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THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

Original Communications.

DIPHTHERIA—ITS TREATMENT.*

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

My duty is to say something concerning treatment; and as the subject is comprehensive beyond my time limit, I shall be obliged to make statements in a somewhat disconnected, fragmentary manner.

The premises will be conceded by the majority of those present that the disease in the early stages is distinctly local in character, for the following reasons:

1st. Marked prodromata are seldom observed before local manifestations; and in the exceptional instances germs probably lie in the respiratory passages, producing toxalbumin for absorption, sufficient time not having elapsed for gross signs to appear.

2nd. As a rule the more extensive the membrane and the lower in character, *cacteris paribus*, the more profound the toxæmia.

3rd. Absorption and consequent general symptoms occur largely in proportion to the lymphatic supply of the part initially affected; for example, adenitis is extreme in pharyngeal and nasal forms and slight in tonsillar.

4th. Although it is still in some degree a *quaestio vexata*, it is pretty generally acknowledged that the Klebs-Loeffler bacillus is peculiar to the disease; always present in the earlier stages at least, limited to the false membrane, most numerous when the attack is at its height, diminishing as the case approaches recovery, and productive of the characteristic neuroses, when the cultures are injected into lower animals, notwithstanding Virchow's contention that all bacilli, whether noxious or inert, are the same organisms, and are

products of disease, not the cause; the differences of form being dependent on the varied environment.

Hence arise the strongest reasons in all cases, even though the diagnosis be incomplete, that prompt local medication be resorted to. And first of all how had it better be applied? The sponge or cotton swab, excepting in the case of the most heroic abortive remedies, for circumscribed patches is to be avoided as being too harsh for the requirements. The brush, excepting in similar circumstances, is also objectionable; it wears the patient, and, if used thoroughly, especially when the membrane is extensive, the performance is tedious, and jeopardizing for the attendant. The atomizer is free from these defects, and the best I have found is the Magic No. 25, moderately simple in construction, fitted with vulcanized rubber, and therefore non-corrosive and durable, and so arranged as to adapt itself to the anatomical peculiarities of the throat and naso-pharynx.

Steam favors formation of mucous, mucous floats germs, shields the underlying membrane, and opposes absorption; and if impregnated with antiseptics and constantly enveloping the patient, it is not only a remedial agent, but also protects the attendant. A convenient and pleasantly aromatic combination is oil of Eucalyptus, carbolic acid, and oil of turpentine in equal quantities, an ounce of which is kept boiling in a quart of water over a spirit lamp.

The local remedies that have been vaunted as specifics, and in turn have died a natural death from inanition, are legion; but whatever differences of opinion may have prevailed concerning their efficacy, nearly all authorities, from Aretæus down to the present, have strongly forbidden forcible removal of the membrane, excepting in extreme cases of obstruction, therefore the applications are made over the diphtheric exudation.

They may be divided for convenience into three classes: 1st, the destructive or heroically abortive: 2nd, antiseptic, and 3rd, solvents of the membrane. In the first class are found acetic, lactic, citric, hydrochloric and carbolic acids, argentic nitras, an old so-called specific, chlorine and bromine; the last mentioned perhaps the best if care is taken in its application. It may advantageously be prepared according to the following formulæ:

*Read before the Ont. Med. Assoc., June, 1892.

R.—Saturated solution of potas. brom, \bar{z} ii.
 Bromine, \bar{z} i.
 Aq. destill,
 Glycerin, āā \bar{z} iv.—M.

These corrosives should be employed only in exceptional instances, viz., when the initial lesion is distinctly circumscribed, the remaining mucous membrane being of a healthy color; and even here the greatest precautions should be taken in limiting the application to the diseased parts, lest new foci be formed by destruction of tissue beyond the requirements of the case.

The most prominent of the antiseptics or 2nd class, are sulphurous, boracic, salicylic, and diluted carbolic acids, chlorate of potash, tincture of iron, permanaganate of potash, iodine and corrosive sublimate, which last may be safely used as a spray up to 1 in 2000.

A large number of remedies have been tried as solvents of the exudation, the chief ones being papoid, lactic acid and lime water, lime water and glycerine, pilocarpine and peroxide of hydrogen. The last mentioned is at present in the meridian of its glory, but it may be that in the near future its sun will go down, as has been the ignoble fate of so many of its predecessors. The application of scientific medicine is not infrequently the development of fashion, in this particular instance I myself have fallen into line behind the bell wether, and have had some experience as to the merits of peroxide of hydrogen; but although I use it frequently, I cannot say that the results are better than those I formerly met with when for several years I relied upon a mixture consisting of tannic acid \bar{z} i, glycerinum \bar{z} ss, acid carbolic η xv., Lugol's solution of iodine \bar{z} ss., and water sufficient to make one ounce.

Hydroxyl being an unstable compound, owing to the free elimination of nascent oxygen, it is imperative that it be carefully preserved and its immediate effects closely watched. Marchand's and Harvey's No. 1, are the best in the market, and should be kept in a well-corked bottle, standing on the cork, in a cool dark place; the atomizer to be emptied into the vial after each application. If no foaming is produced by its contact with the exudation, the sample should be discarded as worthless. Its action being that of powerful oxidation the strength should not exceed the require-

ments; it is usually employed mixed with distilled water from a twenty per cent. solution upwards.

In all nasal cases absorption takes place readily from the Schneiderian membrane, and the strictest watchfulness is necessary to ensure cleanliness; for this purpose the syringe, douche or atomizer may be employed with such remedies as boric acid, chlorate of potash, permanganate of potash or peroxide of hydrogen. Should false membrane be so large as to occasion obstruction to the cleansing process, the urgency of the case permits of such apparently harsh measures as forcible detachment, or boring of the membrane in order for the introduction of the lotion.

Time will not permit of a description of the operations, intubation and tracheotomy, when the larynx is involved, but a few well attested truths may be briefly stated.

1. The mortality in each is virtually equal, about 26 per cent., therefore the peculiarities of the case, not the relative merits of the operation, must determine which is to be resorted to.

2. Very young children, requiring, necessarily, a tube of small calibre, are best tracheotomized.

3. Intubation is as a rule preferable after the 5th year, and especially in adults.

4. If membrane exists low down in the larynx, it is better to open the trachea.

5. The after treatment is more exacting in tracheotomy, consequently intubation is to be chosen in the absence of skilled nursing.

6. The length of time for retention of the tube in either instance is to be determined by the rate of progress of the disease, the average being, perhaps, seven or eight days; but if at any time during this period after intubation pneumonic complications should appear, the tube must be removed to allow of expectoration.

7. To wait until symptoms of impending collapse occur is to cast unjust reflections on the means employed.

8. In every instance of contemplated operation the lungs should be as carefully examined as the circumstances will allow, and the prognosis modified accordingly.

9. The most frequent cause of fatality after operation is inflammation, in the form of bronco-pneumonia, arising from circulatory disturbances set up by the occurrence of lobular collapse dur-

ing the stage of dyspnoea; hence the danger of delay after stenosis is evident.

Microbes are tenacious of life; cultures of diphtheritic bacilli months old have been found to have poisonous properties, and it has been wisely said that remedies strong enough to destroy all the bacilli, are just as apt to kill the patient; hence the difficulty in finding specifics, and the special fitness in the case of this disease of the adage "An ounce of prevention is worth a pound of cure." Prophylaxis stands in the front rank—disease germs are fond of a weakened or diseased part. Some of the most malignant cases I have seen have been engendered on a catarrhal mucous membrane, adenomata of the pharynx, and enlarged or otherwise diseased tonsils. A physician who overlooks these predisposing causes is, to the fullest extent, culpable. I can only suggest the means of prevention:

1. Isolation of the patient perfect and continued for at least two weeks after the last vestige of the disease has disappeared.
2. Destruction of all fomites, no matter how valuable, unless such as can be boiled in a strong antiseptic fluid, preferably corrosive sublimate solution.
3. Conscientious compliance with the requirements of the Health Act in reference to reports of contagious diseases.
4. Thorough inspection of premises. In the large majority of my own cases, drainage has been found defective on the application of thorough tests.

The disease being essentially poisonous and adynamic, the constitutional treatment indicated is antiseptic, stimulating and supporting. The diet should be fluid and generous, up to the limits of digestion—for hungry lymphatics eagerly absorb, and absorption means toxæmia. The tendency is towards exhaustion, and such tonics as quinine and tincture of iron are indicated. It is a hackneyed custom to add chlorate of potash in large quantities, quite irrespective of its tendency to produce heart failure and nephritis. Prof. Wood, of Philadelphia, maintains that it is eliminated in its entirety and unaltered through the kidneys.

The muriate of iron appears to be the standard supporting remedy, and acts in two or three ways: 1st, it causes tissue tonicity, and perhaps in this

manner narrows lymph spaces, and prevents absorption. 2nd, it feeds blood corpuscles, promotes oxidation in the tissues, and thus destroys organic poisons. And, 3rd, it stimulates nervous force by increasing blood pressure in the great centres.

Stimulants are tolerated in proportion to the profundity of the toxæmia, the specific poison acting as an opponent of alcohol, just as opium is well borne in peritonitis, quinine in malaria, and iodide in syphilis, therefore, they are invariably indicated, and the directions are simple, *pro re nata*, and in kind adapted to the palate.

The leading antiseptics administered constitutionally are calomel, mercuric iodides, corrosive sublimate, up to the limit of a grain per diem, in divided doses for a child five or six years old, salicylic acid, a favorite of the late McKenzie, chlorine water and nascent chlorine, strongly recommended by Gerhard, of Philadelphia, prepared according to the formula:

Chlorate of Potash	3 parts.
Muriatic Acid	2 "
Tincture of Iron	5 "
Sprup	15 "
Water	40 "

Dose a teaspoonful diluted.

Lately sulphide of calcium has been highly spoken of, but I cannot pronounce on its merits from personal observation. It should be borne in mind that heart failure, the bugbear of the disease, is not always preceded by a rapid pulse as one would expect; if the pneumogastric is involved the pulse is frequent, but the opposite occurs if the cardiac branches of the sympathetic are affected. The remedies are absolute rest in the recumbent posture, stimulants, digitalis in small doses, musk, camphor, caffeine and strychnia, either by the mouth or hypodermically.

Seibert has been experimenting with only indifferent results with injections of chlorine water into the sub-diphtheritic mucous membrane, the fluid being introduced with a many pointed syringe, and the operation followed by a gargle of iodine, carbolic acid and water. In the *Glasgow Medical Journal*, Bannatyne speaks of injections of attenuations of the erysipelas poison, with the expectation that the product of another microbe may act as an antidote to the Loeffler bacillus;

and it is to be hoped that the problem may be solved along the same line as that pursued by Pasteur in his triumphs over hydrophobia and other dread diseases.

Amongst the complications albuminuria is not rare in the early stages, but if it persists, casts of the tubuli should be looked for, and the ordinary treatment for nephritis adopted. This is occasionally interstitial in character, and then more apt to become chronic. Adenitis, usually cervical, seldom leads to suppuration, but may leave the glands permanently hypertrophied. In the acute stage ice bags are useful, also ice taken frequently by the mouth.

I have had a few cases with extraordinary œdema of the uvula interfering with deglutition, and have found two or three applications of Monsel's solution and water in equal parts, comforting to the patient.

I have seen but one instance of diphtheritic conjunctivitis—a rare complication. It was bilateral and complete, the eyes covered as with a mask of leather; treatment was unavailing. Sloughing of the cornea and total blindness ensued. Boracic acid or other mild antiseptics should be used. The paralyzes that follow the disease are manifold, the most frequent being ciliary and ocular, glosso-pharyngeal pneumogastric, sometimes in one branch alone, and paraplegia.

The lesion in all such cases appears to be peripheral neuritis. For the purpose of obviating it, the syrup of triple phosphates might be administered during convalescence, and, in the way of treatment, a very mild interrupted electric current would be a useful adjuvant.

Secondary middle otitis is not infrequent, but requires, or admits of, no special treatment apart from that employed in acute inflammation in that part. In washing the nasal passages it is well to direct the patient to keep the mouth open in order that the fluid may not enter the Eustachian tube and perhaps carry disease germs with it.

I have refrained from quoting from experience illustrative cases, and shall close with the following reference.

A boy, aged 14, had diphtheria a year ago, followed by temporary presbyopia, convergent strabismus, glosso-pharyngeal paralysis and paraplegia. These symptoms subsided in a few months

and were followed by a very great loss of memory of facts, without aphasia, which continues up to the present. The patient being apparently well nourished and physically robust, I am at a loss to locate the anatomical lesion, and simply mention the matter as a curiosity, in the hope that some one present will solve the difficulty.

ETIOLOGY OF NARCOTIC INEBRIETY.*

BY J. B. MATTISON, M.D.,

Medical Director Brooklyn Home for Habitues; Member American Association for the Cure of Inebriety; Brooklyn Neurological Society.

Twenty-two years study and experience, compassing the history or treatment of hundreds of cases, has emphasized a belief, which candor compels me to express, that in nearly all cases of narcotic inebriety among the better class in this country, the primal and principal factor in causation is the doctor. There is a consensus of opinion from those best informed—by contact with such cases—to the same effect. It is, too, a well-founded fact that in those same cases painful, wakeful conditions have stood, most largely, in genetic relation to the morbid narcotic weed.

Granting these two facts, it goes without saying that the force and extent of professional responsibility is both active and passive, direct and indirect. Opium, chloral and cocaine are the main types of this inebriety disease, and the first is, by far, the most frequent. Of this, morphinism is most common, and the sub-dermic form the most disastrous.

The active, direct responsibility of medical men in the rise of morphine inebriety is in giving this drug often when it is not really required. Little doubt, during the last two decades, of its carelessly needless use, and as little question that this has favored its insidious advances. Akin to this, is the too prevalent practice of giving morphia when other anodynes, though perchance less speedy, would secure the same result. Still more forceful, as to direct responsibility, is the pernicious practice of advising patients to self subcutaneous morphine using. But the main measure thereof is in the patient being dismissed without full thought as to ultimate result of the opiate giving;

*Read before the Brooklyn Neurological Soc., Dec., 1892.

and failure to warn against the harm of continued using, and to insist upon—giving to this earnest personal attention—entire narcotic quitting when the need for its taking is ended. For details, see papers by the writer, "The Responsibility of the Profession in the Production of Opium Inebriety," and "The Genesis of Opium Addiction."

Chloral and cocaine inebriety—happily decreased and decreasing—owe their rise and progress to the same incautious prescribing and continuing. Added thereto, in the case of cocaine, I have little doubt, has been the mistaken, pernicious opinion of Hammond and Bosworth, as to its non-toxic, non-inebriating power. *Vide* my papers: "Chloral Inebriety," "Chloralism," and "Cocainism."

While insisting on the part played by the physician in the genesis of narcotic inebriety, I do not overlook the peculiar neurotic status, both ancestral and acquired, of these cases. Nor the facility with which this specially nervous temperament favors the use of one or other drug, as a stimulant in depressed conditions, or a calmant in the reverse. Nor do I forget that some have their rise in vicious design, morbid curiosity or other outcome of damaged *morale*. All these, however, hold second place in causation.

If these premises be correct, the weightiest deduction is this, Narcotic inebriety is a preventable disease. That I believe a fact—of large and far-reaching importance—and the pivotal point of all precept and practice along this line. The forms of narcotic inebriety are on the wane, due to wider recognition and appreciation of their cause and the danger of continuance, and to the advent of less harmful hypnotics. Erlemmyar thinks morphinism will grow worse from year to year. I am less pessimistic than he. I am hopeful and sanguine of its steady decline. But this hope will be realized only when two results are reached. First, a lessened medical use of morphine. This must be secured by teaching and example. Those whose province it is to instruct in medical lore, both in and out the schools, must rise to the need of the situation, and urge the wisdom of prevention and care. This is of paramount importance, if my belief be true, that the younger men are making most morphinists. With a wish for speedy effect and larger repute they are too apt, when called to a case of pain or insomnia, to use that

modern mischief-maker, the hypodermic syringe, without proper thought as to risk incurred. Their fathers have gained wisdom by experience—sometimes most unhappy—and, as a result, we believe the use of morphia—especially sub-dermic use—is steadily decreasing among the senior members of the profession.

