with a common rubber nipple, because you can clean it readily. The food must be administered warm (96° F.), which is done by putting the bottle in hot water. Generally babies like it in a short time, and even though it happens sometimes that one does not easily take to the smell, it should not be discontinued, because in nine cases out of ten it will succeed entirely. So certain am I, and

several professional associates whom I have induced to try it, of its success, that, when it does not succeed, we attribute it to the nurse. When the child has once taken a liking to the buttermilk, the better plan is to give it twice a day; it will begin with a very little, but by degrees it will take more and more. It can take it *ad libitum*, for in this it agrees with all simple food, that it is not likely that too much could be taken of it; the baby generally takes at once as much as pleases him, and then ceases abruptly. The best time for administering it will always be when the child has had a long sleep, as in the morning after it has been bathed, and then again towards night, at six or seven o'clock, when it is put into the cradle.

When, now, I am asked in what cases buttermilk is to be administered, my answer is in all those cases where the mother either has not milk enough for the baby, or is rather feeble, and is either unwilling to take a nurse, or has not sufficient means to hire one.

The child to whom buttermilk is to be given should be healthy. When either there is no money for a nurse, or the child will not nurse another woman, which happens very often, then an exception can be made; but it is not to be forgotten that the child should have the best food—mother's milk.

When this is impossible the case alters, but so long as it is possible the child should suckle sometimes, even from a neighboring woman. When this also is impossible, then the child should have buttermilk alone. That they can prosper with it alone I have had many times demonstrated to me; cases where formerly children died, even those who had the breast, with buttermilk alone became beautiful children.

Then there is another great advantage of buttermilk in addition to mother's

milk. The illnesses that occur often when children are weaned are mostly avoided. By degrees you accustom the child to other food, whilst the buttermilk has become the standard food.

Exposure to the Sun in Chronic Hydrocephalus in Children.

This means of treatment has been rarely tried, or even mentioned by writers on pediatrics. Locatelli, of Milan, reports one case which was thus cured, and Nicita of the same city reports three cases. Several of the ancient and early writers expressed the opinion that heat applied to the head would effect a cure. Somma has treated five cases with the following results:

1. *Hydrocephalus Externus*.—Treated with solution of phosphate of lime, vesicants upon the scalp, exposure to the sun for periods of fifteen or twenty minutes. Cured.

2. *Hydrocephalus Internus*.—Iodide of potash, solution of phosphate of lime, exposure to the sun. Cured.

3. *Hydrocephalus Internus*; also paresis of the lower extremities and pulmonary catarrh. Exposure to the sun, with improvement for five months, finally death from broncho-pneumonia.

4. *Hydrocephalus Externus*.—Exposure to the sun. Cure after three months.

5. *Hydrocephalus Externus of Syphilitic Origin*.—Iodide of potash and calomel, acid calcium phosphate and exposure to the sun. Cured.

The following method of exposure to the sun was followed:

An attendant held the child with uncovered head, the occiput being turned toward the solar rays, the position being unchanged for half an hour or less. After four or five days duration of exposure was increased to forty or fifty minutes. Of course this method did not

apply during the cold of winter or the excessive heat of summer.—*Archives of Pediatrics.*

Acorn Cocoa in Infantile Diarrhœa.

MR. F. W. ELSNER (*Australia Medical Gazette, Practitioner*) speaks very highly of the efficacy of acorn cocoa in all forms of diarrhœa in children. Acorn cocoa is a preparation of ordinary cocoa powdered and freed from fat, to which are added the soluble parts of roasted acorns without cellulose, a little sugar and roasted flour. A teaspoonful is mixed with cold water, and boiled, being constantly stirred; this may be administered three times a day with a spoon, or placed in the feeding bottle. In twenty-five cases of continuous and exhausting diarrhœa in which he administered this preparation, the benefit was rapid and complete; it never took more than two days to effect an improvement, while twelve days was the limit at which a complete cure occurred.—*New York Medical Journal.*

Bichloride of Mercury and Tincture of Belladonna in Membranous Croup.