With non-opiate resources of modern medicine to bring ease and sleep—never so ample as now—we feel bound to say that in most cases these first should be availed of, and the more riskful remedy held as a *dernier ressort*. And in the should-be fever cases where an opiate is deemed necessary, we have, in codeine, that which gives, largely, the good of morphine with much less risk of entailing harm. See the writer's papers: "The Prevention of Morphinism: Codeine and Narceine *vice* Morphine," and "Codeine in the Treatment of the Morphine Disease."

We have no wish to banish opium; we are not inveighing against the use of morphine. But the over-use, the needless, careless use, especially hypodermically, we decry. The risk of inebriety from this method is larger than any other. Unless urgently required, it should not be preferred. And to counsel its self-using—save under conditions peculiar or beyond control—is more than culpable, it is a crime.

Second. A lessened general use of morphine. Restrictive legislation that will restrict; making it a felony for retail druggists to sell morphine, chloral or cocaine, or to refill a prescription containing either drug, save on order of a physician. To neglect these potent measures for protection is damaging to the public and a discredit to the profession. The prevention of disease ranks higher than its cure, and in the whole realm of prophylactic medicine there are few finer fields for good work than this.

Selected Articles.

THE TREATMENT OF ANAL FISSURE, OR IRRITABLE ULCER OF THE RECTUM

There are some general rules that must always form a part of the treatment of anal fissure, to wit: to lessen as much as possible any inordinate action or detension of the bowel, and to prevent the ulcerated surface being irritated and abraded by the passage of hardened feces.

To fulfil these indications enemata or mild aperients should be employed, and the diet must be regulated, the use of bland and unirritating food being enjoined.

It is not possible to point out a diet that would be even generally applicable, as so much must depend upon the state of the constitution and the previous habits of the patient; but in general it should be moderate in quantity, yet sufficiently nutritious—what the stomach can digest with ease, and has no tendency to produce constipation.

The patient should be directed to take moderate exercise; and if the bowels are disposed to be constive, a daily evacuation should be secured by the administration of an enema of warm water, or one of rich flax-seed tea, say from half a pint to a pint, to be given every evening, preference being given to the night time as the patient can then assume the recumbent posture, which, combined with the rest, affords the greatest protection from subsequent pain.

Instead of the enema, or in conjunction with its use, the action of the bowels may be regulated by the employment of some mild aperient, such as the patient has found by experience to agree with him.

All drastic purges should be avoided, as they are more or less stimulating and irritating to the extremity of the rectum. The pain and spasm of the sphincter muscles attending the evacuation of the bowels is best relieved by the use of a suppository consisting of—

R—Ext. belladonnæ, . . . gr. $\frac{1}{8}$ to $\frac{1}{2}$.
Cocain. hydrochlor, . . . gr. $\frac{1}{4}$ to $\frac{1}{2}$.
Ol. theobromæ, . . . gr. x.

Misce et ft. suppositoria j.

One suppository to be employed about half an hour before the enema is given, or a movement of the bowels is expected.

Instead of the suppository, an ointment of extract of conium may be used, as recommended by Mr. Harrison Cripps.

R—Ext. conii, $\bar{5}$ ij.
Olei ricini, f $\bar{3}$ ij.
Ung. lanolini, . . . q. s. ad. $\bar{3}$ ij.—M.

A small quantity of this ointment should be smeared over the parts five minutes before a passage, and again after it has occurred.

The various methods of treating anal fissure may be divided into the *palliative* and the *operative*.

Palliative Measures.—Palliative treatment will meet with success in cases in which the fissure is tolerably superficial and of somewhat recent origin, especially when there is no great hypertrophy of the sphincter muscles.

Allingham states that the curability of the lesion does not depend upon the length of time

that it has existed, but rather upon the pathological changes it has wrought. This same authority states that he has cured fissure of months' standing by means of local applications when the ulcers were uncomplicated with polypi or hæmorrhoides, and when there was not marked spasm or thickening of the sphincters.

It is essential to the success of the treatment of fissure, especially by local applications, that rigid cleanliness of the parts be maintained; for this purpose the anus and the adjacent portions of the body should be carefully sponged night and morning, and after each stool, with hot or cold water, the temperature being regulated to suit the patient's comfort.

In applying the various local remedies it is necessary first to expose the ulcer to view, and to anæsthetize its surface with a four or eight per cent. solution of cocaine hydrochlorate, well brushed in with a camel's-hair pencil. The application may have to be repeated once or twice, at intervals of about five minutes, in order to obtain the desired anæsthetic effect.

If any ointment has been used about the fissure, the anus should be subjected to a hot water doche before using the cocaine, as cocaine will not exert its anæsthetic influence on a greasy surface.

Among the different remedies that have been used in the local treatment of fissure of the anus may be mentioned the following: Nitrate of silver, acid nitrate of mercury, fuming nitric acid, carbolic acid, sulphate of copper, the actual cautery, and chloral hydrate.

Of these topical applications the nitrate of silver is the best. Its effects are various; it lessens or entirely calms the nervous irritation, which is so important a factor in producing spasmodic contraction of the sphincters; it coats and shields the raw and exposed mucous surface by forming an insoluble albuminate of silver; it destroys the hard and callous edges of the ulcer, and tends to remove the diseased and morbid action of the parts.

The form in which the salt is usually employed is in solution (from ten to thirty grains to the ounce). The stick caustic may be also used. To accomplish the best results, the solution should be used once in twenty-four or forty-eight hours, according to circumstances. It may be applied by means of cotton attached to a silver probe or to a piece of wood.

The application is made by separating the margins of the anal orifice with the thumb and index finger of the left hand, and introducing into the anus the probe charged with the solution. The argentic nitrate is to be applied to the fissure only; a few drops are all that is required. If thorough local anæsthesia has been induced by the use of cocaine, the application of the silver salt produces

little, if any suffering, for by the time that the anæsthetic has lost its effect, the otherwise acute pain of the nitrate of silver will have passed away.

After each application the part should be smeared well with an ointment of iodoform (thirty grains to the ounce). The odor of that drug may be disguised by the addition of a few drops of the attar of roses. Iodol may be used instead and in the same way, but I prefer the iodoform, owing to its anæsthetic qualities. After the ulcer has been touched once or twice with the silver solution the effect will be, in the cases that are benefited by this treatment, a considerable mitigation of the pain from which the patient suffered when at the closet and afterward, and the sore will present a healthy, granulating appearance, and will slowly contract in size.

Some authorities speak highly of the use of acid nitrate of mercury, fuming nitric acid, carbolic acid, the actual cautery, etc., but their employment, with the single exception of carbolic acid, is attended with more suffering than follows the use of the nitrate of silver or the simple operative treatment presently to be described. Furthermore, the application of these remedies is not so certain to effect a cure as either of the two procedures just mentioned.

The daily introduction of a full-sized bougie made of wax or tallow, will sometimes act beneficially in cases of fissure by stretching the sphincter and producing such an amount of irritation as will set up a healing process in the ulcer. An application of cocaine or belladonna ointment should be made to the part previously to the employment of the bougie.

In children and young persons, unless a polypus or a polypoid growth, or a congenital contraction, complicates the fissure, it is almost always curable without operation. In children suffering from hereditary syphilis, numerous small cracks around the anus are common, and they cause much pain. Mercurial applications and extreme cleanliness soon cure them, but they will return from time to time unless anti-syphilitic medicines be taken for a lengthened period.

Operative Treatment.—If, after a fair trial of the simple measures that have been recommended, the fissure does not heal, or if, as described by Allingham, the base of the ulcer be gray and hard, and if on passing the finger into the bowel the sphincter be found hypertrophied and spasmodically contracted, feeling, as it often does, like a strong india-rubber band with the upper edge sharply defined, or if there should be a polypus, polypoid growth, or any other complication, local treatment will not effect a cure and operative interference will be rendered necessary.

There are three methods of repute to be considered in this connection; incision, forcible dilata-

tion, and a combination of these two procedures, viz.: dilation and incision.

Incision.—A fissure can be cured by making an incision through the base of the ulcer and a little longer than the fissure itself, so as to sever all of the exposed nerve-filaments and muscular fibres along the floor of the ulcer. In a certain proportion of cases this operation will meet with success, but it is not so certain and radical as the third method to be described.

It has the advantage over the other two operations, however, of being nearly or entirely painless under local anæsthesia produced by cocaine, and, therefore, when general anæsthesia is contra-indicated, or is refused by the patient, this method is worthy of trial.

Forcible Dilatation.—This is the operation recommended by Recamier, of Paris; Van Buren, of New York, and others.

It consists of the introduction of the thumbs into the bowel, back to back, and then forcibly separating them from each other until the sides of the bowel can be stretched as far out as the tuberosities of the ischia. It is well to place the ball of one thumb over the fissure and that of the other directly opposite to it, in order to prevent the fissure from being torn through and the mucous membrane stripped off. As pointed out by Allingham, it is well to repeat the stretching in other directions until the entire circumference of the anus has been gone over. In this manner, by careful and thorough kneading and pulling of the muscles the sphincters will be felt to give way, and will be rendered soft and pliable. This procedure should always be practiced with the patient thoroughly under the influence of an anæsthetic, and it should occupy at least five or six minutes. The operation is a perfectly safe one, but as it is no less severe than the method by incision, and as it fails to effect a cure in some cases, I can see no advantage in adopting it instead of the more satisfactory and always successful plan of treatment—combined dilatation and incision. It may be found preferable, however, in some cases on account of the prejudice of patients against the use of the knife.

Rapid forcible dilatation for the cure of fissure is a method now tried by some surgeons and apparently with a fair measure of success.

The patient is placed under the influence of nitrous oxid gas, and the sphincters are quickly stretched either by manual force or else with instrument power. For my part, I do not see how a satisfactory dilatation can be accomplished in this way. When the cure of fissure by dilatation is attempted under ether-anæsthesia—the muscular system being completely relaxed—the thorough paralysis of the sphincters occupies several minutes before they are felt to yield, and the strain

upon the operator's thumbs incident to the operation, becomes very tiresome, to say the least.

With anæsthesia produced by nitrous-oxide, we obtain a suspension of muscular action, but no general muscular relaxation; hence, to suspend the function of the sphincters to such a degree as to remove the cause which prevented the healing of the ulcer, viz.: the constant motion of the muscular fibres, we must exert a force which would be both detrimental and dangerous to our patient's welfare. Therefore, I cannot believe that this plan of treatment will be commended by the conservative surgeon.

Dilatation and Incision—This method I believe to be a radical and unfailing cure for anal fissure, if skillfully and carefully performed. The following are the details of the operation: The bowels should be thoroughly cleansed by the previous administration of a dose of castor oil and an injection; after which, under ether-anæsthesia, the sphincters should be dilated in the manner previously described. The resulting hyper-distention of the anus not only affords rest to the parts, by the temporary paralysis of the muscles, but also, as pointed out by Van Buren, it stretches the sensory nerves of the anus, so that they cease for the time being to convey impressions, the result of irritation, to the nerve fibres exposed in the floor of the ulcer; in the same way that we find forcible stretching of the sciatic and the sensory branches of the fifth nerve, relieves neuralgia.

Mr. Charles B. Ball states that this theory of the temporary cessation of the function of the sensory nerves following the hyper-distension of the bowel receives considerable support from the fact which is frequently observed, that the first time the bowels move after the dilatation there is entire immunity from the pain which before was so severe.

The first step in the operation being accomplished—the dilatation of the sphincter—it will enable us to obtain a complete view of the lower end of the rectum and the exact limits of the ulcer. The fissure is now kept exposed by the fingers of the left hand, and a probe-pointed bistoury is drawn through its base, from within outward so as to incise the subjacent muscular fibres at right angles to their course. It is well to begin the incision a little above, and to end it a little below the ulcer, so as to insure its being carried quite through the sore.

Another method is that advocated by Mr. Syme, and is performed by transfixing the ulcer beneath its base with a small, sharp-pointed, curved bistoury, and cutting from without inward. This procedure endangers wounding the opposite side of the bowel unless it is protected.

The subcutaneous division of the sphincter, as recommended by some authorities, is not a satisfactory method, and is mentioned solely for the

purpose of condemnation. It is not only uncertain in its results, but it is also painful, and in more than one instance has been followed by abscesses.

In cases in which the fissure is situated in the median line of the rectum, either anteriorly or posteriorly, care should be observed in making the incision, for the reason that wounds towards the coccyx split and separate the fibres of the external sphincter only, and are difficult to heal, while anatomical considerations will deter us from using the knife freely anteriorly; in the male from the bulb of the urethra being in close proximity, and in the female the shortness of the perineum, and the knowledge that division of the anterior fibres of the sphincter in women is so frequently followed by incontinence of feces.

After any of these the patient should keep the recumbent position, and it is better to confine the bowels with opium, at least for the first forty-eight hours. After three or four days a laxative, followed by an enema, may be given, from which time daily alvine movements should be secured. In seven or eight days the patient can begin to move about, but for at least two weeks he should avoid standing too long on the feet. No dressing is required, except a small quantity of iodoform, which should be dusted over the ulcer, and the parts should be bathed well with warm carbolized water, night and morning, to remove offensive discharges.

Peroxide of hydrogen (Marchand's) may be used instead of the carbolized water.

In the majority of cases of fissure, healing progresses with great rapidity, but occasionally, after the wound has healed to a certain extent, healthy action stops, and the appearances of an anal ulcer are again produced. Should this occur, it will generally be found that some complication has been overlooked, such as a fistulous passage running from the ulcer beneath the mucous membrane of the bowel.

The presence of such a passage might be suspected, if the discharge from the part is out of proportion to the size of the ulceration.

Another complication consists of a small hypertrophied tag of membrane, or polypoid growth, situated at the base of the fissure, or on some other portion of the rectal wall.

The removal of these complications will aid the patient's recovery.—Lewis H. Adler, M. D., in *Times and Reg.*

THE TREATMENT OF PUERPERAL FEVER.

Elevation of temperature during the puerperium is, strictly speaking, puerperal fever, although the term is usually understood as applying to fever having an infectious origin. Since the recognition

of the microbic origin of puerperal fever, some individuals have gone so far as to insist that all fevers occurring during this state are due to infection; but I am convinced that fever of a non-infectious character occurs during the lying-in period, due to trifling conditions, as constipation, emotion, mammary engorgement, etc. The correct interpretation of the nature of a fever in a puerperal patient is often a perplexing matter, and an immediate opinion cannot, in many instances, be given. If, however, after careful investigation the fever seems not to be dependent upon emotion or reflex irritation from any cause, a safe rule of practice is to conclude that it is of an infectious nature and must be treated accordingly.

The dividing line between judicious boldness and meddling interference is not always clearly defined in dealing with these conditions. If a dose of bromide and chloral to control nervous excitability, a dose of salts to clear the alimentary canal, or an application of lead-water and laudanum to an engorged breast, will reduce a fever, it is certainly unjustifiable as well as unscientific to direct attention exclusively to the genital tract upon the supposition that the fever is necessarily due to infection.

But it is equally unphilosophical, and vastly more injurious to the patient, for the doctor to try to convince himself that the fever is of a non-infectious character, simply because he fears to invade the parturient tract. How often it happens that, upon seeing a patient on the third to the fifth day after labor developing fever, although fearing sepsis, we instinctively cast about us for a possible explanation of the condition which will relieve our fears as to its dangerous nature.

The diagnosis of septic infection does not depend upon any special distinguishing symptom, but must be determined by a broad, comprehensive survey of each case. In many cases sepsis occurs in a most insidious manner, with a temperature not over 99° or occasionally a trifle below normal, with absence of abdominal tenderness, and with no noticeable change in the character of the lochia, nor evidence of any marked departure from the patient's usual standard of health, until after the process has been well inaugurated and a fatal termination is unavoidable.

But, as it is my intention to consider the methods of treatment particularly, we will not consume any time in a description of the disease, which, fortunately, is comparatively rare since the introduction of antiseptic midwifery.

The axiom that "Prevention is the best treatment," has no more forcible application than in this instance. When we contemplate the many cases reported, and the many others not reported, of death occurring in patients under constant observation—temperature and pulse-rate being taken at intervals of three or four hours—yet

dying in spite of the most rigorous treatment in from one to three days after the first signs of poisoning appeared, the most skeptical will scarcely fail to see the value of prophylactic measures.

Without going too much into detail, I would advise that the accoucheur remove from himself (whether on his person or in his clothes) every possible source of infection at the time of delivery and during subsequent visits; that abdominal palpation be practiced more freely, and vaginal examinations be as few as possible; that no vaginal examination be made, either before or after delivery, without disinfection of hands; and that immediately after delivery of the placenta a vaginal douche of 1:1000 solution of bichloride of mercury be given, followed by a douche of boiled or distilled water. Instruments or hands, before being passed into the uterine cavity, must, of course, be subjected to rigid disinfection, preferably by the use of bichloride solution 1:1000 in strength, the hands having been previously scrubbed with soap and water, and the vagina douched with the bichloride solution. An intra-uterine douche should always be given if the uterine cavity has been invaded by instrument or hand. The solutions which may be used for this purpose are, of creolin, 2 per cent.; carbolic acid, 5 per cent.; thymol, 1:1000; or bichloride of mercury, 1:2000—followed in each case by a douche of distilled or boiled water. A quart of disinfectant solution should be used, and about half that quantity is sufficient for the clear-water douche.

Daily douching of the vagina during the puerperal state would not be necessary if we always had to deal with perfectly normal labors in healthy women; but as these conditions are so frequently absent, it is best to resort to the routine practice of giving the vaginal douche of bichloride of mercury, 1:2000, morning and evening.

A practical matter of importance in this connection is an inspection of the syringe to be used for this purpose. Unless this instrument be perfectly clean, we may readily impart poison and thwart the end we attempt to achieve.

Careful search should be made, just after delivery, for lesions of the vaginal canal and cervix uteri, and all extensive lacerations should immediately be repaired. Up to the present time, I have not operated upon the freshly torn tissues of the cervix, but believe that such a procedure is proper. While there is some force in the objection that immediate repair of the cervix tends to exhaust the patient just at a time when she needs repose, such an objection should not hold when we reflect that a laceration may be the source of an exhausting hæmorrhage or a breeding-ground for poison germs. If we are always prepared for such emergencies, the time element can be almost eliminated. Reports of the primary operation on the cervix are to the effect that union (despite the

lochia) takes place just as readily as it occurs in the primary operation on the perineum.

Failure on the part of a physician to immediately repair lesions of the vagina and perineum should be regarded as malpractice, for the evils resulting from a tear at this point are greater, so far as septic infection is concerned, and the *modus operandi* of repair much simpler, than in cases of cervical laceration. Anæsthesia is unnecessary in these operations. A pledget of absorbent cotton soaked in a 10-per-cent. solution of cocaine, packed into the lacerated parts, after thorough irrigation with bichloride solution, will benumb the tissues sufficiently to prevent acute pain. Sutures of catgut or silk-worm-gut may be used for the cervix, while the same may be employed for the vaginal rents, with either silk or silver wire for the external perineal sutures.

The prophylactic measures advocated by Péraire seem to me to be not only unnecessary, but dangerous, except, possibly, in cases where we know that gonorrhœa has been recently contracted, or where the patient is exposed to a high degree of infection of any kind. Such measures consist in the taking of a vaginal douche, morning and evening, from the beginning of gestation, of a mild biniodide of mercury solution; the vulva is to be washed with soap and water and then covered with a pad of borated or salolized cotton. One death has been reported, attributed to the use of vaginal douches made of weak sublimate solutions; the douching had been employed for a week, when peritonitis developed, followed by abortion and death.

When, however, from neglect of precautionary measures, or in spite of them, puerperal infection has occurred, our plan of action should be well understood. I will not delay you with an attempt to show how septic infection may occur. I will simply say that my own views are opposed to the theory of "idiopathic puerperal fever," and that I believe the condition always arises from extraneous heterogeneous poisonous material, and, therefore, is preventable.

If we regard the vagina and uterus as the seat of purulent infection—the hot-bed of cultures of streptococci—the most rational plan of treatment is to dislodge and remove these germs and their ptomaines as thoroughly and as speedily as possible.

From a clinical standpoint, it is convenient to divide puerperal septicæmia into two classes: the first comprising those unfortunate cases in which the microbes have invaded the system and caused profound septic infection which resists all efforts to control; and the other class comprising those cases in which a comparatively small number of microbes, or only ptomaines, have been absorbed, and the infecting medium can be removed. It is not always possible at first to distinguish between

the two classes, but the results of treatment speedily determine between the necessarily fatal and the curable cases.

The treatment consists in curettage of the endometrium, followed by copious disinfectant douching and swabbing. The details of the treatment are exceedingly important, as upon their observance the result largely depends. The instruments which I prefer are a sharp curette, tenaculum, bivalve speculum and speculum forceps, Kelly's or Lentz's uterine irrigating tube, and either an écouvillon or an applicator with absorbent cotton wrapped around it. Anæsthesia is not necessary, as the pain inflicted is trifling. After placing the patient in the lithotomy position, and cleansing the external genitals and vagina with soap and water, followed by a 1:1000 bichloride of mercury solution, the speculum (which, with the other instruments, has been immersed in a 1:2000 sublimate solution) is introduced, and the vaginal walls and cervix uteri are examined for diphtheritic patches—and if any are found, as frequently happens, they are removed by the curette and their bases saturated with sublimate solution. The vagina being thus cleansed, the tenaculum is hooked into the cervix to steady the uterus, and the curette introduced and passed up to the fundus, starting with the scraping at a definite point and making a complete tour of the cavity, curetting down to the muscular tissue, which can readily be detected by both the tactile and aural senses. The French style this characteristic sound produced by the curette after removing the endometrium the "*cri utérin*."

It is important to pass the curette well into each cornua and thoroughly detach any irregular prominences, and also to pay special attention to the region of the internal os. I have found fragments of placenta and membranes to adhere very closely to these portions of the uterine cavity, and they can more readily escape detection in these localities.

Some French surgeons have recently urged the use of a special form of curette for the purpose of more easily and more thoroughly scraping the orifices of the fallopian tubes. While delicacy in the use of the curette is imperative, boldness is equally required, and unless the curettage accomplishes the detachment of adherent masses and shreds it fails in its purpose and had better be omitted. For this reason I prefer the sharp to the dull instrument, and rarely resort to the latter.

After the curettage, the *dbéris* and blood are mopped out of the speculum, and the intra-uterine tube is passed into the uterus and pressed up to the fundus. The syringe being attached to one end, inject a quart of a 1:2000 sublimate solution, followed by a distilled or boiled-water injection, which passes out of the return tube and is conveyed into a receptacle on the floor by the bed.

If the return stream is clear, the douching apparatus is withdrawn, also bringing with it some shreds and blood clots not removed by the curette. The *écouvillon* or swab, dipped into sublimate solution, is now introduced and swept over the entire uterine cavity with the intention of brushing out any fragments which may have been scraped off the uterine wall by the curette but not washed out by the irrigation.

It is the custom of some surgeons to introduce, after this, a pencil of iodoform or pack a strip of iodoformed gauze into the cervix and vagina; but this is not necessary.

The entire operation can be completed in about fifteen minutes. Hæmorrhage is rarely profuse, and can be checked promptly by thorough curetting or by packing the uterine cavity with a strip of iodoformed gauze. No serious conditions have been reported as being dependent upon curettage. Patients occasionally have slight pelvic pain for a day, but as a rule the temperature falls and improvement is noticeable almost immediately.

The plan usually advised is to employ the curette only after irrigation has been tried and found to be insufficient, but experience has caused me to pursue the above plan, as I believe that curetting properly done cannot cause damage nor add to the risks; and as the instrument has to be employed oftentimes after douching alone has failed, it might as well be used at the beginning and thus give the patient a better chance by making the first treatment effective and curative. Septic infection frequently progresses with alarming rapidity, and twenty-four hours can easily turn the balance against the patient.

I recently saw, in consultation, a case of puerperal septicæmia which illustrates the value of preceding irrigation by curettage. At the time of my first visit the temperature was moderately high, first rapid, tongue furred, and skin clammy. Insomnia, anorexia, anxiety, and general weakness were increasing. There was no evidence of peritonitis. Irrigation of the uterus was promptly done, and a large collection of putrid matter, looking like mud mixed with coal dust, and very offensive, was washed away. When all odor had disappeared and the return water was clear, the irrigation was suspended and patient put to bed. She soon fell into a refreshing sleep, with amelioration of all her symptoms for about six or eight hours. Twenty-four hours later I was again asked to see the patient, as her condition had grown worse than at first. I now introduced the curette, and was surprised to remove a number of fragments of placental and membranous tissue in an advanced state of decomposition. The pieces were small, but fetid, although the lochia had lost their offensive odor since the previous irrigation, and even the secretions of the cervical canal, as withdrawn on a swab, were almost odorless. This fact would

seem to indicate that it is not safe always to conclude that septic infection is not taking place if the lochia fail to be fetid, for some decomposing fragments near the fundus may be the source of infection and yet fail to indicate their presence by an offensive discharge.

This plan of treatment is, of course, chiefly applicable to cases of septic endometritis, and is useless when profound general sepsis has occurred. That curetting can thoroughly remove fragments from the uterine cavity, has been proved by autopsies.

The objections used against curettage are, first, the difficulty of making, at the beginning, a differential diagnosis between sapræmic and streptococic infection. To this objection we may safely apply the rule: When in doubt, curette.

The second objection—which has been forcibly put by Fritsch—is, that the seat of infection is not in the decidua nor in the contents of the womb, but rather in the parametrium, as the result of microbic absorption from the lacerated tissues of the cervix. That some cases of puerperal infection occur in this manner, there can be no doubt; but it is certainly short-sighted to fail to see other sources of poison in the parturient tract.

In the case referred to above, there was a badly lacerated cervix, which was covered with a diphtheritic membrane; this diphtheritic formation was removed at the first, when the uterine cavity was irrigated, and the underlying tissue was thoroughly mopped with strong sublimate solution. But while this treatment removed that one patch of poison, and the cervix remained healthy afterwards, there was another seat of infection near the fundus of the uterus, which was scraped away next day by the curette.

In those cases which are not seen until after the poison has invaded the deeper or peri-uterine structure, it is obviously foolish to confine the treatment to scraping and douching the uterine cavity. In such cases incisions through the vagina into the parametrium, or cœliotomy, will effect a removal of the purulent collection.

The third objection to the use of the curette is the danger of perforating the womb. To obviate this disaster, some surgeons advocate the use of the dull curette; for reasons previously stated, I prefer the sharp instrument, but admit that it is dangerous in the hands of those unaccustomed to its use. The uterus is usually hard and firm enough immediately after labor or at any time during the puerperium for this style of treatment.

When curettage and irrigation fail to relieve the symptoms inside of forty-eight hours, it is safe to conclude that the poison has invaded deeper tissues, and other measures of treatment must be instituted. If peritonitis has developed, or we suspect a collection of pus in the pelvis, an exploratory incision through the abdomen should be

made and the appendages and surrounding tissues examined. If there is a parametric abscess it should be removed by the aspirator or some other means better adapted to the individual case; the pelvis well irrigated with distilled water; and drainage used or not, according to circumstances.

A case of incipient puerperal peritonitis was recently reported by Laphorn Smith, in which a successful result followed hysterectomy, after douching and other paliative measures had failed to reduce temperature and improve other symptoms. In this case the temperature had ranged between 104° and 105° before the operation, but fell to normal on the fourth day after removal of the womb. The stump was treated by the extra-peritoneal method, covered by boracic acid, and turned back on the twelfth day. No drainage was employed, and the convalescence was uninterrupted.

Hysterectomy, both by the vaginal and by the supravaginal method, has been performed for this condition on several other occasions. Removal of the uterine appendages alone would never be justifiable in puerperal septicæmia, as the infection of the tubes would be secondary to the uterine infection.

Just when to cease curettage and irrigation and resort to bolder measures, is in some cases a most difficult problem to solve. The plan of action has been summarized by Smith in the report above referred to, as follows: Daily records of the temperature of confinement cases should be taken, and upon the first rise of temperature a vaginal douche should be given. If the temperature does not fall speedily, the douche must be made intra-uterine. If no improvement occurs in twenty-four hours, curette, irrigate, and apply tincture of iodine to the cavity of the uterus. If these measures fail and peritonitis develops, perform an exploratory incision; and if there is no other evident source of infection, remove the uterus.

Although hysterectomy is a dangerous operation, its mortality record is steadily decreasing as experience grows, and it is certainly far better to extend to patients the benefits of such an operation than allow them to die without this chance, unless the proofs of general septic infection are indubitable.

The treatment of puerperal septicæmia would be incomplete without the employment of general sustaining and tonic measures. The free exhibition of stimulants with iron, quinia, and strychnia must be rigidly enforced. Free purgation must be speedily induced upon the first indication of peritoneal inflammation. But no reliance should be placed in medication with antipyrin, salol, or any other antipyretic or antiseptic drug when it is possible to locate and mechanically remove the seat of poison.—Dr Carey, in *Am. Lancet*.

ADENOID VEGETATIONS OF THE NASOPHARYNX.

Sir Morell Mackenzie defines this trouble as "minute glandular vegetations growing from the vault and sides of the naso-pharynx, causing the voice to be dull and nasal in tone, the respiration to be buccal, frequently inducing deafness by setting up inflammation of the middle ear, and, in the case of children, often giving rise to the constitutional phenomena which follow prolonged nasal obstruction." I have selected this subject for a paper before this society, composed largely of practitioners of general medicine and surgery, because it is one of great importance not only to the rhino-laryngologist, but to every member of the medical profession. We look around us, and upon every side we see patients who have suffered, during a lifetime, from adenoid vegetations in the naso-pharynx. When I meet these patients on the streets, a single glance being sufficient to diagnose the pathological condition, I often wonder why the general practitioner is not more interested in these cases. I can account for it only upon the fact that their attention has not been called to the well-known conditions produced by this mass of pathological product in the vault of the pharynx.

Probably the first adenoid growths ever seen were those observed by Czermak in 1860, who described them as small tumors at the upper part of the naso-pharynx, which resembled a "cock's comb." In 1865 Sir Andrew Clark, Voltolini, and Lowenberg recognized and published reports of cases. But it was not until 1868 that Meyer, of Copenhagen, gave a complete account of granular disease in the pharyngeal region under the name of "adenoid vegetation." He fully described the symptoms and progress of the affection, and gave a mode of surgical treatment, which has been but slightly modified up to the present time. He was not the first to discover adenoid vegetations, but he was the first to realize their importance and fully describe them. Meyer had at that time (1868) examined two thousand children in the National School of Copenhagen, and had met with the affection in one per cent. of the cases examined. Since Meyer's time numerous writers and observers have furnished important contributions on the same subject, which have fully confirmed his original deductions. This condition is frequently spoken of as a hypertrophy, a hyperplasia, or enlargement of the pharyngeal tonsil, or, as it is sometimes called, "Luschka's tonsil." At the back of the pharynx, near the base of the skull in the normal condition, we find a thickening of the mucous membrane amounting to the one-tenth of an inch. Luschka calls this thickening a tonsil, because it resembles in structure the so-called tonsils of the fauces. This so-called pharyngeal

tonsil is composed of simple and compound follicular glands, and is simply a folding in of mucous membrane, a duplication and reduplication of normal mucous membrane; on the surface there are small prominences and numerous depressions and crypts.

Of the function of this glandular structure we know but little. We do know that when it becomes enlarged and has been removed there is no loss of function that we are able to detect.