DR. J. H. JONES writes as follows to the *New York Medical Journal*:

I have for some years been in the habit of treating this disease with a combination of corrosive sublimate and belladonna. These drugs are recommended for this complaint in almost every work on therapeutics, but I am not aware that they have ever been given conjointly. I have found that small doses of the bichloride (one-fiftieth of a grain), administered in conjunction with tincture of belladonna (two to five minims), every half hour for a child two years old, is a very successful method of dealing with this dangerous disease of childhood. The secret of its success is in its persistent administration, even when the symptoms are ap-

parently most unfavorable. I have several times witnessed a happy termination to the disease when other practitioners with whom I was associated entertained scarcely a hope of recovery. It is advisable to commence the treatment by administering an emetic, so as to dislodge the already formed membrane. Probably much of the benefit derived from this mixed treatment is due to belladonna, and it is astonishing what large doses of this drug children can tolerate. During the progress of the disease the strength must be maintained by a liberally nutritious diet and stimulants, for I must say that when recovery takes place the patient is left very anæmic and weak. This is not very apparent while the medicine is being given, as every evidence of it is partially masked by the physiological effects of the belladonna.—*Canadian Practitioner.*

Thrush, or Sore Mouth of Infants,

Is often due to the rough and careless swabbing out of the mouth of the child by the nurse, who uses the corner of a coarse towel, and proceeds as if she were scrubbing the kitchen floor or back stairs. In Prague, since Obstein has forbidden the washing of the mouths of infants born under his care, stomatitis has almost disappeared from the lying-in, whereas previously 52 per cent. of the infants born there, and under ten days old, were afflicted.—*Md. Med. Jour.*

Biniiodide of Mercury in Scarlet Fever.

In the same journal DR. C. R. ILLINGWORTH, alluding to a former communication of his on biniiodide of mercury in scarlet fever and diphtheria, says: That it is a true specific for the former is proved by the defervescence commencing immediately upon the administration of the medicine, instead of upon

the fifth day, and by the absence of desquamation in consequence. That it acts as a specific in the latter is shown by the rapid disappearance of the membranous effusion and reduction of temperature. The efficacy of the medicine depends, I think, upon the diffusible potassic iodide carrying the germicide biniodide to every portion of the circulation. Prescribed in this form, the biniodide of mercury has not, so far as I am aware, been used before for these diseases.—*New York Med. Jour.*

The Connection Between Scarletina and Heart Disease.

DR. ASHBY (*Med. News*) draws the following conclusions :

1. Lesions of the heart are very rare in uncomplicated cases of scarlatina.
2. Endocarditis is quite exceptional in scarlatinal synovitis; pericarditis occurs more frequently.
3. Acute and subacute rheumatism occasionally supervenes during convalescence from scarlet fever; an attack of scarlet fever may also be an exciting cause of a relapse, in such attacks, pericarditis and endocarditis are frequent.
4. Periendocarditis occasionally occurs in scarlatinal pyæmia.
5. Dilatation without valvular disease, very frequently occurs in scarlatinal nephritis; pericarditis and embolism are by no means uncommon.

Pseudo-Membranous Croup. Treatment by Strong Alkaline Vapors, Trypsin and Intubation of Larynx.

Not infrequently croup can be prevented by the persistent use of alkaline inhalations begun as soon as the least huskiness of the voice is heard. The best method for this purpose is a steam atomizer, the solution to be atomized consisting of, ℞.—Trypsin, q. s., sodii bicarb., ʒ ii, aq. calcis, ʒ vi. M.

As much as will be held in solution without clogging the delivery tube.

Trypsin is very expensive for any extended use.

Pilocarpine is contraindicated because, expectoration of the bronchial secretion being difficult, on account of obstructing the membranes, it is likely to cause a rapid filling up of the bronchial tubes, to increase the dyspnea and to produce sudden death with symptoms very similar to those due to œdema of the lungs.

Intubation of the larynx is available in those cases in which parents are unwilling that tracheotomy should be done so early in the disease.

Its advantages are, that it is not looked upon as an operation, can be done without a professional assistant, rapidly and effectually.—*Am. Jour. Med. Science*.—*Archives Pédiatriques*.

OBSTETRICS.

Method of Inducing Labor.

PROF. TIBONE (*L'Union Médicale*) suggests a modification of the method of Krause, which is, as is known, the introduction of an ordinary sound into the uterus, leaving it there until labor is established. Tibone's method is as follows: After taking all antiseptic precautions, the cervix is brought into view by means of a speculum and then a special kind of sound is introduced. The author prefers the plain English bougie, No. 10 or 12. The bougie is held a moment in a warm mercurial solution and is gradually softened; it is then introduced into the cervix, and slowly and gradually pushed up until it has entirely disappeared inside the womb. There is then placed upon the mouth of the womb a large tampon of cotton soaked in an antiseptic solution; the patient may then get up and keep

about until the appearance of labor. This method is perhaps a trifle slow, but is sure, and on account of the softness of the instruments used there is no exposure to violent rupture of the membranes or to serious injury to the placenta. The author has used this method repeatedly, and always with satisfaction.

[Our own method of inducing labor may be of interest in this connection. It is safe and we have found it a promptly effective procedure for the purpose.