The enlargement of this tonsillar structure frequently takes place. We generally find it in children. It is seldom developed after thirty years of age. It occurs in children more frequently than in adults, for the same reason that all glandular structures in children are more prone to take on morbid changes. Heredity seems to have some influence, as we frequently find several children in the same family with adenoid vegetations. Pathologically we would be interested in knowing whether this enlargement is a true hypertrophy or hyperlastic in its nature, or whether it be papillomatous in its character. But clinically this makes but little difference, as the symptoms and treatment would be the same in either case. Numerous causes are given for its growth,—a debilitated constitution, scrofulosis, nasal and naso-pharyngeal catarrh, etc.,

In mild cases there is only a slight enlargement, with such symptoms as we have in naso-pharyngeal catarrh, except more aggravated in its form. From this slight thickening we have it increasing until it fills the entire naso-pharynx, and in some cases protrudes into the fauces, producing complete obstruction to the pharynx, preventing nasal respiration and compelling mouth-breathing. The symptoms of adenoid vegetation will, of course, depend upon the amount of obstruction produced. Nature designed that the naso-pharynx should be free, and serve as a means of communication between the five openings which enter it. Among the most common symptoms we have deafness, either slight or very marked, and one that is liable to become permanent, unless relief is afforded.

The openings of the Eustachian tubes are situated at the upper portion of the lateral walls of the pharynx, and are only separated from the pharyngeal tonsil by a small groove, called the fossa of Rosemüller. Deafness is produced by the enlargement pressing upon and obstructing the opening of these tubes, and a secondary inflammation follows. Adenoid vegetations stop up the posterior nasal openings according to the degree of the growth, causing mouth-breathing. Nature intended the nose as a preparatory department to respiration. Inspired air is freed from dust and germs and receives its proper amount of moisture, and is raised or lowered to the proper temperature by passing through the nose. Even if the nasal cavities are in a normal condition nasal respiration cannot take

place, on account of the plugging up of the naso-pharynx. The muscles of the growing child become distorted by constantly keeping the mouth open day and night. The action of these distorted muscles upon the soft and pliable bone of the child's face, together with the absence of admission of air to the accessory nasal cavities,—the frontal, sphenoidal, ethmoidal, and maxillaries.—causes a deficient development of these sinuses, giving a flat appearance to the cheek-bones, producing a peculiar physiognomy characterized by the open mouth, vacant stare, and almost idiotic expression of countenance. The hanging lower jaw and constant mouth-breathing, together with deficient development of the bones constituting the nasal septum and with augmented atmospheric pressure upon the roof of the mouth, cause a high-arched hard palate. A narrow lower jaw, with protrusion of the front teeth, is usually associated with long-continued and excessive adenoid vegetation; the vault of the pharynx in growing children. The non-use of the muscles of the wing of the nose prevents their complete development, so that the nose is either flat or pinched, or its alæ are distended; the muscles acting upon the corners of the mouth and eyes give them a drawn, contracted appearance.

Dr. Casselburry, of Chicago, says, "Not only do these unfortunates *look stupid*, but they really *are stupid*, and exhibit abundant evidence of mental hebetude, with inability to fix the attention to learn, to memorize, or to reason, the whole evidencing an impairment or cerebral function which Dr. Guye, of Amsterdam, has recently described under the name of 'aprosxia nasales.' Indeed, we hold it not illogical to believe that in extreme cases of long duration, associated, perhaps, with deafness, such alteration of cerebral function might ensue as to result in absolute idiocy."

My observation has been that children with adenoid vegetation are usually as bright intellectually as other children, and that the dulness is only apparent, on account of the deafness and stupid expression of countenance, which are relieved by operation. In infants the first symptom to attract attention is, as a rule, "hard" breathing or snoring during sleep, sometimes producing attacks of dyspnoea, resulting in enlargement of the lungs. These attacks frequently resemble spasmodic croup, or may even be mistaken for laryngitis. In explanation of this it is a well-known fact that the mouth in infants is almost always closed during sleep, and that the tongue is brought in contact with the hard palate, and that even in those rare cases where the lips are open no air passes through the mouth. As the air cannot pass through the nostril we have an explanation of the cause of these troubles. In older children it is the dull voice and deafness which generally attract our attention. A chronic catarrhal condition exists, a

yellowish-green secretion may be seen trickling down the back wall of the pharynx. In some cases we have asthma. In cases of long standing we frequently have deformity, such as "pigeon breast," "barrel-shaped chest," and "flat chest." Time will not permit me to speak of the "dead" voice of Meyer, nor of the effect of adenoid vegetation at the vault of the pharynx upon the singing voice. These are of the greatest importance and will be the subject of another paper.

If you will but think of some children in families under your care you can call to mind children that have an anæmic appearance, stupid expression, drooping eyelids with the corners drawn, open and distorted mouth, projecting teeth, arched palate, pinched nostrils, the frog-nose, and the deformed chest, with mental dulness, loss of hearing, and nasal obstruction, with all their distressing symptoms.

By means of posterior rhinoscopy we are able to examine these growths. They are seen to partly or completely cover the posterior nares. They are generally of a pale color, but are sometimes pink, and even bright-red. As a rule, they are rounded in form and vary in size from a hempseed to a bean, but are occasionally much larger, and often occur in clusters. In some cases they hang down from the vault and back of the pharynx like stalactites; sometimes they are flat, like the granulations often seen on the posterior walls of the oro-pharynx; in some cases they resemble a cushion, extending from the posterior nares along the roof and upper part of the naso-pharynx to within a short distance above the level of the soft palate, with an irregular surface, produced by deep crypts and depressions. In other cases the surface will be smooth and regular. In cases where it is impossible to use the rhinoscope, as in very young children and in refractory ones of older years, we have to depend upon the sense of touch; by passing the index finger behind the uvula the growth can generally be easily felt, when they are found to be smooth, soft, and yielding to the touch, and prone to bleed. The sensation communicated to the finger is very much like that produced by placing the finger in a mass of earth-worms, the sensation of touch being in great contrast to the feel of the smooth, regular, and firm surface of the naso-pharynx.

Treatment.—In mild cases of adenoid vegetation of the naso-pharynx alterative and tonic medication, with local applications of antiseptics and astringents, in connection with good hygiene, will sometimes do much to relieve them. In the great majority of cases it will be necessary to resort to more active treatment. Surgery must come to the rescue in these cases. It gives us immediate, certain, and radical cure. They may be destroyed in some cases by the application of chromic or trichloroacetic acids, but as these acids

are apt to deliquesce and run down the throat, sometimes down to the larynx and do damage to those parts, I seldom use them except in cases in which there is but slight thickening of the membrane. An application of sixty grains of sulphate of copper to the ounce of water will give relief in mild cases. By some operators the electro-cautery is used. As there are a number of objections to its use, I seldom use it in these cases. Rumbold grasps the growth with naso-pharyngeal forceps and produces pressure, but not sufficient to lacerate the parts; by this method absorption is promoted. Others grasp the growth with the naso-pharyngeal forceps and tear it off.

Instead of giving the methods of each operation. I will give the methods I resort to in these cases. In some cases, especially adults, I prefer operating without anæsthetics. This can be done without much pain if the parts are thoroughly cocaineized. But in cases of children and very nervous patients I use an anæsthetic. The operation is a bloody one, and it is horrifying to a highly-sensitive child to hold them by main force, pry open the mouth, and force instruments into the naso-pharynx. All this can be avoided by general anæsthesia, which gives time for a thorough examination and operation. After the child has been anæsthetized he should be held in the lap of an assistant, facing a good light. Then the mouth-gag should be introduced and managed by a second assistant, who stand behind the patient and steadies the head. As the soft palate is in the way, we have to use a palate-retractor. A number of these have been devised, but I prefer a piece of small rubber-tubing introduced through both nostrils, grasping the ends with forceps as they appear in the oro-pharynx, pull forward and tie the ends back of the head. This method pulls forward the palate on either side, and gives plenty of room for examination and treatment. It cannot become displaced, and can do no injury to the parts. Now the operator places himself in front of the patient, introduces his index finger into the naso-pharynx, and makes a thorough examination of the cavity, as well as the character and extent of the growth.

In some cases the vegetation is so soft and frail that the entire mass can be removed with the finger-nail, or with a spoon-attachment placed over the end of the finger. If I find it too firm to remove in this way, I introduce Gradle's post-nasal cutting forceps, with which I cut away portions of it without producing the slightest injury to the surrounding parts. After removing all I can with this instrument, I use Bishop's modification of Bocker's curette, having various sizes and shapes; with this instrument you can remove every portion of the growth and leave the membrane smooth. Plenty of blood will flow during the operation, which should be pushed as rapidly as possible, as bleeding soon ceases after completing operation.

After the operation the child should be kept quiet, or in bed, if possible, for a few days, until all the surgical condition has passed off. It is best to remove all the growth at one sitting. This can be ascertained by the introduction of the finger. The curette should be used till the surface feels smooth and firm. If small portions remain they are very readily absorbed by the application of the sulphate of copper solution before mentioned. A second operation is seldom required, but if the growth returns it should be removed again.

Some operators only remove a small portion at each sitting, introducing the post-nasal forceps once every third or fourth day. The administration of the syrup of iodide of iron, in fifteen to thirty-drop doses three times each day, seems to benefit these cases, especially anæmic ones.

Is it right to let these patients go through life with loss of hearing and the deformities of face and chest, and with the other inconveniences and dangers of mouth-breathing, when such a simple operation will give entire relief?—an operation devoid of danger. After such an operation in a child nature will restore the deformity in most cases. The cause being removed, nature has a chance to do her work. In some cases the habit of mouth-breathing has become so persistent that when the patient falls asleep the mouth will open. This can be corrected by placing a bandage under the chin, and another around the forehead, fastened to the first bandage at the side of the head.—Dr. North in *Inter. Med. Mag.*

SYMPHYSIOTOMY.

Not only in the line of patriotism have the events of the present season suggested the part Italy has played in the world's history, but the rise or rather revival of an obstetrical operation has called attention to her contributions to medical science.

Symphysiotomy is not a new procedure. Previous to 1860 it was done with disheartening results. Suggested by Pineau in 1598, and first practised upon the living female in 1777, it was performed eighty-five times up to 1858 with a mortality of about thirty-three per cent. After the latter date it fell in abeyance, and was not revived till 1866, when Morisani of Naples re-introduced the operation, and while his pioneer work has perhaps been surpassed by the brilliant results of other workers, and in more recent years, he still lives to witness the results of his earlier labors.

It is to that Nester of midwifery-statistics, Dr. Robert P. Harris, of Philadelphia, that we are indebted for a concise summary of what has already been accomplished in this direction. In a recent paper before the American Gynecological

Society (see *Phil. Med. News*, Oct. 8, 1892, page 416), he relates that of the first forty cases, from 1777 to 1804, twenty-five women recovered and fifteen died; of the children twelve were saved and twenty-eight lost. The results of a second series of about the same number of cases were practically the same.

In 1863 Morisani commenced his work, and after three years of practise upon the cadaver, was successful in 1866 in saving both mother and child in his first case. Other operators entered the field and up to 1886 eight women and five children were lost in eighteen cases. Since 1886 thirteen operators had delivered forty women in this manner, six of the women enduring two operations with success and thirty-five of the forty children were saved.

The operation has undoubtedly a great future, and it remains for us to carefully study both its limitations and technique. According to Charpentier it is applicable to and indicated in contracted pelvis, not sufficiently deformed to forbid version or the use of the forceps. We should have a true conjugate diameter of from two and three-fourth to three and a third inches. Here, after the artificial induction of labor, we have a choice between version, the forceps, and symphysiotomy. Spinelli had the remarkable result of recovery of the mothers in all of twenty-four operations, and the loss of only a single child. Antiseptic precautions were carefully employed, the cutaneous incision was closed with cat-gut, and dressed with bichloride gauze. After delivery the patient had daily three vaginal douches of solution of mercuric chloride, at first from one to two thousand, afterward one to four thousand. The pubic joint was usually firmly united in from four to six weeks. During that time the patient remained in bed, wearing a firm bandage about the pelvis. No case of permanent non-union is reported, the joint, as a rule, becoming strongly knit together.

The list of operators has now become quite large. In addition to those named above it includes Tarnier and Porak of France; Freund and Leopold of Germany, and Jewett, Hirst, and Broomall of Philadelphia, the latter a woman. During the last two years then, there have been thirty-four operations done in Italy, France, Germany, and America. As far as is known all the mothers have been saved and but two children lost.

Dr. Harris traces, with his accustomed clearness, the causes which have led to such brilliant success. He finds them largely in rigid antiseptics, and in the employment of subcutaneous section. As a result there is an absence of the dreadful lameness which was once urged against the procedure, the symphysis being readily made to reunite firmly under proper fixation of the pelvis.

It is true that in four instances there was produced a fistula of the bladder or urethra, which Morisani claimed should not occur under proper precautions.

Harris does not regard the operation as applicable on a Robert's or Naegeli's pelvis, or in one where ankylosis has resulted from hip disease. Cervical cancer and obstructions from exostoses, tumors, etc., are also contra-indications. In the living woman two and one half inches of separation are a safe average, and this amount can very rarely be exceeded with safety.

There will be a difference in opinion as to how far symphysiotomy can supplant other obstetrical procedures. Hirst says (*Phil. Med. News*, Oct. 15, 1892): "It is applicable in contracted pelvis with a conjugate over sixty seven *mm.*, and, therefore, should be the method employed in almost all cases of the kind in the country, for a greater contraction of the pelvis is rarely seen among us. It should, moreover, almost entirely displace the Cæsarean section for a relative indication. It is a much simpler, an easier, and a safer operation. This is also the opinion of Leopold, who cannot be accused of prejudice against Cæsarian section, with his brilliant record in that field."

Harris (*loc. cit.*) has considered the question of choice between the three incisive methods of delivery in cases of contracted pelvis: the improved Cæsarean, the Porro-Cæsarean, and symphysiotomy and gives the technique of the latter. Obstetric surgeons are likely to prefer the improved Cæsarean section, especially as it is possible, under most favorable circumstances, to reduce the maternal mortality to six per cent.

On the other hand the preference of abdominal surgeons who are "successful in the Cæsarian operation will remain in favor of that procedure in contrast with symphysiotomy. The greatest need in obstetric surgery, at present, is some method of procedure by which labor can be successfully terminated in contracted pelvis without destroying the life of mother or child, a method available amid the surroundings of ordinary obstetric practice. In a well-appointed hospital, or with the co-operation of one or two intelligent colleagues, the Cæsarean operation will always give brilliant results, but if symphysiotomy in connection with induced labor, version, and the use of forceps, shall prove a resource which the individual practitioner of obstetrics can employ unassisted by professional help, it certainly will find a field of usefulness. It seems applicable to those cases in which it is often difficult to decide that an abdominal delivery is absolutely necessary."

Hirst (*loc. cit.*) describes the technique of the operation as follows: "The technique of symphysiotomy is simple and easy. After thoroughly cleansing the field of operation and disinfecting

the vagina as well, a short vertical incision is made on the abdominal wall, reaching to about three quarters of an inch above the symphysis. The attachments of the recti muscles are severed just sufficiently to admit one finger. The forefinger of the left hand is passed under the symphysis, and upon this as a guide the curved knife of Galbiati is inserted until its beak projects under and in front of the symphysis. The joint is then cut upward and outward. To avoid injury to the urethra, a metal catheter is inserted and pressed by an assistant downward and a little to the right, while the knife is placed a little to the left; but with Galbiati's knife I should think that there is little likelihood of cutting the urethra or the plexus of veins in its neighborhood. I at first thought that an ordinary probe-pointed, curved bistoury would serve my purpose well enough, but I quickly laid it aside, and was glad to avail myself of Galbiati's knife, at the time one of the three, I believe, in the country.

"As soon as the joint has been severed, the wound should be covered with iodoform-gauze, and then the child extracted with forceps, or allowed to be delivered naturally, as seems best in the individual case. I should, I think, almost always prefer the forceps. It is well to have the trochanters supported by assistants during the passage of the child through the pelvis, so that the sacro-iliac joints shall not be injured.

"As soon as the delivery is completed the wound is sewed up, the lowest stitch, if desired, passing through the top of the symphysis. How the whole symphysis can be stitched up, as Leopold claims to have done, I do not understand. After closing the wound and dressing it, rubber adhesive strips are placed around the hips and lower abdomen, and a tight binder applied. The symphysis unites surprisingly, and three weeks after the operation the patient can walk as firmly and as well as ever."

Already a discussion has begun on the proper name for the operation. Forbes of Philadelphia (*Med. News*, Oct. 20th), says:

"The cutting of the junction of the two pubic bones, I humbly submit, should be called *pubeotomy*. This operation is now performed for the purpose of widening the pelvic diameter, thereby accomplishing, in certain cases of difficult labor, a safe delivery to both mother and child, as has been of late so well and so frequently demonstrated.

"Now, *symphysiotomy* is a term that may be applied to any symphysis, and we have several of them in the human body: thus, the sacro-iliac symphysis is not far from the symphysis of the pubes.

"The name *pubeotomy* is illuminating; it is restricting in its meaning to the part cut; it is euphonic and in strict keeping with a proper scientific nomenclature."—*Epitome of Med.*

FEEDING IN FEVERS.

In opening the discussion this evening, I wish to say that I am here to learn rather than to teach, and to find out from my colleagues who are present whether they do not think that it is common in practice to-day to adhere too rigidly to older methods in feeding fever patients. I refer not only to the continued fevers, but to the eruptive fevers and those that occur with many varieties of inflammations. In following other physicians in the hospitals to which I am attached, *i.e.*, in succeeding them in attendance each year when my term of duty begins, I always find a certain number of fever patients, and I usually find that they are allowed only fluid foods. Of these foods milk is the most important. Milk seems to be generally regarded as a fluid, and a very harmless-looking fluid it certainly is when it is put into the stomach; but if it is to be digested and assimilated at all, it is very soon transformed into a bulky solid after it reaches the stomach.

There are many patients to whom milk in any form is repugnant, and to some of these it is exceedingly difficult of digestion. It has been my practice for many years, in all kinds of illness, but especially in the presence of fever, to pay regard to the appetite and desire of the patient. If a patient is really hungry solid food of a properly selected kind and in judicious quantity will rarely disagree with him. With hospital patients it is not always easy to ascertain whether they are really hungry. Many will profess hunger without being hungry because they suppose that they will recover more quickly if they eat freely. To them, of course, other solid food than milk should not be given, but if they are genuinely hungry I believe it is safe to presume that the stomach is prepared again to resume its function, that gastric juice is again secreted, and that properly selected albuminous food in judicious quantity will be digested if you give it.

We are accustomed, I think, to have too great a dread of doing harm at the site of lesion in the ileum in typhoid fever by giving solid food. If I am correct in my opinion as to the inference to be drawn from hunger in a fever patient, there is even less likelihood of causing damage to an ulcerated ileum by giving finely divided egg or beef or chop to such a patient than by giving him milk; and my experience seems to justify the inference. It has been my practice for years to allow albuminous foods of these descriptions to such patients, even before the fever leaves them, under these conditions. I have at present under treatment several patients with typhoid fever whose temperatures reach 101°, 102°, and 103° F., daily, who are hungry, and who are receiving such solid food once a day. So far as I am aware

I do not have a larger percentage of relapses or hemorrhages or other serious complications or accidents in my practice than I did before I adopted this plan, or than my colleagues who have not yet adopted it.

Even tea and coffee and beer are not allowed by many doctors; in my hands they have been very useful when given to those who have been accustomed to them in health and desire them in fevers. Well-cooked oatmeal is another very nutritious food that I allow under the same conditions as meat.

When the appetite fails, in consequence of the presence of fever, meat becomes more repugnant than any other food as a rule. Then it would be most injudicious to force it upon a patient; but the returning appetite, the awakening desire for meat, I believe to be nearly always an indication that the stomach is prepared to take care of it. That much is gained by maintaining the nutrition of fever patients needs not to be mentioned to the members of this Society. Of course, the necessity of giving an abundance of water is not to be lost sight of.

What I have said of feeding typhoid-fever patients is equally true in other forms of fever. It is, in my judgment, a mistake to withhold solid food merely because a patient has fever, and it is incorrect to regard milk as a fluid food, as our knowledge of the physiology of digestion teaches us. Our knowledge of the form in which milk often appears in the *faeces* emphasizes this latter fact. Milk will always remain the most serviceable general food in disease, and especially in fever, largely because it is swallowed with much less effort than attends the taking of other foods; because it is the cheapest of the foods; because it requires little or no preparation, and because it is so commonly well borne. But where it fails to nourish the patient, where it is not well borne, where it cannot be taken, for any reason, it is well to remember that efficient adjuncts and substitutes are within reach.—*Geo. L. Peabody, in Medical Record.*

SICK-ROOM DIETETICS.

It is rarely easy, and almost always very difficult, to persuade the sick to take nourishment in sufficient quantity; and the successful nurse must be rich in expedients. Her persuasive power must be great. She must be patient, and yet firmly persistent, until her whole duty is done. There are certain general rules for her to observe. A few of them we will give. All foods for the sick should be of the very best quality, well cooked, palatably seasoned, and attractively served. A savory dish will always sharpen the appetite of one in health; and it must have a stimulating in-

fluence upon a debilitated patient, to whom the flat and insipid preparations usually offered are loathsome and even nauseating.

Surprise is frequently a useful element in the dietetic treatment of the sick. Something unexpected will often be acceptable, when, were the patient consulted and advised of what was being prepared for him, it would take away all appetite for it. Cooking in the sick-room is, of course, always forbidden; nor should the smell of food be allowed to reach the patient if it is possible to prevent it. Absolute neatness in the serving of food is a prime consideration. There is more to the patient in clean napkins, spotless china, etc., than many think. A slovenly nurse is out of place anywhere. If the doctor directs that certain foods should be given hot, he means that they should be hot, and not merely warm, in which condition some are very insipid.

Occasionally one sees the nurse tasting the food in the presence of the patient,—a most unpardonable habit. No more food should be at one time taken into the sick-room than is likely to be eaten, and whatever is not should be at once removed. Nurses often leave it in sight, in the hope that the patient may want it a little later; but almost invariably they are disappointed. It is quite a common thing for the physician to find milk in a glass or pitcher standing near the bedside of his patient; and often the appearance of the glass is such that even a person with the strongest kind of a stomach would not care to drink from it. Of all foods, milk probably takes up impurities the easiest. Hence to keep it exposed to the air of a sick-room or any other bad air is simply to render it unfit for use. A nurse with anything approaching neatness would never allow a glass which has held milk to be used a second time without careful washing and rinsing. Some consult their own convenience altogether too much in feeding the sick.

Food ought to be given at regular intervals, when possible. If given punctually at fixed hours, a habit not only of taking, but of digesting it, will soon be acquired; for our most automatic functions are influenced by custom. In this connection there is a rule which nurses should never violate. It is that of keeping for the physician an accurate record of the quantity of food taken at each feeding. As to whether or not a patient should be aroused from sleep for food depends upon the disease from which he suffers, and upon his condition. The physician, of course, must advise. As a general rule, it is not best to awaken a patient for the purpose of feeding except in desperate cases. In feeding helpless patients, the food must be given slowly, and in quantities easily disposed of. See that each morsel be swallowed before another is given. A drinking tube is always of great assistance;

and it is better to use that, when possible, than the spoon, not only for the reason of convenience to the nurse and comfort to the patient, but because he will often take larger quantities in this way than he can be induced to in any other. Drying the lips and the corners of the mouth after feeding is a necessary precaution against sore lips, which not infrequently result from want of this little care.—*The Trained Nurse.*

MEDICAL NOTES.

Prof. Hare recommends aconite in cases of *Hypertrophy of the Heart.*

Prof. Keen favors the opening of a *Felon* with the knife as soon as possible for the surgeon to do so.

Arsenic is recommended by Prof. Hare in cases of *Anæmia* due to a reduction in the amount of hæmoglobin in the blood.

Prof. Hare says that in cases where digitalis will have no effect, and is indicated, the administration of *Adonidine* will often give good results.

Prof. Wilson says that in cases of *Gouty Rheumatism* the anti-rheumatics yield poor results. Blistering will not be of any value for permanent relief, but may give temporary relief. He advises the administration of cod-liver oil in the earlier stages, but not in the later. In the later stages he prescribes some arsenical preparation, preferably Donovan's solution, beginning with five drops three times a day, increasing one drop every other day, until the physiological effects of the drug are experienced.

Prof. Wilson, in cases of *Lead Poisoning* recommends the following treatment: A laxative dose of the sulphate of magnesium every day and ten grains of the iodide of potassium three times a day.

Prof. Wilson says that *when the temperature is taken in the groin, ½° should be added.* He also favors the taking of the temperature in the axillary space, rather than in the mouth, as being the more accurate method of determining it.

Prof. Wilson, in the earlier stages of *Influenza*, prescribes antipyretics, but in the later stages he orders quinine to be given. He especially recommends turpene hydrate as an efficient and useful expectorating agent in this disease.

Good results have been obtained in cases of *Whooping Cough*, treated by Prof. Hare, by administering one or two grains of antipyrine every hour in children. It tends to decrease the number of coughing spells.

In puncturing the chest on account of an

accumulation of pus in cases of *Empyema*, Prof. Keen recommends that it be done no lower than the eighth or ninth intercostal space. If the operation be done lower than this, there exists great danger of perforating the diaphragm on account of its convexity.

Prof. Hare recommends the following prescription in cases of *Gastro intestinal Catarrh in Children*:

R.—Ammonii chloridi. . . . gr. ij.—
 Ext. glycyrrhiz. fluid, . . . gtt. v.
 Aquæ destillat., . . . q. s. ad f 3j.—M.
 Ft. sol.

Sig.—To be taken at one dose.

He also highly recommends this same prescription, but four times as strong, in cases of *Bronchitis* in the second stage in adults. In both cases the dose is to be repeated every few hours.

PRURITUS ANI.

No local affection is more annoying and troublesome to a patient than this disease, and often the physician will be put to his "wit's end" to find means of relief. This disease is characterized by an intense itching, burning and lancinating pain, in and around the anus, the pain often coming on in paroxysms, usually being much worse at night, after the patient has retired. The affection often extends to the surrounding tissues, the germs multiplying rapidly and burrowing in different directions, irritating the sensitive nerves, causing most intense itching. In a large number of cases, we find associated with it fistula in ano—hæmorrhoids, irritable fissure and small ulcers, each adding to the misery of the patient. A patient suffering from this trouble usually exhausts all local means he knows or ever heard of. He refrains from consulting a physician as long as he can, consequently he has become nervous, emaciated, and I may, say, almost skeptical, as regards getting well.

The treatment of this trouble is varied, every physician having his own formula, besides every case must be treated on its own merits from the conditions presented. That which I have found most successful in a considerable number of cases, is as follows: When a patient comes to consult me, I endeavor to get his confidence and instil him with hope, the bowels are freely opened with a saline purge, or calomel, and he is directed to report for thorough examination, when such complications as fistula, hæmorrhoids, fissure, etc., are carefully sought for. Of course when any of these are found, they each call for their respective treatment. In a simple case of pruritis ani I order an injection of a solution of the following, which I

have found to be a good antiseptic and local stimulant:

R.—Listerine, 3 iv.
 Glycerine, 3 vi.
 Acid carbol, gtt xx.
 Aqua, ad 3 vi.

M. Sig.—3ss injected to rectum once daily.

It is necessary to medicate the internal sphincter and rectum in all cases of pruritis as there is more or less irritation of these parts. I also use the different ointment and antiseptic solutions, with good results in some cases and none in others. Lately I have employed tincture of iodine. Before using, however, I direct the patient to have the bowels thoroughly moved and an injection of warm soap and water to be taken, the external parts to be washed and dried. Then I apply the iodine thoroughly to the diseased surface; if it is too severe, a small amount of tr. opii can be added, or the parts may be covered by vaseline protected by absorbent cotton.

After having made from four to six applications, I begin to find my patient rapidly improving, or nearly recovered. I direct him to keep the parts clean, use the injection once daily, keep the bowels open, take plenty of outdoor exercise and eat good, nutritious food. Complications, if, present must be treated according to the surgical methods.

—*Med. and Surg. Report.*

CURRENT MEDICAL NOTES.

Yawning as a Therapeutic Measure, Dr. O. Naegeli.—In certain affections of the throat, such as acute pharyngitis and catarrh of the Eustachian tube with pain in the ear and deafness, excellent results may be obtained by making the patients take many times a day a series of successive yawns. There is an almost instant improvement in the symptoms especially of the pain. The movement of the muscles in the act of gaping acts as a sort of massage.

Hydrastis Canadensis in treatment of the Vomiting of Pregnancy.—In four successive cases of persistent vomiting, a Russian gynæcologist, Dr. P. Fedorow, has obtained rapid and complete success by the administration of the fluid extract of *hydrastis canadensis* in doses of 20 drops repeated four times a day. The drug acts, according to the author, by lowering the blood pressure, by relieving the uterine congestion and by calming hyperexcitability of the vaso-motor centres of the gastrointestinal tube.

Cerebral Tumor twice Extirpated with success, Prof. Erb, *Wiener Med. Presse*.—A man of 47 years affected with clonic spasms of the arm, leg and face on the left side. Later, there was hemi-

paralysis of all the left side. A diagnosis of a tumor of the right central convolutions was made, the patient trepanned, and a glio-sarcoma of the convolution was found anterior right central; this was extirpated as extensively as possible. After the operation the paralysis became sensibly less; the convulsions disappeared completely to reappear eight months later, with less intensity. A year after the first operation the trepan was again employed; the tumor, which had again grown; was again extirpated as deeply as possible. The convulsions and paralysis amended, but have not disappeared completely.

Treatment of Zona—Brocq employs the following:

Boric acid,	gr. xv.
Oxide zinc,	
Powd. starch, aa,	gr. xxx.
Albolene,	ʒ iss.
Lanolin,	ʒ ii $\frac{1}{4}$

By means of a needle previously passed through the flame open carefully all the vesicles of the zona; then wash the parts with boric water containing a little alcohol; cover with the above paste; powder with starch and spread over the whole a thick wad of tow. If the pain is too great add muriate of morphine or cocaine to the above formulæ.

Creasote in the Scrofula of Children.—Dr. J. Sommerbrot, of Breslau, has obtained excellent results in the treatment of scrofula by means of creasote in *high doses*, either in the pure state (in drops which are taken in milk or wine), or mixed with cod liver oil (in capsules). In children less than seven years old the treatment is begun with three drops of creasote a day, gradually increased to eight and even twelve drops. In children over seven years old it is easy to attain in the course of seven or eight days a daily dose of 15 grains. It is seldom necessary to exceed the latter dose, but it can be done without inconvenience if required.—*N. Y. Med. Abstract*.