1. Prepare a mercuric iodide solution (1 to 4,000) at a temperature of about 105° Fahr. Place the patient upon the back in convenient position for a prolonged douche. With clean hands and instruments, project a stream of the hot biniodide solution for fifteen minutes against the membranes. The preliminary douche thus used is important as an antiseptic as well as an oxytocic measure. Septic matter may be carried into the uterus from the cervix or vagina, on an instrument previously clean.

2. With a flexible uterine sound, rendered aseptic, carefully separate the membranes for a space of two inches about the os internum. This separation of the ovum from the lower segment of the uterus will be found perfectly practicable, and it materially hastens its expulsion. It provokes expulsive pains by rendering the ovum in part a foreign body.

3. Finally pass the aseptic bougie with the aid of a Sims' speculum and the latero-prone position. No tampon is required.] J.

Treatment of Pruritus Pudendi.

DR. E. S. M'KEE (*Med. and Surg. Reporter*). In a paper read before the Cincinnati Academy of Medicine, on Pruritus Pudendi, the author discussed that interesting section, the treatment, as follows :

First, we should ascertain the cause of the disease to treat it intelligently. We should treat the constitutional diseases as the origin of the trouble. Next, we should treat the morbid phenomena, the pruritus. Remove the cause, and the pruritus will disappear of itself. The parts should be washed twice a day with castile soap and water. The diet should be vegetable, and regular action of the bowels maintained. As a general rule stimulants should be disallowed.

In this troublesome trouble, for we can hardly call it a disease, we need all the remedies we can find, hence I give all I know : 4 per cent. solution of boracic acid ; 3-10 per cent. solution of carbolic acid ; 2-5 per cent. solution of argenti nitratis ; 0.5 per cent. solution of bichloride of mercury ; 25-50 per cent. solution of sulphurous acid ; 6 per cent. solution of sodæ bborat.

Ointments of tar, boracic acid, camphor or iodoform, mixtures of camphor and chloral, infusions of tobacco, 20 per cent. solution of chloroform in almond oil.

Treatment with the bichloride should be preceded by a removal of the mucous with warm water, and then dry with soft linen. Pass a sponge moistened with the solution rapidly over the affected part. This leaves a smarting, burning sensation, which is alleviated by a few minutes' washing with cold water. Subsequent applications become less and less painful.

M. Dubois recommends in the rebellious cases that the entire surface of the vulva be cauterized with a solid stick of the nitrate of silver. The great objection to this is that it is extremely painful, and the alleviation produced by it is almost always temporary.

Meigs recommends : ℞. Borax, ʒ ij ; morph. sulph., gr. ivss ; aquæ rosæ dest., ʒ viij. M. S.—Apply three times a

day to the affected part with a sponge or soft piece of linen. Take care to wash well the parts beforehand with soap and warm water, and dry them well afterward. A compress dipped in the oil of sweet almonds and laid in the commissure of the vagina, is recommended.

When the trouble is general, temporary relief may be obtained by placing the woman in a prolonged soda bath, and subsequently rubbing the entire surface with vaseline.

Pruritus which has extended upon the distended abdominal walls is well treated with: ℞. Lin. saponis comp., ℥v; chloroformi, ℥j; S. Apply locally.

If the itching comes from an ulcerated cervix, or more properly from the irritating discharge proceeding from it, apply nitrate of silver, and introduce a tampon of tanno-glycerine.

Pruritus from breeding pediculi is well treated by mild mercurial ointments. Stavesacre answers well. A plasma formed of flour of sulphur and water, saline purgatives, as Pullna or Friedrichshall water. Vichy baths, or even bathing with cold or tepid water, constitute the palliatives. Salines and colchicum may be indicated, also bromide of potassium. A weak solution of Goulard's lotion, or a lotion composed of, ℞. Liq. morphixæ hydrochlorate, ℥j; acid hydrocyanic, ℥iss; aquæ, ℥vj; M. S.—Use as a lotion.

Pledgets soaked in the following and placed in the vagina have been found useful: ℞. Acidi sulphuric., sodii biborate, acidi sulphurici, glycerini, āā ℥ij. M. Insert at bed time and withdraw in the morning.

Iodoform may be dusted over the parts. The following has often given relief: ℞. Chloformi, ℥ij; ol. amygdal., ℥ij. M. S.—Apply externally.

Morphia and chloral internally may be found necessary to obtain relief at night. Hildebrant has found the tinct. cannabis indica, x-xx. gtt., to be of even more benefit than these.

There is no end to remedies; the trouble is to get the right one: ℞. Extract opii, gr. v; plumbi acet., gr. x; acidi hydrocyanici, dil., ℥j; aquæ, ad., ℥ji; M. S.—Apply on lint to the vulva. Or, ℞. Liq. plumbi subacetat., ℥j; acid hydrocyanici, dil., ℥j; aquæ, ad., Oj.