DEATH UNDER CHLOROFORM.—Mr. F. Mortimer Rowland, M.B., Resident Medical Officer at the City Infirmary, Birmingham, has forwarded us the following report of a case of death under chloroform in that institution: M. S., aged 57, was admitted on November 9th, under Dr. Carter, suffering from ascites, which was thought to be complicated by a tumour (?cystic) in the right pelvic region, for which it was decided to operate. For this purpose, she was transferred to Mr. Jordan Lloyd; and on November 12th, the heart having been found to be apparently healthy, chloroform was administered on a piece of folded lint. Chloroform was given in preference to

ether because of an asserted liability to pulmonary trouble. The patient took the anæsthetic perfectly well, and was in no way excited, respiration continuing evenly and deeply, and at normal rapidity up to the time when the skin incision had been made, when quite suddenly, and without warning, she became livid, made a few shallow gasps, and breathing ceased. The heart was examined instantly, and no sounds could be detected. The pupils were not dilated, being about a line in diameter. The tongue was well forward between the teeth during the administration. The head was lowered over the end of the table, and artificial respiration, both by Sylvester's and Howard's methods commenced, but no air could be made either to enter or leave the chest. Insufflation of the lungs was tried without effect, tracheotomy was then performed and insufflation again attempted, though again without effect. Heart puncture made within a few minutes of the onset of alarming symptoms showed the cardiac muscle to be absolutely inactive. Chloroform from the same bottle had been administered the day previously, and was given to another case immediately afterwards without any disturbing effect. The amount administered in this case was not measured accurately, but could not have exceeded half an ounce, and the patient was completely, but not deeply, under when alarming symptoms arose. It is thought that respiration and circulation ceased simultaneously, but that the symptoms were due to respiratory cessation, aided by the upward displacement of the diaphragm from the abdominal fluid. At the *post-mortem* examination the cardiac condition was not such as could be recognized by auscultation, there being no valvular lesions, nor was the condition of the muscle such as could have affected the duration and tone of the first sound. Dr. Rowland calls particular attention to the following: (1) The normal size of the pupils; (2) the position of the tongue; (3) the sudden development of the condition; (4) the lividity of the face throughout in the entire absence of obvious signs of laboured breathing; (5) the early arrest of the heart's action as discovered by auscultation and puncture; (6) the complete failure from the first to make air either enter or leave the chest by any artificial means.—*Brit. Med. Jour.*

CHLOROFORM IN THE TREATMENT OF TYPHOID FEVER.—According to the *Lancet*, Dr. P. Werner has treated 130 cases of typhoid fever with a one-per-cent. solution of chloroform, the employment of which was suggested by Behring's observations of the germicidal action of chloroform upon the bacillus. Werner gave a tablespoonful of the solution every hour or every two hours during the height of the disease, and for some days after the temperature became normal. In all cases in

which this treatment was adopted before the tenth day great improvement was manifested; the tongue did not become brown, diarrhoea and tympanitis gradually disappeared, there was no tendency to led sores, and relapse was very rare. His observations agreed with those of Steppe, who used the drug in 1890 in this disease. Possibly we may have in this a desirable substitute for the so-called Brand treatment, of which Osler says in his recent work: "To transfer a patient from a warm bed to a tub at 70° F., and to keep him there twenty minutes longer, in spite of his piteous entreaties, does seem harsh treatment, and the subsequent shivering and blueness look distressing. A majority of our patients complain of it bitterly, and in private practice it is scarcely feasible."—*N. Y. Med. Jour.*

**A NEW METHOD FOR THE CULTURE OF DIPH-
THERIA-BACILLI IN HARD-BOILED EGGS.**—All who have had experience in the diagnosis of diphtheria by culture-methods agree in praising their accuracy and promptitude. Unfortunately, the general practitioner, who must feel most of all the need of some accurate method for the prompt diagnosis of doubtful cases, does not seem disposed to avail himself of the new process, and the prophecy of Roux and Yersin, that the method would come into general use, appears still to be far from fulfilment. Thinking that the chief obstacle lay in the difficulty of obtaining serum for the culture medium, M. Sakharof recently suggested a simple plan by which slices of hard-boiled eggs, cut with a sterilized knife and placed in sterilized tubes, could be made to replace the serum.

Of this method I have no personal experience, but should imagine that the main objection would still exist, as the physician might not have test-tubes about him at the time when they were most needed. I have, during the past two months, made use of a method which may be regarded as a modification of Sakharof's, and which does away with the necessity both of test-tubes and the preparation of media before they are actually needed for use. I employ hard-boiled eggs, from which a part of the shell is removed with ordinary forceps, after being tapped so as to break it. In this way shell and shell-membrane can readily be peeled off from one extremity (by selecting the narrow extremity the air-chamber is avoided), leaving a smooth, glistening, moist surface, which offers a most tempting spot for making cultures. These are made, as in the case of serum, by touching the diphtheritic exudation with a sterilized needle and drawing the latter lightly from three to six times across the exposed white of the egg. Instead of the regulation platinum needle mounted in a glass rod, I employ either an ordinary needle or a bit of silver suture-wire held in an artery

forceps. To guard the culture against contamination the egg has only to be placed upside down in a common egg-cup; it can afterward be wrapped in paper and transported, if necessary. The interior of the cup can be sterilized, if desired, by allowing a flame to enter it for a second or two, though I have not found this necessary, as the nutrient surface does not come in contact with the inside of the cup. The egg and shell are, of course, both sterilized by the act of boiling. Five minutes' boiling suffices, and if the operation has to be done "while you wait," the egg can be cooled in a still shorter time by placing it in cold water. Strict attention to aseptic details is unnecessary, as the diphtheria-bacillus outstrips in its growth the contaminating organisms likely to lead to confusion. The appearance of the diphtheria-colonies at the expiration of twenty-four hours is the same as when they are grown in serum, but I have found the growth even more rapid, so that a colony is already visible in twelve hours. Confusion with micrococci is, of course, to be guarded against. The reliability of this method seems to be the same as that of the methods of Loeffler and E. Roux. I have found one bacillus which attains visible dimensions within the same period, but as this also grew on blood-serum in the manner characteristic of the diphtheria-bacillus, the great value of the method here described is not invalidated by that fact.

Although this minor modification of a now well-tried procedure might enable it to be employed by those destitute of laboratory outfits, I do not think it likely that this means of diagnosis will be utilized by physicians not habituated to laboratory methods. It may be of interest to state here that the constant temperature of about 35° C., needful to insure the rapid and characteristic growth of the diphtheria-bacillus, can readily be obtained by placing in a cupboard or box with the culture, a large jar or pail of warm water, which is renewed from time to time, thus making an impromptu thermostat.—Wyatt Johnston, M.D., Montreal, in *Med. News.*

NOTES ON "ANGINA PECTORIS."—*Potain* describes many varieties of this disease. Some are neuroses; others neuralgic or related to affections of the cardiac plexus. These neuralgic cases may be primitive or symptomatic of an affection of the heart or large blood vessels; others are sympathetic. Finally, the most important are those associated with defective circulation in the heart, due to stenosis of the coronary arteries. There are cases of angina which do not depend upon stenosis of coronary arteries, as the autopsy shows, but *Potain* has never known a case of death due to angina which did not present stenosis of coronary arteries. On the other hand, he had never found a case of marked stenosis of both coronary arteries

in which, during life, there were not attacks of angina.

In cases where the nervous plexus of the heart is primarily affected, death never occurs from the angina itself. In cases of stenosis of coronary arteries nutrition of the heart is not affected, but its functional activity. During unusual exertion a corresponding increase in the blood supply of the heart is demanded, but as this supply is limited by the stenosis of the coronary arteries, a local asphyxia of the cardiac muscle supervenes, resulting in angina pectoris. In a few minutes, the circulation being restored by rest, the cardiac muscle regains the normal condition. Other conditions favoring the occurrence of the paroxysms are: difficult digestion, over-eating, emotional causes, etc. Neuralgic cases of angina are sometimes associated with rheumatism or gout, but rarely so. Anginal attacks often occur at nights, with agonizing substernal pain propagated into the left arm. The attacks come without apparent cause, and, after lasting for a minute to half an hour, or three hours or more, cease spontaneously. The attacks recur irregularly, but during the intervals the patient is able to run or undertake any exertion without provoking attacks of angina or anything more than slight dyspnoea. In such cases there is no danger to life. In other cases there is neuritis of the cardiac plexus, more or less allied to an aortic affection. There is then a continuous substernal pain, increasing at times to paroxysms, but never absent in the intervals.

Signs of aortic disease will be found in these cases. Budor, in his observation with regard to the effect of obliteration of the coronary arteries on the nutrition of the cardiac walls, found that in one-fourth of the cases there are supplemental coronary arteries, which run mostly in the upper part of the ventricles, the collateral circulation in which may sometimes prevent myocardial degeneration. Huchard gives the following table of differential diagnosis between true angina and hysterical pseudo-angina:

<i>True Angina.</i>	<i>Hysterical Pseudo-Angina.</i>
Most common between forty and fifty years.	At every age, even six years.
Most common in men. Attacks brought on by exertion.	Most common in women. Attacks spontaneous.
Attacks rarely periodical or nocturnal.	Often periodical and nocturnal.
Not associated with other symptoms.	Associated with nervous symptoms.
Vaso-motor form rare. Agonizing pain, and sensation of compression by a vice.	Vaso-motor form common. Pain less severe. Sensation of distension.
Pain generally short duration; attitude; silence; immobility.	Pain lasts one or two hours; agitation and activity.
<i>Lesion:</i> Sclerosis of coronary artery.	Neuralgia of nerves.
<i>Prognosis:</i> Grave, often fatal.	Never fatal.

Huchard discusses the *prognosis* of angina:— Sudden death may occur during the course, or at the end of a painful paroxysm, or, by sudden syncope unattended by pain. Anginal patients are very liable to syncope; the patient falls as if struck by lightning. In other cases death is not so sudden, but rapid, and may be attended with symptoms of asphyxia instead of syncope. In other cases the disease may be terminated by inter-current affections. The predisposing causes of sudden arrest of the heart in angina are probably lesions of the cardiac ganglia and local ischæmia of the myocardium; the exciting causes are spasmodic contraction or thrombosis of the coronary arteries.

Treatment.—Huchard gives iodide of potash for three or four years in doses of forty-five to sixty grains daily, taking care to suspend it for eight or ten days each month. In rheumatic cases sodium salicylate, rest, even temperature, and dietetic care are always important. The inhalation of nitrite of amyl (this drug relaxes the peripheral arterioles, lowers the blood pressure, and relieves the heart). Nitro-glycerine and hypodermic injection of morphia are also useful for the same purpose, and act much in the same way. Hot applications to the chest, faradisation of the cardiac region, with internal administration of diffusible stimulants, belladonna, and small doses of opium have been recommended.—Jas. D. Staple, M. R. C. S., in *Hosp. Gaz.*

ON APPENDICITIS, AN ANALYSIS OF SIXTY-EIGHT CASES, AND A SUMMARY OF THE CONDITIONS REQUIRING OPERATION.—Appendicitis is the result of a catarrh of the cæcum extending to the appendix, the secretion being retained; or the cicatrization of a typhoid or other ulcer may cause retention; or inflammation may be caused by an impacted foreign body or fecal concretion. Sometimes a gangrenous patch may be found in the appendix without any obvious reason. An analysis of the cases admitted into the General Hospital, Birmingham, during the last seven years, shows that they have been 68 in number. Of these 7 died; a mortality of 10.3 per cent. In 40 of the cases there was a well-marked turn in the right iliac fossa, but of these only 4 had well-marked abscess, and in only one of the 4 was the presence of suppurations marked by œdema and redness. Fluctuation was made out in two of the suppurating cases. Relapse was exceptional, happening only 5 times, and of these, only one patient came to operation, and in this case concretions were found in the appendix. In the 7 patients who died, only once was the cæcum the seat of the disease; in all the others the appendix was the starting point. One of these has already been referred to as a relapsing case, and of the remaining 5, 3 were admitted with advanced peritonitis. The analysis

of these cases appears to show that operation is required only in exceptional cases, and ought not to be made the rule.

Cases requiring operation may be classified into three groups :

1. Those in which pus can be diagnosticated with something like certainty.
2. Those in which, from the acuteness of the symptoms, perforation or gangrene of the appendix may be regarded as imminent, if it has not already happened.
3. Those in which prolonged rest, blistering, etc., fail to prevent relapse.

In Class 1 the indications for operation may be: The presence of a distinct tumor increasing in size despite treatment; increasing tenderness, hectic temperature, and perhaps redness, œdema, or fluctuation. The operation consists in cutting down on the most prominent part of the tumor, evacuating the pus, and removing the appendix, if it presents itself easily, and is found to be diseased. The abscess sac will generally be found adherent to the abdominal wall, so that the general cavity of the peritoneum is not opened. The cavity must be drained.

In Class 2 the attack generally has a very acute commencement, pain is very marked, and tenderness of McBurney's point extreme. Tumor there may be none to be felt, unless the patient is examined under an anæsthetic. The temperature will generally be elevated to 102° or 103°, and the pulse will be unduly quick in proportion to the temperature; at the same time the patient looks very ill. These acute symptoms continuing, and especially if there is even a beginning of distention, operation should be resorted to,—and this is especially true of children. An incision should be made in the right semilunar line, pus evacuated if it is found, the appendix removed if this can be done without any great disturbance of parts. The greatest care should be taken to prevent fouling the general cavity of the peritoneum. The wound should be closed, except for the space occupied by a glass drainage tube.

In Class 3 if prolonged rest in bed with blisters and salines fails to give relief, especially if there be a succession of relapses, operation is called for on much the lines laid down in Class 2, but operation should not be resorted to until rest has had a thorough chance of effecting a cure.—Barling in *The Med. Press*.

CREOSOTE IN PHTHISIS.—In a new communication on this subject the writer reaffirms the convictions expressed by him in previous papers as to the great value of this remedy. He finds that it relieves cough, lessens expectoration, improves nutrition, and lessens the number of bacilli even to extinction. The physical signs show evidences of

a lessened area of damaged pulmonary tissue, and even the occlusion of small cavities.

The objections to the use of creosote are few; and usually obviated by a little judgment. Occasionally the stomach becomes intolerant; shown by headache, inappetence, and a sluggish feeling in the performance of usual duties; or there is slight pain or uneasiness in the stomach, evidently brought on by the creosote. These ill effects are frequently occasioned by a too rapid increase of the dose, by faulty administration, or by idiosyncrasy; or there is an irritative or weak stomachal condition dependent on catarrhal gastritis, or a possible atrophy of the gastric tubules. The remedy of this state is not far to seek. Diminish the dose or interrupt its use for a while, and resume in small and slowly increasing doses, and more frequently repeated, only after a period of complete rest from taking it. If diarrhœa be occasioned by its use, the same rules apply, or, indeed, an appropriate opiate may be added in small amount to each dose with good effect, so far as toleration is concerned.

Usually the ordinary tests for creosote do not show its presence in the urine. It has been found there, however, and it may irritate the kidneys at times in a pronounced manner. I do not believe this will often take place, unless large and frequent doses of the drug be given.

It is true that under these circumstances I have recognized a passing albuminuria, which disappeared when the amount of creosote taken by the patient was diminished. Examine the urine carefully every few days, at least, when the patient is taking large amounts of creosote. When renal disease exists, I have given creosote and have observed no ill effects from its use, although it is true I have not been willing to increase the dose beyond six or eight minims in the twenty-four hours.

According to Dujardin-Beaumez, creosote in appreciable doses, while it is eliminated from the body by way of the respiratory organs, congests the bronchial mucous membrane, and thus promotes the occurrence of pulmonary hæmorrhage. According to him the drug is strongly indicated whenever hæmorrhage actually occurs. Nothing in my experience thus far tends to corroborate this view. It seems to me prudent, however, to recognize the possibility of what Beaumez affirms, and for this reason to interrupt the use of creosote during the time there is hæmoptysis, or an evidently imminent tendency to it.—Beverly Robinson, *Med. Record*.

ADENOID GROWTH IN THE PHARYNX.—Dr. W. P. Northrup states that he frequently removed these growths with the nail. A spool is placed between the teeth and held with one hand, and the arm of that hand holds the head of the child against the operator's side, while the index-finger of the other hand readily removes the spongy growth in the vault. The results were so satisfactory that

it surprised him that the method was not more generally approved of by laryngologists. The pain was slight, and apprehension of an operation was avoided. Protruding tonsils, when not actually inflamed, should be removed as quickly as possible. The vault of the pharynx should be investigated in every case of deafness or chronic otorrhœa. A surprising improvement often followed a simple operation in these deaf, stupid mouth-breathers. Not only was the hearing improved, but mental brightness was often restored. The condition was one that the general practitioner could discover, and in many cases remove with most satisfactory results.—*Medical Record*.

In the *Medical Record*, G. H. Penrose sums up an article on creosote as follows :

"I will not burden you with the histories of any of the cases, as none were marked failures or marked cures, but in each there was marked improvement, and it is because of this gradual improvement that I think we have the more encouragement for continuing the use of creosote in every case of tuberculosis.

"In conclusion, I should like to urge the use of creosote, in progressive doses, and think that if previous observers had used the drug in larger doses their results would have been better and more decided. I cannot agree with Professor Flint in the assertion that creosote has but little more than a palliative action in cases where cavities exist. In several instances we have noticed decided improvement in such cases.

"I do not claim, nor do I think, that we have a specific in creosote, but from careful observation of several hundred cases of this dreadful disease, I do think we have a drug of ignite worth, and, as such, deserving of careful use and more careful study."—*The Times and Register*.

THE ENGLISH AS MEDICINE-TAKERS.—Statisticians have proved beyond dispute that the average of human life in this country at the present time is longer than it has ever been. Whether this be due to the quality of patent medicines which the inhabitants of Great Britain now swallow, as compared with their ancestors, is a question to which qualified medical practitioners would have no hesitation in giving a decided answer ; but the fact remains that at this moment Englishmen are taking these Government-stamped nostrums in a manner to make the rest of the world wonder. During the past year the revenue derived from the three-halfpenny stamp placed upon patent medicines amounted to £240,062, an increase of £14,361 over the sum paid in the previous twelve months. The quantity of pills, lotions, powders, and ointments represented by these figures must be something enormous. Licenses for the sale of these compounds have also increased by 1,340 in

England and 111 in Scotland, from which the revenue benefits to the extent of £7,188. The total income derived by state from the patent medicines is thus £247,250.—*London Telegraph*.

HOTEL SANITATION.—The "Traveller's Association" of Vienna, lately addressed a memorial to the Home Office, drawing their attention to a grievance seriously affecting that class in the approaching danger. Hotel proprietors, they say, do not recognize the present risk of allowing their water-closets, sheets, towels, etc., to become fouled. Though having all the appearance of being newly done up, the serviettes are merely damped with a few drops of water, pressed, and then returned to the table for use, under the base pretence of being clean, while they contain all the germs of saliva, etc., of a preceding user. The government has considered the matter and issued an order taking effect on the 21st inst., that all articles not properly disinfected, down to the drinking-utensils, will subject the proprietor to a severe penalty.—*Medical Press*.

THE PRESERVATION OF VISION.—Dr. Webster Fox has formulated the following propositions as an aid to the preservation of vision (*The Sanitarian*, November, 1892): 1. Do not allow light to fall upon the face of a sleeping infant. 2. Do not allow babies to gaze at a bright light. 3. Do not send children to school before the age of ten. 4. Do not allow children to keep their eyes too long on a near object, at any one time. 5. Do not allow them to study much by artificial light. 6. Do not allow them to use books with small type. 7. Do not allow them to read in a railway carriage. 8. Do not allow boys to smoke tobacco, especially cigarettes. 9. Do not necessarily ascribe headaches to indigestion, the eyes may be the exciting cause. 10. Do not allow the itinerant spectacle vendor to prescribe glasses.

FOR NIGHT SWEATS OF PHTHISIS.—

R.—Creosoti, ℥ iv.
Acidi gallici, gr. ij.
Zinci sulphatis, gr. ij.
Atropinæ sulphatis, gr. ʒ i.

M.—Ft. pil. no. v.

S.—One thrice daily.

—*Sei-i Kwai*.—*Times and Register*.

IPECACUANHA AS AN OXYTOCIC.—Ipecacuanha is said to stimulate uterine contractions ; two to three doses of 10-15 drops of the wine ipecac, if given every ten minutes, have produced very marked contractions in a very short time.—*Der Ertzl Pract.*

THE CANADA LANCET.

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

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

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AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STRRNT & Co., 30 Cornhill, London, Eng.; M. H. MAHLER 23 Rue Richer, Paris.

TORONTO, FEBRUARY, 1893.

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

CHARLATANISM RAMPANT.

That the medical profession in Ontario is afflicted with numerical plethora no member of it will venture to deny, unless miraculously that millennial stage of evolution be reached in which he ignores an honest living as one of the rewards of toil, and yearns for the patronage of suffering humanity, solely for the opportunity of alleviating distress, and to enlarge his field as a benefactor of mankind.

Doctors are plentiful as daisies in the spring-time, and still our medical schools turn them out yearly by the hundreds; what are they to do? It is gratifying to feel that our graduation and license standards have long since been recognized as high by more countries than our own. A large proportion of our newly fledged graduates cross the lines into the neighboring republic, and in the larger field of the sixty-five millions, find there is room for ability, and meet with appreciation. In every large city of the States are to be found on the roll of eminent practitioners the names of those who reflect credit on their Canadian training, and who by Canadian industry have forced their way to the front, in spite of the fact that on every street corner is to be seen the shingle of a disciple of Æsculapius.

In a city of no less pretensions than Cincinnati, according to the *Lancet-Clinic*, to so great straits are a certain class of the profession driven by their numerical multiplication and possibly low

order of mentality that they have formed a combine, a sort of "divy up" brotherhood, to catch from the public that patronage which individual attainments had failed to secure.

A *bona fide* company has been formed, on the directorate of which are some leading business men of the community, and which is called "The American Family Physician's Company." They purpose, for an annual fee, granted according to the size of the family, to supply at a moment's notice, a physician, surgeon or accoucheur of reputable standing, who will "do the work up in good shape," also to furnish all medical and surgical appliances "free, gratis, for nothing." Admirable arrangement! Mrs. A. is in the first stage, or at least thinks the pains indicate it; her spouse being a member, the old time request in the words of the song, "Run for the doctor Joe," is rendered obsolete by the onward march of civilization's ingenuity, he rings up the company's office as one might a livery stable for a hack, and sure enough, with as little delay as though another witch of Endor waved some magic wand, the accomplished obstetrician appears on the scene of commotion, with bag in hand, and possibly a homely but useful article in the shape of a bed-pan under his arm; for are not the company, according to their agreement, bound to furnish all requisite appliances? The picture may be slightly over-drawn, but to say the least, degradation is complete.

There appears to be a slight oversight in the policy of this Company; it undertakes to pay all obstetrical fees and its graded assessments are in classes, not strictly according to the extensiveness of the family in all cases; for example, \$15 per annum if the family consists of not more than four members. As an inducement no entrance examination is required, the applicant's statement that he is in good health being sufficient. Here lies the defect.

John Smith, a newly made husband, seeks for membership, without examination his fee is pocketed and his name appears on the roll, it being a question *in futuro* as to whether or not the little household of two happy souls will ever be developed into four; and to meet the contingency we would suggest the advisability of subjecting Mr. Smith to a severe cross-questioning regarding the number of twins amongst his ancestors; and it might be

well to call in a phrenologist to pronounce upon the magnitude of his bump of philo-progenitiveness.

The prospectus might, without any stretch of imagination, be taken as part of some low down dime musee farce; but the pity is, 'tis true.

A noble profession cannot ignore the fact that its status in society largely depends upon the respect it has for itself. Medical men the world over cannot afford to be undignified, or to stoop to ignoble methods even to make both ends meet; and to be appreciated in the highest sense of the word they must be perfect gentlemen. Nothing is to be more abhorred than snobbishness; but it would appear that in Cincinnati amongst a certain class of doctors, regard for appearance no longer exists, and the tone is rather too far removed from what it was in the good old days of gold-topped cane, silver buckles and ruffles.

We insert the prospectus as a curiosity.

AMERICAN
FAMILY PHYSICIAN'S COMPANY.
810 NEAVE BUILDING, CINCINNATI, O.

PROSPECTUS.

This Company was organized and is now endorsed by Cincinnati's leading professional and business men.

The plan and scope of the American Family Physician's Company gives to those families who desire such protection, an absolute and sure method of providing a physician and surgeon of the highest professional standing, for sickness or accident to any and all members of the family.

The company also provides all the medicine necessary in such cases.

The company also provides all medical and surgical appliances necessary in the treatment of these cases.

You are not annoyed running first to the office of one physician and then to another to find him in, you simply go the nearest telephone, call up our office, and a physician is at your house in a few minutes. You are absolutely assured of service at once, the best to be had in the city.

You never receive a doctor's bill with a polite request to settle, and just at the time when you need the money for something else.

You are healthy now, but you do not know how soon you may be a confirmed invalid when the best attention will be necessary; then is when the bills run up, then is when you will need the service. Prepare yourself in advance; join with us now.

The cost of the membership is certainly low enough for all to enjoy its benefits. Class A.—For a family consisting of not more than four members, \$15.00. Class B.—For a family of more than four and not over six, \$18.00; and Class C, for a family of eight or more, \$20.00 per year, payable monthly, quarterly, semi-annually or annually, in advance.

We take you if you are in good health now; no examination is necessary.

A policy will be issued to each family and to single persons.

Obstetrical cases are all paid by the company.

It is a matter of efficient and economical service for every policy holder, so do not delay.

THE MEDICAL DEFENCE ASSOCIATION.

The Medical Defence Association is apparently making strenuous efforts to secure the legislation for which in vain it applied last year. The Council last session evinced a desire for reconciliation and a peaceful settlement of differences by appointing a committee to confer with one nominated by the Association. In response to an invitation extended by the Council, the meeting took place; but unfortunately without restoring that harmony which the best interests of the profession demand. It was tacitly understood, as is always the case in such negotiations, that the only object to be looked for was a compromise, for, when diverse interests and strong opinions separate contestants, this is all that can, in the nature of things, be expected.

The grievances and corresponding requests for redress were formulated and presented to the committee of the Council, and it would appear from its replies that it was willing to concede the greater part of what was asked for, and in a conciliatory spirit; therefore it is unfortunate that their overtures were not acceptable.

The Association claims that all its causes of disaffection hinge on the fact that the profession at large is inadequately represented in the Council's deliberations, that school men by superior influence and combination, work solely in the interests of the educational corporations; and accordingly requested that five additional territorial representatives be elected.

This the committee granted on condition that if the penal clause 41 A, be left in abeyance they might rely upon the honor of the profession to pay the annual assessment. They furthermore expressed a willingness that educational bodies, while neither giving instruction in medicine nor granting degrees, should be without representation.

This would unquestionably have given the profession a largely controlling voice in the Council, and in its own hands would have been the remedy. Had these suggestions been acted upon the Committee of the Council, in accordance with their prerogative, would have proceeded to secure legislation to that effect.

Medical men are a busy class, a great deal of reading must necessarily be crowded into their

spare moments, there is but little leisure for the perusal of detailed reports of Council meetings, consequently it would be prudent for them to carefully ascertain the facts before answering the questions on the card accompanying the circular recently issued by the Association, in order to calmly determine whether or not, the published charges to some extent, emanate from prejudice—a defect from which none of us are wholly exempt.

We think it not improbable that a careful reading of the Annual Announcement, would convince any one that, instead of school men combining to the detriment of the profession, the spirit of rivalry and emulation that always exists between the educational bodies, most frequently arranges their representatives on opposite sides, and, judging from the tone of the debates, occasionally in hostile array. This is natural, for their interests are not identical.

Because negotiations have once miscarried it is no reason that they should not be resumed; we have confidence in the good sense of the profession; no matter how wide a difference of opinion may exist, an amicable settlement of disputed points can surely be accomplished, and if happily in this way unanimity be once more restored, the means adopted would be much more creditable in the eyes of the public.

On the authority of the Journal of the American Medical Association, we are glad to be able to state that American educationists are commencing to see the desirability of raising the standard of medical training by requiring longer periods of attendance at College; the enlarged intelligence of the people, with its increased capacity for discriminating between the charlatan and the scientist, is calling out for this change; it is affirmed that fully twenty-five per cent. of the colleges have so changed their curricula during the past year as to require three sessions instead of two as formerly; and it is patent to all who inquire that the largest and most successful, are those who prolong the course into four years. In the long run efficiency and thoroughness are the surest avenues to patronage, and it is a matter of congratulation, that even the best of them may, not without profit, contemplate what has been accomplished in this line in our own Province; for,

although it may have been a little premature so far as the financial resources of the community are concerned, the Medical Council erred on the right side in adding a fifth year devoted to clinical work. The burden may for some time bear heavily, and in some instances unjustly on the student; but, in the years to come, the profession as well as the public will be the gainers.

DR. J. D. BLAKE has recently given to the medical world the results of numerous trials of phenacetine as an adjuvant to other remedies; it would appear that when given with quinine for the control of malaria it acted well, and very moderate doses only of each were requisite, which is undoubtedly a desideratum. As a substitute for opium to relieve pain in certain conditions in which restraint of the secretory functions is undesirable, it proved in his hands a valuable remedy, not invariably reliable, but, in most instances affording relief; for example, in Sciatica of rheumatic character, such so called specifics as the Salicylates Colchicum or Pot. Iod. might be exhibited, and phenacetine used for the paroxysms of pain. For the same purpose it might be administered in neuralgias pure and simple, while at the same time arsenic, quinine, cod liver oil or other anti-neuralgic and supporting remedies are being employed. It is not ordinarily necessary, so he says, to use larger than five gr. doses, and in this quantity it appears to be as free from danger as any of the heroic anti-pyretics.

To the Editor of the CANADA LANCET.

DEAR SIR,—In your issue of this month, one of your editorials was upon the old, but ever interesting subject of the over-crowding of the profession. You mentioned there, what is in my opinion by far the most actively operating cause in keeping up the supply of students, and that is the ease with which a general education, in advance of what is ordinarily styled primary, can be obtained. The public school system of the province is one of our proudest boasts. I do not venture any criticism of it, though I am certain that I could show our pride to be in some points ill-founded. But the high schools of the province are doing a work which has both a good and an evil side. An ex-

perience of seven years in the work of the high school system satisfies me that those schools are responsible for the turning into physicians of a great many who would have been excellent farmers and workmen and business men. I will not say that the more ignorant a man is the better citizen he makes, but I venture to challenge contradiction to the statement, that higher education is not an unmixed blessing. Old Aristotle (I think it is, if my memory is not playing me false), argued the question many centuries ago, whether the pleasure of the pursuit of knowledge lay more in the act of acquisition or in the knowledge itself when attained, and he ended in the conclusion, found before him by the preacher of Sacred Writ, that "all is vanity," that the mere possession of knowledge is not a pleasure, but the act of acquisition; for the higher one climbs the wider is his horizon and the greater the surrounding expanse of regions, till then unsuspected, and still to be explored. But aside from all that, we physicians, lawyers, and other professional men, had better fully realize the parasitic place we fill in the body politic, and, with a view both to our own interests and to those of the general population, seek to check the drafting into our economically unproductive ranks of so much material that, particularly in so young and undeveloped a country, is urgently needed in the ranks of the producers. And the remedy lies ready to our hands. It is not to be imagined that the Council in its discussions on the subject has not had my suggestion made before now, but I shall make it again. Instead of raising the matriculation standard, or increasing the amount of work to be done by the under graduate, for the latter has now reached about the limit of human capabilities, instead even of adding a year to the length of the course, why not raise the percentage necessary for license? This would weed out the incapables, would deter many from entering on a course of study in which the battle inevitably went only to the strong, and would stop many more at the primary examination, and at the same time give the public a more efficient medical service. The schools would be stimulated to better efforts even than in the past, and the safety valve provided by emigration of men who declined or failed at the Council examinations, would still exist. The druggists of the province have to obtain 66.66 per cent. of the total to pass their finals,

and the same or a higher per cent. might, in my opinion be advantageously demanded in the Council examinations, both primary and final; some of the subjects, if deemed advisable, having a lower standard, but the high total being necessary.

Didaskalos.

Toronto, Jan. 23rd, 1893.

BACTERIOLOGICAL NOTES.

COMPILED BY E. B. SHUTTLEWORTH.