℞. Acidi tannici, ℥ij; extracti belladonnæ, gr. x; butyr. cacao., ℥v. M.—Div. in suppos. No. xx. S.—Insert one in the vagina night and morning.

℞. Sodii biborat., ℥ij; morph. sulph., gr. vj; aquæ rosæ, ℥viij. M. S.—Apply to the vulva on lint.

Trousseau recommends—

℞. Potassii carbonat., ℥ij; aquæ, ℥iv. M. S.—Lotio.

℞. Hydrargyri chloridi mite, ℥j; adipis, ℥j. M. Ft. ungt. S.—Apply locally.

A solution of nitrate of silver (i-℥j) applied to the neck and cervical canal, so far as accessible, will often remove the pruritus even when due to pregnancy. If due to vesicular eruptions on the genitals this application should be made to the affected part.

Fox recommends the following:

℞. Sodii hyposulphitis, ℥iv; glycerini, ℥ij; aquæ dest., ad., ℥vj. M. S.—Lotio.

℞. Hydrargyri bichloridi, gr. j; acidi hydrocyanici dil., ℥j; emulsion of almonds, ℥vj.

℞. Acid hydrocyanici dil., ℥ss; infus. marshmallow, ℥v. M. S.—Apply twice daily.

℞. Sodii biborat., ℥j; acid hydrocyanici dil., ℥ij; Aquæ rosæ, ℥viij. M. S.—Use in the pruritus of old people.

℞. Ammonixæ acet., ℥j; acid hydro-

cianici dil., 3 iss; infs. tobacco, 3 viij.
M. S.—Apply daily.

McCall Anderson recommends :

℞. Potassii cyanidi, gr. vj; pulv. cocci, gr. j; ungt. aquæ rosæ 3 j. M. S.—Use as ointment.

Guerneau de Mussey recommends the following :

℞. Infs. marshmallow, 1 litre; cherry laurel water, 50.00; sodii. sub borat., 10.00.

He then prescribes an ointment to be used night and morning as follows :

℞. Glycerole of starch, 20.00; pot. bromid., bismuthi subnit, āā 1.00; hydrarg. chlor. mite., 0.40; ext. belladonnæ, 0.20.

De Savignac uses the above lotion, and then dusts the surface with the following powder :

℞. Pulv. lycopodii, 30.00; bismuthi subnitratis, 19.00; bellad. rad., 2.00.

Dr. Martineau recommends an ointment of cocaine 1 in 10.

It is claimed by German writers that this pruritus is localized on a certain small area of the mucous membrane, and that by the removal of this part by the knife we remove the cause. This, I think, would have no effect on a case dependent upon the pregnant state, a discharge, or the condition of the urine.

Mercurial Intra-uterine Injections.

In proof of the advisability of greater caution than some may think necessary in the use of the mercurial antiseptic intrauterine injections, so largely employed by some obstetricians, I may here cite from the *American Journal of Obstetrics* the history, not long since reported by Dr. Partridge, of New York, of "a case of labor that had occurred at the Nursury and Child's Hospital, in which vaginal injections of bichloride of mercury, 1 to 2,000, were used, and the patient did well for three days. On

third day she had a chill, and the house surgeon gave an intra-uterine injection of the same solution. The next day there was another chill, and the injection was repeated. This was followed by bloody passages from the bowels, and death took place. Intense colitis was found *post mortem*. Dr. Partridge referred to reports of three other cases of supposed mercurial poisoning from the same cause. The patient whose case he had related died within sixty hours from the administration of the first intra-uterine douche." At the same meeting of the New York Obstetrical Society, at which the last case was referred to, Dr. Partridge also related a case in which, by mistake, a nurse threw a bichloride injection into, the bladder instead of into the vagina and a severe cystitis was set up—quite as much, perhaps, from mechanical violence as from any special action of the bichloride.—*Dublin. Journal Med. Science.*

Faradization of the Uterus as a Hæmostatic Agent.

In the *Bulletin Général de Thérapeutique*, RAMOS gives details of a case in which a slight but persistent hemorrhage followed abortion in a multipara. After a careful examination, the absence of placental remains or tumor was recognized. All available agents, such as ergot, perchloride of iron, and plugging, failed. The patient becoming steadily weaker, electricity was tried as a last resource. One pole of the battery was placed upon the abdomen over the symphysis, and the other placed directly on the cervix. The patient had pains, and in five minutes the bleeding ceased. Three days later, hemorrhage again commenced, but ceased after a prolonged application of the battery. Under tonic and hydro-therapeutic treatment the patient recovered completely.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children,
and Obstetrics.