Influence of Sunlight on Bacteria. — Workers in bacteriology have long been aware that direct sunlight exercises an unfavorable effect on the growth of many micro-organisms, in some cases actually destroying the vitality of germs. As early as 1877 Downes and Blunt showed that some non pathogenic forms would not develop in direct sunlight, and experiments made by various bacteriologists from that time to the present, go to establish the fact that darkness is generally favorable, while diffuse daylight exercises a restraining influence, and the direct rays of the sun are actually fatal to many organisms. Attempts have been made to account for this germicidal influence, some maintaining that it is due to a change in the culture medium in which the bacteria are located, others ascribe it to the formation of ozone, while a third class hold that light acts directly on the bacteria themselves. It is difficult to say which is the correct view. The balance of opinion is probably against the statement that changes in the medium produce this effect. Buchner and Minck (*Centralb. f. Bact.*) have recently made experiments as to the effect of light on the organisms of cholera and typhoid, and some of the pyogenic cocci, and have found that one hour's exposure to the rays of the sun was sufficient to kill these organisms. They also observed a difference in the bactericidal effects of different parts of the spectrum, and, like Geisler, found it to correspond closely with actinic power; the maximum being reached at the violet end. Since making the above notes the paper of Dr. Sternberg, in the *New York Medical Journal* for January 21st has come to hand, and gives the results of a series of experiments made at the Hoagland Laboratory in order to determine the effect of sunlight on the cholera spirillum. The conclusions arrived at are con-

firmatory of those of previous observers. Bouillon tubes, with two or three loops of a previous culture, inoculated, and then exposed for two hours, were found to be sterile, but, when a larger amount of the original culture was used, development occurred after four hours' exposure, but not after five hours. Dr. Sternberg's paper is replete with interest, and contains much valuable information in regard to the cholera spirillum, more especially that relating to means of disinfection. He describes experiments with all the ordinary methods, and, while noting the advantages or defects of each, places exposure to fresh air and sunshine among the most reliable modes of treatment.

Questionable Germicidal Action of Corrosive Sublimate.—Koch's assertion, in 1881, that mercuric chloride, even in very dilute solution, would prove quickly destructive to bacteria of all kinds, and without any previous treatment, has latterly been called in question. One of the latest objectors is Mr. C. T. McClintock (*Med. News*), who finds that some bacilli, as that of typhoid fever, will withstand the action of a 1-1000 solution of the chloride for many hours. He thinks the conclusion that this agent is a germicide of any considerable power is without proper foundation. Though it may not actually kill germs it may prove a disinfectant. This, he explains, is due to the fact that it forms with cellulose and albuminous bodies an insoluble compound, which, in the case of the cell walls of bacteria, locks up the germs so that they cannot grow, at all events until released. He also attributes the alleged germicidal power of the mercuric salt to faulty experiments in which the cultures used contained enough of the chloride to act as an antiseptic, which, by inhibiting the growth of bacteria, would give rise to the impression that the vitality of the germ was destroyed.

Bacteria in Aereated Waters.—Vichy water, as originally obtained, is devoid of micro-organisms, but such have been found in the bottled product. M. M. Colin and Roman have made a thorough investigation as to the cause of this contamination, and have arrived at the conclusion that it is to be ascribed to the manipulations in bottling, during which air-forms gain access to the water. For about fourteen days after storage in bottles the

number of bacteria increases, but then diminishes. The former result is largely governed by temperature.

TAX ON QUACKS.—The recent suggestion of the Secretary of the Treasury of the United States, that the tax on alcohol be increased fifty cents per gallon in order to raise more money for the increasing expenses of the Government seems to have met with a favorable response in some quarters, and the question of tariff and taxation will no doubt be considerably discussed by Congress in the near future. In this connection the wisdom of putting a heavy and permanent tax on all forms of nostrums and quackery will at once commend itself to all wise legislators who are working for the public good. A stamp tax of this kind, say twenty-five per cent., on every form of secret medicinal preparation of any kind, whether sold by the retailer, proprietor, manufacturer, or by advertising quack specialists, would be no hardship to the public, as it would in no wise affect the retail price of these articles. All such manufacturers could easily afford to give the Government twenty-five per cent. of the retail price and still have a very handsome profit left, as their net profit is rarely less than five hundred per cent., and often very much more. Legitimate preparations of the Pharmacopœia and other standard preparations where the complete working formula is public property should be exempt. But as the success of quackery depends on secrecy and mystery, and as these two conditions enable unscrupulous persons to get a dollar for a few cents' worth of a simple remedy, it will be seen that there would be no injustice to any one if a good fair tax were put on the business.

If the Government went still further and required all nostrum and secret medicine manufacturers to pay a big license, and place on record open to public inspection a sworn statement of the exact composition, together with a complete working formula of each preparation, much good would result. And if, like insurance companies, they were also required to furnish heavy bonds or make a special deposit, which could be forfeited under proper restrictions, provided their medicine did not do all that was claimed for it, the public would be still better protected both in health and

pocket, and no injustice would be done to the honest manufacturer of articles of real merit. There is no good reason why our Government should not place the nostrum business on the same basis in its Internal Revenue Department as the manufacture of whiskey and tobacco. Analyses of these preparations should be made from time to time, and heavy penalties imposed if they vary from the sworn formula on record, or if any dangerous drug like morphine is being used. England, which is said to be a free trade country, taxes the nostrum business heavily, and derives a large and growing revenue from that source.

A BATTLE WITH OPIUM.—“One day I realized,” writes (*London Spectator—Med. Rec.*) a former victim of the opium habit, “that my word was no longer a symbol of truth, and the moral nature I had not quite drowned leaped up in the dark and called me ‘Liar!’ to my face. Then I awoke, and for the first time for many a day I prayed. Then, also, came the resolve, the determined resolve, come what may, to be done with this damnable tyranny. At six o’clock that evening I took a hearty meal of meat (principally) and a little (very little) red wine. It was June 10, 1868. I had determined to walk into the summer night, walk till I died if necessary, but walk till I won my battle, if I lived through the ordeal. I left my watch at home that I might not pawn it for opium; I took no money with me; even as I left home and struck across the downs I felt the craving coming on (the hour for my penultimate day dose was at hand), and I knew my temptation was with me, and realized how long and bitter the struggle was to be. The craving seemed to me a palpable shape that walked beside me, a presence that outran me and lost me, and came back to me like a faithful dog that would not lose or leave me, that I could not leave or lose! Sometimes I sang, sometimes I raved and swore, sometimes I prayed and wept, but never once, thank God, did my resolution falter. Much of that night I cannot remember. Dim things came back to me at times, such as a fall I had once, hurting my knee. I think I frightened some one who asked me some question, and I believe I can recollect that I myself grew at one time full of fear—fear of hurting myself, not others; and then I suffered thirst—such thirst, such awful thirst—but I must have

slaked it somewhere, for in the morning my clothes and necktie were all wet, and so was my hair. At seven in the morning of the next day, I found myself leaning on a gate and looking out on the landscape before me with a sort of curious wonder as to how I came there; my head dropped on my hands, I slept (I think) only a few minutes, and awoke quite well. Since that day I have never touched it, and have never been tempted to touch it. Of course, I am well aware that the doses to which I had become accustomed were not very large, but I am also sure that they were on the increase, and having told my experience lately to a distinguished English physician, he begged me, for the sake of others, to put on record these plain and simple facts. This I now do, and if I do so anonymously, it is only because I believe that no further good could follow the knowledge of my identity or name.

MR. VICTOR HORSLEY AND MISS COBBE.—*Apropos* of the anti-vivisection agitation now going on in London, Mr. Horsley has been led, *Med. Rec.*, after a study of Miss Cobbe’s articles, to write the following: “Further, I have purposely employed this plain language in order to make it clear to the public that Miss Cobbe is unworthy of the customary courtesies of debate. Miss Cobbe has, ever since this agitation began, systematically employed the weapon of deceit, professing, as in the present instance, to quote the whole truth, but in reality suppressing or falsifying the essential particulars. This line of conduct deprives Miss Cobbe of all credit, and renders it impossible for me to extend to her the consideration which would otherwise have been due to her sex. I have documentary (printed) proof that she has chosen, for sixteen years or more, to take an immoral course, namely, accusing medical men of murder, cruelty, falsehood, etc., and, in fact, almost every crime in the calendar, while supporting such charges by frauds of the kind I have now exposed. I cannot, therefore, treat her as I would wish to do; I can in this matter only deal with her quite impersonally, so far as her sex is concerned.”

Punch presents this matter as follows:

A MODERN SCIENTIFIC DISCUSSION.

“—Animis Cœlestibus Iræ!”

Miss Fanny (a gentle and most voracious child):

Yah, you cruel coward! you and your friends skinned a live frog!

Master Victor (an industrious but very touchy little boy): You're a liar! The frog was dead, and you know it!

Miss Fanny: Boohoo! Whether it was dead or not, you've got no right to call names; 'cos I'm a girl, and can't punch your head.

Master Victor: It's just because you're a girl that I can't punch yours! You should have thought of that before you called me a coward!

Our happy New York contemporary *Life* is curiously enough on the side of Miss Cobbe. It might learn a lesson in toleration, honesty, and good sense from its London exchange.

INDICATIONS FOR THE USE OF CIMICIFUGA.—

According to Dr. Reed, *Am. Therap.* ten to thirty drops of the fluid extract after meals are used to cure seminal emissions. This has rarely failed in his experience. Half a grain to a grain of the resinoid, cimicifugin, twice a day, has occasionally been found useful in conditions of nervous depression, hysteria, and incipient melancholia. Five to twenty drops of the tincture, several times a day, have proved very helpful in scanty menses, especially in maiden ladies; but if repeated, as often as every three hours even, are likely to cause severe headache. This untoward effect he has never seen from the largest doses, such as half a drachm or a drachm of the fluid extract three times a day. Very small doses, as one-quarter of a drop up to one drop of the ordinary tincture, repeated every one or two hours, will often promptly relieve a frontal headache due to mental fatigue, or any kind of a headache resulting from pelvic congestion at the menstrual period in women. The same doses are often efficient in preventing abortion when threatened from weakness or passive congestion of the uterus, or from habit at a certain stage of pregnancy. Two or three drops of the tinctures of cimicifuga and gelsemium—sometimes one drop of each—every hour or two, are among the most certain means of bringing on the menstrual flow when delayed by passive congestion, cold, grief, or other similar cause, and act similarly with the lochial discharge after parturition. Dragging pelvic pains arising from the same causes may be relieved by the same combination.

RECENT OBSERVATIONS ON SULFONAL.—Sulfonal has been doing very satisfactory work in general practice, largely supplying the place of narcotic drugs in conditions in which the use of the latter is unadvisable. The usefulness of this remedy has called forth many expressions of opinion from all parts of the country. Among the newer uses, which have been made of sulfonal in therapeutics, we have observed the report of Dr. Julius Althaus (*Am. Jour. Med. Sci.*), in which the author successfully treated post-grippal psychoses, where insomnia was present, by the use of prolonged warm baths, and sulfonal. Dr. Hammond is reported as making successful use of this remedy in insomnia following the opium habit; and several observers attest its value in alcoholic delirium. Sulfonal has also given very satisfactory results in inveterate and incurable cases of epilepsy, where there is super-excitability of the brain, and where the attacks are very numerous. The alleviation was very marked in all cases, although the doses were smaller than the average dose for insomnia, being from 10 to 36 grains, administered in warm tea-broth at bedtime, or given in fractional doses during the day.—*Coll. and Clin. Rec.*

APPEARANCE OF THE EYES IN DISEASE.—The eyes (*Times and Reg.*) are congested in variola, scarlet fever, rubeola, yellow fever, typhus fever, meningitis. They are projecting in asphyxia, hydrocephalus, hydrophobia, exophthalmic goitre, and sometimes in functional heart disease. They are sunken in collapse, cholera, and hectic. They are staring in convulsions, apoplexy, meningitis, and dementia. They are rolling in catalepsy and tuberculosis meningitis. They are photophobic in hysteria, meningitis, and cephalalgia. The pupils are dilated in syncope, hysteria, collapse, asphyxia, epilepsy, drowning, uræmia, coma; generally in phthisis, poisoning by belladonna, atropia, fungi, and many vegetable irritants and narcotics. They are contracted in concussion, sunstroke, typhus fever, hemorrhage of the pons; in poisoning by opium, morphine, prucic acid, calabar bean, ergot of rye, and pilocarpine. At first contracted and afterward dilated in compression of the brain, in poisoning by alcohol, ether, and chloroform. At first dilated and afterward contracted in severe apoplexy. They are unequal in paralysis, com-

pression of the brain, and posterior spinal sclerosis. They are frequently oscillating in epilepsy, typhus, and spinal sclerosis. In diseases of the eyes external signs facilitate diagnosis. Congested in conjunctivitis, trachoma, and ophthalmia. Dilated in mydriasis, glaucoma, and amaurosis. Contracted in myosis, retinitis, and iritis. Photophobic in strumous ophthalmia, amaurosis, iritis, scleritis, choroiditis, and retinitis.

FISSURE OF THE ANUS IN CHILDREN.—Dr. Wm. I. Hamlin (*Medical Brief*) says that children under two years often suffer from fissure of the anus, and that all cases of painful defecation should be carefully searched for fissure, which, when found, should be stretched and then touched with a sharp pencil of lunar caustic. One or two applications will generally cure the fissure. The cause of constipation and hard stools should be eliminated by changing the diet of the child.

BOOKER in the Bulletin of the Johns Hopkin's Hospital, gives the following conclusions from his investigations into the relation of pseudo-diphtheritic angina to diphtheria. The pseudo-membranous affections of the throat that sometimes occur secondarily to scarlatina, measles, and perhaps other infectious diseases, often present the clinical features of diphtheria, from which, however, they differ in nature and etiology. The clinical features are not always sufficiently distinctive to differentiate these affections the one from the other. The anatomic changes induced by the activity of the bacillus of diphtheria appear to be characteristic, and unlike those present in the pseudo-diphtheritic processes. Excepting the false membrane, the anatomic changes found in diphtheria are dependent not upon the direct action of the bacilli, but upon a toxic substance to which they give rise. These changes are characterized especially by focal necrosis of tissues, with a peculiar splitting of the nuclei of the cells. The anatomic changes that attend the pseudo-membranous angina of scarlatina are accompanied with an invasion of streptococci, with suppurative processes. The etiologic factor furnishes a certain criterion for the differentiation of diphtheric and pseudo-diphtheric processes, but the diagnosis is,

nevertheless, sometimes difficult. Measles and scarlatina render the tissues especially vulnerable to the bacillus of diphtheria. The constant presence of streptococci in pseudo-diphtheric processes is suggestive of an etiologic connection. The streptococci have not been differentiated, and it is presumed that different forms may occur. The relation of streptococci-infection to scarlatinal pseudo-membranous angina has no bearing upon the specific etiology of scarlatina.

The following from the *Hospital Gazette* is good.—Having an important engagement two or three weeks ago, I was unable to attend the general meeting of one of the medical societies, and asked a friend to send me a few notes of the meeting. The following came to hand :

ROYAL PIMPLE-CURING SOCIETY.

DR. MAKEM-PAY, President, in the Chair.

Dr. Cutemout related the case of a patient who had for some years past suffered from a very painful and interesting complaint. Not having the notes of the case before him, he was compelled to speak from memory, and, unfortunately, the symptoms had long since been forgotten. The etiology of the disease was very obscure, and he proposed to deal with this more fully on a subsequent occasion. As to treatment, he had found it necessary to employ a great number of remedies, and when last seen the patient reported himself as improving—he was unable to say under which particular treatment. He had since lost sight of the patient and could not, therefore, say whether the improvement had been maintained. *Dr. Swindem* expressed the great interest he took in the case so clearly brought before the Society, and asked for further details, particularly as to whether the bowels were regular. *Dr. MacAdamised* said he had met with a similar case in his private practice, in the person of a wealthy American gentleman who, after having been treated by all the leading specialists of Europe and America, recovered in the course of three days in his private hospital at 24 Pignomy Street, W. *Mr. Herringfry* proposed a vote of thanks to the author of this interesting paper.

(Left under discussion.)